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# Oceanic Observations of the Pacific

# OCEANIC OBSERVATIONS OF THE PACIFIC

# 1958

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OCEANIC OBSERVATIONS OF THE PACIFIC: 1958

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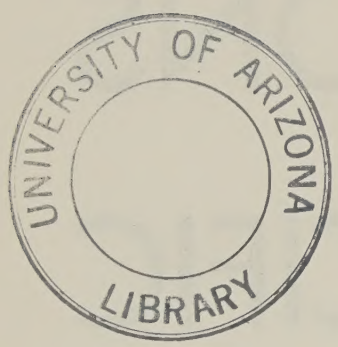


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# Preface

Oceanic Observations of the Pacific is a medium for publication of oceanographic data collected in the Pacific Ocean and its adjacent seas by the cooperating agencies. At the present time these agencies are Scripps Institution of Oceanography of the University of California, San Diego, California; Biological Laboratory of the Bureau of Commercial Fisheries, Honolulu, Hawaii (formerly Pacific Oceanic Fishery Investigations); Biological Laboratory of the Bureau of Commercial Fisheries, La Jolla, California (formerly South Pacific Fishery Investigations); Biological Laboratory of the Bureau of Commercial Fisheries, Seattle, Washington (formerly Pacific Salmon Investigations); Department of Oceanography of the University of Washington, Seattle, Washington; Pacific Oceanographic Group of the Fisheries Research Board of Canada, Nanaimo, British Columbia; United States Navy Electronics Laboratory, San Diego, California. Certain cruises were carried out jointly as California Cooperative Oceanic Fisheries Investigations (CCOFI). The agencies cooperating in the CCOFI program are the Scripps Institution, the Biological Laboratory of the Bureau of Commercial Fisheries, La Jolla, the California Department of Fish and Game, the Hopkins Marine Station and the California Academy of Sciences.

In addition to the cooperating agencies, the United States Naval Oceanographic Office (formerly United States Navy Hydrographic Office), Washington, D. C., participated in one of the cruises presented in this volume.

Cruises in which more than one agency participated are usually listed under the agency which had a greater part in collecting and processing the physical and chemical data.

A grant from the National Science Foundation has supported part of the cost of preparing these data for publication and most of the printing cost.

The present volume contains observations made in 1958. For each hydrographic station, values of temperature, salinity and oxygen are tabulated at observed and at standard depths. Computed values of density, specific volume anomaly or thermosteric anomaly, and geopotential anomaly are also tabulated at standard depths. In addition, some observations of phosphorus, silicate, nitrite, nitrate, ammonia, acidity, alkalinity and reactive iron are included. The positions of the serial observations and the numbers of bathythermograph observations made in 1958 and during the period 1941 through 1958 are shown on charts. Information concerning each cruise is summarized in a table.

66/67-P

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# Description of Observations

## SIGNIFICANCE OF REPORTED OCEANOGRAPHIC DATA

Routine field measurements of oceanographic parameters by conventional methods are usually subject to at least the following random errors:

| | |
|---|---|
| depth | ± 4 m (in the upper 1000 m) |
| temperature | ± 0.02°C |
| salinity | ± 0.03‰ (Knudsen titration)<br>± 0.004‰ (conductivity bridge) |
| oxygen | ± 0.04 ml/L |
| phosphate | ± 0.05 to 0 1 μg at/L |

The precision of measurements of temperature and of Knudsen determinations of salinity made in the field have been analyzed by Wooster and Taft (1958). The above estimate of the precision of measurements of salinity made routinely at sea by conductivity bridge is that of Strickland (1958b).

Interpolated values at standard depths are known with less precision, and the resulting uncertainty in specific volume anomaly and thermosteric anomaly at standard depths due to random errors in field measurements of temperature, salinity and depth is of the order of three centiliters per ton. Therefore, in this publication series it is the practice to report specific volume anomaly and thermosteric anomaly to no more than one part in $10^5$ (one cl/ton) and geopotential anomaly to no more than the nearest dynamic centimeter.

It should be noted also that computations of salinity (from measured chlorinity) and density (sigma-t, specific volume anomaly and thermosteric anomaly) reported in this volume have all been based on the empirical equations and tables by Knudsen (1901) and Ekman (1908). Because of the inadequacy of our present knowledge of the equation of state of sea water (Eckart, 1958) and the uncertainty of the relationship between chlorinity and salinity (Carritt and Carpenter, 1959), it is possible that these computed values differ systematically from the absolute values. However, in the upper thousand meters at least, Reid (1959) has shown that the influence of such systematic errors on the accuracy of computed geostrophic flow is significantly smaller than the influence of errors in the determination of temperature, salinity, pressure and position.

## NOTES ON PARTICULAR CRUISES

### Expedition Dolphin

The primary objective of Expedition Dolphin, a survey of the International Geophysical Year, was to determine the structure of the Pacific Equatorial Undercurrent both from the physical and chemical data reported in this volume and from direct current measurements. During the first half of the cruise, RV Horizon of Scripps Institution and RV Hugh M. Smith on Cruise HMS-45 of the Biological Laboratory, Honolulu, alternately occupied a station on the equator at 140°W; the vessel not at the equatorial station engaged in measurements in a short meridional section at that longitude. A series of hydrographic and current stations by RV Horizon along the equator between 137°W and 89°W comprised the second half of Dolphin Expedition.

### Expedition Doldrums

RV Horizon, RV Spencer F. Baird and RV Stranger of Scripps Institution and the Columbian frigate Almirante Padilla (replaced in mid-operation by the frigate Capitán Tono) participated in Expedition Doldrums as part of the International Geophysical Year. Because the primary purpose of the expedition was to study short-period fluctuations in the North Equatorial Countercurrent between 85°W and 110°W, BT observations and GEK measurements of surface current comprised nearly the whole program of observations. In addition, however, direct measurements of subsurface current were made by RV Horizon and the hydrographic data reported in this volume were collected by RV Stranger.

### Cruises TO-58-1 and TO-58-2

The Scripps Tuna Oceanography Research Program of the Scripps Institution made two cruises in 1958. Cruise TO-58-1 (Expedition SCOT) was partly financed by the Inter-American Tropical Tuna Commission and partly devoted to work of the IATTC; the physical, chemical and biological data (except primary productivity and total phosphorus) are listed in Special Scientific Report, U. S. Fish and Wildlife Service, Fisheries No. 345. Similar data from Cruise TO-58-2 are listed in Special Scientific Report, U. S. Fish and Wildlife Service, Fisheries No. 420 (which also contains data on primary productivity and total phosphorus from TO-58-1, in Appendices 1 and 2).

The main purpose of Cruise TO-58-1 was to gather information about the distribution and interrelationships of properties, especially biological, in the eastern tropical Pacific Ocean north of the equator at a different season (northern spring) from earlier expeditions (mainly in northern autumn). Other purposes were to commence a detailed oceanographic study of the Gulf of Tehuantepec, to be continued on later cruises made at different seasons, and to look for larvae of yellowfin tuna (as an indicator of spawning by that species) off the coast of southern Mexico. The main purposes of Cruise TO-58-2 were to continue the study of the Gulf of Tehuantepec and to test the suitability of certain types of moored unmanned stations.

Cruises HMS-45 and HMS-46

The data collected by RV Hugh M. Smith on these two cruises have been corrected for an error in depth calculation reported by Thomas S. Austin (1962). (This error had been made in the calculation of all data of the RV Hugh M. Smith and RV Charles H. Gilbert reported in Special Scientific Reports, U. S. Fish and Wildlife Service, Fisheries Nos. 168, 180, 201, 217, 238, 252, 315, 358 and part of 164.) The recalculations of the data of the 1958 Hugh M. Smith cruises were made through the facilities of the IGY World Data Center A, Oceanographic Archive, Agricultural and Mechanical College of Texas. Interpolation for values at standard depths was performed by a machine program that fitted a parabola to the four observed values surrounding the desired standard depth (two above and two below), to pass through the two inner observed values and to be a least-squares fit to the two outer observed values. Re-editing by the Bureau of Commercial Fisheries, Honolulu, of these machine calculations was done by comparing them with characteristic curves and then making adjustments for any peculiarities introduced by the machine interpolations where points were widely scattered.

MV Attu and MV Pioneer

The data collected by MV Attu and MV Pioneer represent the second summer's field work by the Oceanographic Section of the Biological Laboratory, Seattle, under the direction of the American Section of the International North Pacific Fisheries Commission. The observations were taken on board fishing vessels chartered to continue the investigation of the distribution and migration of salmon in the North Pacific Ocean and the Bering Sea. Physical, chemical and biological data are listed in Special Scientific Report, U. S. Fish and Wildlife Service, Fisheries No. 312.

The purpose of the oceanographic observations was to define the general oceanographic salmon environment, reveal geographic differences in the general environment and investigate the relationships of physical, chemical and biological properties to the abundance and distribution of salmon stocks.

King Crab Investigations

Data were collected by MV Tordenskjold in Bristol Bay of the Bering Sea by the King Crab Investigations of the Biological Laboratory, Seattle, for the International North Pacific Fisheries Commission. The research program included an ecological study of the eastern Bering Sea. During the summers of 1958 and 1959 samples of invertebrate bottom fauna were collected by biologists to identify the food organisms of the king crab and to establish the relationship of king crabs to other fauna of the area. Biological data collected during 1958 and 1959 are listed in Special Scientific Report, U. S. Fish and Wildlife Service, Fisheries No. 401.

Cruises P-58-1 through P-58-4, NP-58-1 through NP-58-3, S-4-58, S-3-58, F-8-58, S-9-58 and CS-58-1

The interpolation for values at standard depths and the determination of calculated depths were carried out on the ALWAC III-E digital computer at the computing center of the University of British Columbia, Vancouver, B. C. (Fofonoff and Tabata, 1958; Fofonoff and Froese, 1958). Interpolations were made by the three-point Lagrange method in accordance with procedures used by the U. S. Naval Oceanographic Office, Washington, D. C. (U. S. N. Hydrogr. Off., 1960; Nat. Oceanogr. Data Center, 1962).

Cruise CC-58-1

The fifteen hydrographic stations occupied on this special survey off the coast of British Columbia are not considered by the Pacific Oceanographic Group to meet the observational standard of their regular oceanographic surveys. These data are included in this volume because of the wide range of chemical properties observed.

USS Burton Island

The interpolation for values at standard depths and determination of calculated depths were carried out by machine programs at the U. S. Naval Oceanographic Office, Washington, D. C. Interpolations were made by the three-point Lagrange method (U. S. N. Hydrogr. Off., 1960; Nat. Oceanogr. Data Center, 1962). The data presented in this volume were taken from Oceanographic Data Report, Arctic, 1958 (U. S. Naval Oceanogr. Off., unpublished manuscript).

Cruises BB-188, BB-193, BB-199 and BB-202

Interpolation of values at standard depths was performed by the IBM Type 650 Magnetic-Drum Data-Processing Machine in the Research Computer Laboratory of the University of Washington, using the three-point Lagrange curve based upon one point above and two points below the desired depth. Corrections were made for any peculiar interpolations which resulted from use of this method in the upper layers.

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 and 50 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| CCOFI | | | | | | | | | |
| 5801 | Black Douglas[a] | 9-21 i | 8 | 10 | 0 | 0 | 18 | 0 | 78 |
| | Paolina-T | 14 i-1 ii | 13 | 43 | 0 | 0 | 56 | 0 | 96[c] |
| | Stranger | 14 i-2 ii | 22 | 55 | 0 | 0 | 77 | 0 | 255 |
| 5802 | Paolina-T | 7-19 ii | 1 | 9 | 0 | 0 | 10 | 44 | 88[c] |
| | Stranger | 10-24 ii | 4 | 4 | 0 | 0 | 8 | 72 | 138 |
| 5803 | Black Douglas | 28 ii-20 iii | 7 | 22 | 0 | 0 | 29 | 54 | 147 |
| | Stranger | 7-19 iii | 4 | 6 | 0 | 0 | 10 | 66 | 138[c] |
| 5804 | Black Douglas | 5-27 iv | 17 | 35 | 0 | 0 | 52 | 24 | 22 |
| | Paolina-T | 1-22 iv | 7 | 39 | 0 | 0 | 46 | 37 | 107 |
| | Spencer F. Baird | 31 iii-11 iv | 4 | 3 | 0 | 0 | 7 | 8 | 32 |
| | Stranger | 3-27 iv | 28 | 42 | 0 | 0 | 70 | 30 | 138 |
| 5805 | Black Douglas | 9-21 v | 0 | 3 | 0 | 0 | 3 | 82 | 118 |
| | Paolina-T | 4-15 v | 1 | 2 | 0 | 0 | 3 | 73 | 83 |
| | Stranger | 4-17 v | 3 | 9 | 0 | 0 | 12 | 55 | 112 |
| 5806 | Black Douglas | 5-15 vi | 1 | 4 | 0 | 0 | 5 | 41 | 100 |
| | Orca | 5-25 vi | 3 | 7 | 0 | 0 | 10 | 94 | 149 |
| | Stranger | 7-23 vi | 1 | 2 | 0 | 0 | 3 | 61 | 102 |

| Depth determination | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| $O_2$ | $PO_4$-P | Usual No. Nansen btls | No. P therms/btl | Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
| 13 | 0 | 17 | 2 | 11 | thermograph | 33[b] | 3 GEK; drift btls released | Marine mammal watch; pelagic marine life obs |
| 46 | 0 | 17 | 2 | 11 | thermograph | 56[b] | 68 GEK; drift btls released, 12/sta | Marine mammal and albatross logs; pelagic marine life obs on sta and at BT obs |
| 69 | 0 | 17 | 2 | 11 | thermograph | 62[b] | - | Marine mammal log; pelagic marine life obs with BT ob |
| 0 | 0 | 17 | 2 | 11 | thermograph | 54[b] | 33 GEK; drift btls released from 30 stas | Marine mammal and daytime bird logs; pelagic marine life obs |
| 8 | 0 | 17 | 2 | 11 | thermograph | 80[b] | - | Marine mammal and bird logs; pelagic marine life obs |
| 26 | 0 | 17 | 2 | 10 | thermograph | 82[b] | 57 GEK; drift btls released[d] | Marine mammal and daytime albatross logs; pelagic marine life obs |
| 10 | 0 | 17 | 2 | 11 | thermograph | 77[b] | 19 GEK; drift btls released from 2 stas | Jig-line fishing; marine mammal and daytime albatross logs; pelagic marine life obs |
| 51 | 0 | 17 | 2 | 10 | thermograph | 78[b] | 78 GEK; 12 drift btls released from designated inshore stas | 50 phyto. hauls with small fine-meshed net; marine mammal and albatross logs |
| 46 | 0 | 17 | 2 | 10 | thermograph | 81[b]<br>4[e] | 7 GEK; 780 drift btls released, 12/sta | Phyto. hauls at all hydro. stas, to 50 m on alternate stas and 10-min. surface hauls on the other stas; daylight mammal watch; albatross log; pelagic marine life obs |
| 6 | 0 | 17 | 2 | 10 | thermograph | 12[b] | 1 GEK; total of 312 drift btls released | Phyto. hauls |
| 69 | 0 | 17 | 2 | 10 | thermograph | 100[b] | 27 GEK; 12 drift btls each from designated stas | Vertical or horizontal phyto. hauls at each hydro. sta as far as Sta. 113.50; marine mammal watch; albatross log; pelagic marine life obs |
| 3 | 0 | 17 | 2 | 10 | thermograph | 86[b] | 70 GEK; 552 drift btls released, 12/sta | Phyto. samples at 11 stas; jig-line fishing; marine mammal and bird logs; pelagic marine life obs |
| 3 | 0 | 17 | 2 | 10 | thermograph | 81[b] | 624 drift btls released, 12/sta and 48 special btls | Marine mammal and daytime albatross logs; pelagic marine life obs |
| 12 | 0 | 17 | 2 | 10 | thermograph | 66[b] | 34 GEK; 768 drift btls released[f] | Marine mammal and daytime albatross logs; pelagic marine life obs |
| 5 | 0 | 17 | 2 | 8 | thermograph | 46[b] | 65 GEK; 552 drift btls released, 12/sta | Jig-line fishing; marine mammal and daytime albatross logs; pelagic marine life obs |
| 9 | 0 | 17 | 2 | 8 | thermograph | 104[b] | 864 drift btls released, 12/sta | Marine mammal and daytime albatross logs; pelagic marine life obs at BT stas |
| 3 | 0 | 17 | 2 | 8 | thermograph | 64[b] | 51 GEK; 396 drift btls released, 12/sta | Marine mammal and daytime albatross logs; pelagic marine life obs at BT stas |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 and 50 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| 5807 | Black Douglas | 8-21 vii | 26 | 26 | 0 | 0 | 52 | 23 | 92 |
| | Orca | 2-20 vii | 17 | 40 | 0 | 0 | 57 | 34 | 109 |
| | Paolina-T | 4-17 vii | 8 | 33 | 0 | 0 | 41 | 21 | 75 |
| | Stranger | 30 vi-14 vii | 13 | 26 | 0 | 0 | 39 | 12 | 93 |
| 5808 | Black Douglas | 6-21 viii | 15 | 8 | 0 | 0 | 23 | 32 | 43 |
| 5809 | Black Douglas | 5-9 ix | 16 | 5 | 0 | 0 | 21 | 0[i] | 44 |
| | Orca | 10-19 ix | 9 | 26 | 0 | 0 | 35 | 0[i] | 59 |
| 5810 | Black Douglas | 10-28 x | 25 | 44 | 0 | 0 | 69 | 27[i] | 124 |
| | Horizon | 13-18 x | 0 | 2 | 23 | 0 | 25 | 0[i] | 34 |
| | Paolina-T | 8-20 x | 10 | 38 | 0 | 0 | 48 | 14[i] | 96 |
| | Stranger | 17 x-5 xi | 13 | 41 | 20 | 0 | 74 | 13[i] | 149 |
| 5811 | Paolina-T | 13-23 xi | 6 | 21 | 0 | 0 | 27 | 18[i] | 72 |
| 5812 | Orca | 2-11 xii | 14 | 15 | 0 | 0 | 29 | 18[i] | 81 |
| SIO | | | | | | | | | |
| Dolphin | Horizon[a] | 7 iv-30 v | 0 | 2 | 35 | 0 | 37 | 0 | 396 |
| Doldrums | Stranger[a] | 15-20 viii | 1 | 2 | 8 | 0 | 11 | 0 | 490 |

INFORMATION (cont.)

| Depth determination | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| $O_2$ | $PO_4$-P | Usual No. Nansen btls | No. P therms/btl | Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
| 51 | 0 | 17 | 2 | 8 | thermograph | 75[b] | 636 drift btls released, 12/sta | Jig-line fishing; marine mammal and albatross logs; pelagic marine life obs |
| 55 | 0 | 17 | 2 | 8 | thermograph | 91[b] | 684 drift btls released, 12/sta | Jig-line fishing; marine mammal and albatross logs; pelagic marine life obs |
| 41 | 0 | 17 | 2 | 8 | thermograph | 111[b] | 588 drift btls released, 12/sta | Jig-line fishing; marine mammal and albatross logs; pelagic marine life obs |
| 5 | 0 | 17 | 2 | 8 | thermograph | 50[b] | 5 GEK; 576 drift btls released, 12/sta | Marine mammal and albatross logs; pelagic marine life obs |
| 23 | 0 | 17 | 2 | 8 | thermograph | 37[b]<br>9[g]<br>11[h] | 456 drift btls released, 12/sta | Jig-line fishing; marine mammal and albatross logs; pelagic marine life obs |
| 21 | 0 | 17 | 2 | 8 | thermograph | 36[b]<br>6[j] | 420 drift btls released, 12/sta | Polychaete worms collected from 500 m, 1000 m, 1500 m and 2000 m; jig-line fishing; marine mammal and daytime albatross logs |
| 35 | 0 | 17 | 2 | 8 | thermograph | 53[b] | 640 drift btls released, 12/sta | Marine mammal and daytime albatross logs; pelagic marine life obs |
| 66 | 0 | 17 | 2 | 7 | thermograph | 96[b] | 1462 drift btls released, 24/sta[k] | Jig-line fishing; marine mammal and albatross logs; pelagic marine life obs |
| 25 | 0 | 17 | 2 | 9 | thermograph | 12[b] | 376 drift btls released, 24/sta[l] | Close pattern of deep hydro. stas in Davidson Seamount area while USS Thrasher conducted drogue survey to determine effects of seamount; marine mammal and daytime albatross logs; pelagic marine life obs |
| 48 | 0 | 17 | 2 | 7 | thermograph | 61[b] | 1368 drift btls released, 24/sta[l] | Jig-line fishing; marine mammal and albatross logs; pelagic marine life obs |
| 73 | 0 | 17 | 2 | 9 | thermograph | 89[b] | 2206 drift btls released, 24/sta[l] | Jig-line fishing; marine mammal and daytime albatross logs; pelagic marine life obs on sta |
| 27 | 0 | 17 | 2 | 8 | thermograph | 43[b] | 1080 drift btls released, 24/sta[l] | Marine mammal and albatross logs; pelagic marine life obs |
| 26 | 0 | 17 | 2 | 8 | thermograph | 46[b] | 1104 drift btls released, 24/sta[l] | 22 phyto. hauls; marine mammal and daytime albatross logs |
| 36 | 13 | 17 | 2 | 10 | thermograph | 0 | 51 GEK | Current measurements using Roberts meter; magnetometer measurements; Precision Depth Recorder (PDR) in operation; dredge hauls |
| 11 | 0 | 17 | 2 | 10 | thermograph | 0 | GEK[b] | Subsurface current measurements by Roberts meter; 7 current measurements using Swallow float |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 and 50 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| TO-58-1 SCOT | Spencer F. Baird[a] | 25 iv-18 vi | 13 | 15 | 31 | 2 | 61 | 0 | 333[c] |
| TO-58-2 | Spencer F. Baird[a] | 22 xi-2 xii | 11 | 10 | 0 | 0 | 21 | 0 | 148 |
| HBL | | | | | | | | | |
| HMS-45 | Hugh M. Smith | 6 iv-15 vi | 0 | 2 | 42 | 0 | 44 | 0 | 258 |
| HMS-46 | Hugh M. Smith[f] | 23 vii-3 ix | 0 | 0 | 52 | 0 | 52 | 0 | 325 |

| $O_2$ | $PO_4$-P | Depth determination: Usual No. Nansen btls | Depth determination: No. P therms/btl | Depth determination: Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
|---|---|---|---|---|---|---|---|---|
| 59 | 59 | 16 | 2 | 10 | thermograph | 98[d]<br>28[f]<br>123[g]<br>23[h]<br>57[i] | 85 GEK[e] | Incident solar radiation measurements by 10-junction Eppley pyrheliometer; photometer lowerings to approx. 100 m to measure submarine daylight; phyto. samples, including 46 hauls, 50-0 m; surface and subsurface chlorophyll a standing crop determinations; zooplankton and nekton standing crop determinations; surface and subsurface primary production study, using the carbon-14 method, of samples collected by trailing bottles and plastic Van Dorn-type samplers |
| 21 | 20 | 17 | 2 | 11 | thermograph | 14[d]<br>3[f]<br>6[g] | 98 GEK | Incident solar radiation measurements by 10-junction Eppley pyrheliometer; photometer lowerings to measure submarine daylight; 6 phyto. vertical hauls, 50-0 m, with 17-cm Hensen-type net (mesh size 32μ); chlorophyll a standing crop determinations; zooplankton standing crop measurements; micronekton standing crop measurements; surface and subsurface primary production study, using the carbon-14 method, of samples collected by trailing bottles and plastic Van Dorn-type samplers |
| 44 | 44 | 17 | 2[a] | 13 | thermograph | 39[b]<br>12[d]<br>12 pairs[e] | 32[c] | Study of diurnal variability in distribution of tuna larvae at one sta in Marquesas area; daylight surface trolling; 110 stomachs and 55 ovaries of skipjack preserved; at each hydro. sta between 0800-1600, photometer measurements at 105 and 1% light transmission; Forel water-color measurements; Secchi disc obs; surface S and $PO_4$-P samples at each BT ob offshore and at local noon daily inshore; 4 night-light collections; bird and fish-school logs |
| 52 | 52[g] | 13 | 2 | 9 | thermograph | 29[h]<br>25[i]<br>7[j] | - | 3 20-min. Isaacs-Kidd midwater-trawl hauls; 7 long-line fishing stas; 19 gill-net stas (with night-light collections); direct surface trolling; 3 albacore tagged; stomachs from all long-line and troll catches and 19 albacore head sections preserved; Secchi disc obs; bird and fish-school logs |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations | | | | | T and S obs at 10 and 50 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| | | | 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | | |
| HBL/IGY | | | | | | | | | |
| CHG-37 | Charles H. Gilbert | 22 i | 1 | 1 | 0 | 0 | 2 | 0 | 13 |
| HMS-43 | Hugh M. Smith | 28 ii | 1 | 1 | 0 | 0 | 2 | 0 | 9 |
| HMS-44 | Hugh M. Smith | 24-25 iii | 1 | 1 | 0 | 0 | 2 | 0 | 19 |
| Makua | Makua | 21-22 iv | 0 | 2 | 0 | 0 | 2 | 0 | 20 |
| CHG-39 | Charles H. Gilbert | 30 v-22 vi | 3 | 2 | 0 | 0 | 5 | 0 | 18 |
| HMS-46 | Hugh M. Smith | 22 vii | 0 | 1 | 1 | 0 | 2 | 0 | 8 |
| CHG-41 | Charles H. Gilbert | 20 viii-26 ix | 3 | 1 | 0 | 0 | 4 | 0 | 16 |
| Makua | Makua | 21-22 x | 0 | 2 | 0 | 0 | 2 | 0 | 9 |
| HMS-48 | Hugh M. Smith | 21 xi | 1 | 0 | 1 | 0 | 2 | 0 | 7 |
| HMS-49 | Hugh M. Smith | 19 xii | 3 | 1 | 0 | 1 | 5 | 0 | 10 |
| SBL | | | | | | | | | |
| - | MV Attu | 14 v-29 viii | 51 | 7 | 20 | 0 | 78 | 0 | 127 |
| - | MV Pioneer | 18 v-30 viii | 57 | 10 | 38 | 0 | 105 | 0 | 267 |
| King Crab Investigations | MV Tordenskjold | 29 iv-15 vii | 167 | 0 | 0 | 0 | 167 | 0 | 169 |

| $O_2$ | $PO_4$-P | Depth determination: Usual No. Nansen btls | Depth determination: No. P therms/btl | Depth determination: Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
|---|---|---|---|---|---|---|---|---|
| 2 | 2 | 12 | 2 | 8 | - | 2[a]<br>2[b] | - | Secchi disc and water-color obs |
| 2 | 2 | 12 | 2 | 8 | - | 0 | - | - |
| 2 | 2 | 12 | 2 | 8 | - | 4[a]<br>2[b] | - | Photometer, Secchi disc and water-color obs |
| 0 | 0 | 12 | 1-2 | 8 | - | 4[a]<br>2[b] | - | Secchi disc and water-color obs |
| 3 | 1 | 4 w/12<br>2 w/8 | 1-2 | 8<br>4 | - | 6[a]<br>3[b] | - | Secchi disc and Forel scale water-color obs |
| 2 | 2 | 15/10 | 2 | 11/6 | - | 2[a] | - | - |
| 4 | 2 | 10 | 2 | 6 | - | 4[a]<br>2[b] | - | Secchi disc and Forel scale water-color obs |
| 1 | 2 | 12 | 2 | 8 | - | 4[a]<br>2[b] | - | Photometer, Secchi disc and Forel scale water-color obs |
| 0 | 2 | shallow, 12<br>deep, 8 | 2 | shallow, 6<br>deep, 8 | - | 2[a]<br>1[b] | - | - |
| 1 | 1 | shallow, 12<br>deep, 8 | 2 | shallow, 6<br>deep, 8 | - | 4[a] | - | Photometer and Secchi disc obs |
| 70 | 0 | deep, 4<br>shallow, 10 | 2<br>2 | 4<br>6[b] | - | 29[a]<br>24[c] | 5 releases of drift btls, total 241 | Investigation of distribution and migration of salmon; gill-net fishing; Isaacs-Kidd trawl hauls;[d] numbers of 10 different organisms and numbers of copepods (13 species) per cubic meter of water filtered during plankton hauls |
| 91 | 0 | deep, 4<br>shallow, 10 | 2<br>2 | 4<br>6[b] | - | 41[a]<br>39[c] | 5 releases of 50 drift btls each | Investigation of distribution and migration of salmon; gill-net fishing; 41 Isaacs-Kidd trawl hauls;[d] numbers of 10 different organisms and numbers of copepods (13 species) per cubic meter of water filtered during plankton hauls |
| 0 | 0 | 4 | 2 | 0 | - | 0 | - | Survey of the benthic invertebrate fauna (pelecypods, gastropods, barnacles, decapod crustaceans, tunicates and the majority of echinoderms) collected in the eastern Bering Sea using otter trawls and a box-type dredge[e] |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 and 50 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| POG | | | | | | | | | |
| PAPA, P-58-1 | CGS St. Catharines[a] | 9 iii-16 iv | 6 | 0 | 5 | 0 | 11 | 0 | PAPA total: 843[d] |
| PAPA, P-58-2 | CGS St. Catharines[a] | 31 v-8 vii | 34 | 1 | 7 | 0 | 42 | 0 | |
| PAPA, P-58-3 | CGS St. Catharines[a] | 23 viii-22 ix | 4 | 2 | 8 | 0 | 14 | 0 | |
| PAPA, P-58-4 | CGS St. Catharines[a] | 3 xi-11 xii | 6 | 2 | 5 | 1 | 14 | 0 | |
| NP-58-1 | HMCS Oshawa[g] | 11 iii-11 iv | 26 | 11 | 27 | 35 | 99 | 0 | 108[h] |
| S-4-58 | HMCS Oshawa[k] | 24-26 iv | 0 | 1 | 7 | 2 | 10 | 0 | 42[l] |
| S-3-58 | HMCS Oshawa[n] | 17-27 v | 16 | 3 | 3 | 0 | 22 | 0 | 142[o] |
| CC-58-1 | HMCS Oshawa[p] | 23 vi-4 vii | 13 | 2 | 0 | 0 | 15 | 0 | 20[q] |
| NP-58-2 | CNAV Whitethroat[t] | 27 vi-14 viii | 14 | 10 | 66 | 7 | 97 | 0 | 149[u] |
| NP-58-3 | HMCS Oshawa[w] | 23 vii-16 viii | 41 | 19 | 39 | 0 | 99 | 0 | 190[u] |
| F-8-58 | HMCS Oshawa[n] | 2-7 ix | 0 | 0 | 2 | 3 | 5 | 0 | 25[u] |
| S-9-58 | HMCS Oshawa | 26-29 ix | 1 | 2 | 1 | 4 | 8 | 0 | 33[x] |

| $O_2$ | $PO_4$-P | Depth determination: Usual No. Nansen btls | Depth determination: No. P therms/btl | Depth determination: Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
|---|---|---|---|---|---|---|---|---|
| 10 | 9[b] | 14 | 1-2 | 3[c] | at BT | PAPA total: 226[e] | 1000 drift btls released on arrival on sta | Samples for $SiO_3$-Si[b] determination at 10 stas; $NO_2$-N,[b] 11; Secchi disc reading on all daylight stas; detailed marine life obs of birds and mammals twice daily |
| 17 | 11[b] | 14 | 1 | 3[c] | at BT | | 1000 drift btls released on arrival on sta | Samples for $SiO_3$-Si[b] determination at 13 stas; $NO_2$-N,[b] 12; Secchi disc reading on all daylight stas; detailed marine life obs of birds and mammals twice daily |
| 12 | 8[b] | 14 | 1 | 3[c] | at BT | | 500 drift btls released on arrival on sta[f] | Samples for $SiO_3$-Si[b] determination at 12 stas; $NO_2$-N,[b] 8; Secchi disc reading on all daylight stas except during rough weather; detailed marine life obs of birds and mammals on each 4-hr daytime watch |
| 0 | 0 | 14 | 1-2 | 3[c] | at BT | | 500 drift btls released on arrival on sta[f] | Samples for $NO_2$-N[b] determination at 2 stas; Secchi disc reading on all daylight stas except during rough weather; detailed marine life obs of birds and mammals on each 4-hr daytime watch |
| 99 | 0 | 18 | 1 | 4-6[i] | at BT | 73[j] | - | Secchi disc readings at some daylight stas; marine life log |
| 0 | 0 | 19 | 1-2 | 3/cast | at BT | 3[m] | - | - |
| 0 | 0 | 13 | 1-2 | 3/cast | at BT | 0 | - | - |
| 14 | 10[b] | 10[r] | 1, 1 pair | 1 | - | 1[m] | - | Samples for determination of $SiO_3$-Si,[b] $NO_2$-N,[b] $NO_3$-N,[s] Alk., pH,[b] $NH_3$[s] and total phosphorus at 10 stas (pp. 627-636); reactive iron, 9 stas; daily measurements of light attenuation with depth in as many different sea regions as practicable (at 9 stas) |
| 96 | 0 | 16 | 1, 5 pairs | 1-3[v] | at BT | ±80[m] | 500 drift btls released twice | Marine life obs |
| 97 | 0 | 19 | 1, 1 pair | 3 | at BT | 80[m] | - | Samples for $SiO_3$-Si[b] determination at 11 stas; $NO_3$-N,[s] 2; Secchi disc reading at most daylight stas |
| 0 | 0 | 17 | 1 | 4 | - | 0 | - | - |
| 0 | 0 | 20 | 1-2, 16 pairs | 5/cast | at BT | 0 | - | - |

| Cruise | Vessel | Dates of hydro. casts | Number and depths of hydrographic stations 0-500 m | 500-1000 m | 1000-2000 m | >2000 m | Total | T and S obs at 10 and 50 m | No. of BT obs |
|---|---|---|---|---|---|---|---|---|---|
| CS-58-1 | CNAV Whitethroat[p] | 12 xi-6 xii | 87 | 2 | 11 | 0 | 100 | 0 | 128[y] |
| USNOO | | | | | | | | | |
| - | USS Burton Island | 12-13 ix | 6 | 0 | 0 | 0 | 6 | 0 | 44 |
| UW | | | | | | | | | |
| BB-188 | Brown Bear | 19-28 ii | 13 | 3 | 13 | 0 | 29 | 0 | 62 |
| BB-193 | Brown Bear | 16-17 iv | 1 | 1 | 0 | 0 | 2 | 0 | 0 |
| BB-199 | Brown Bear[e] | 2 vii-20 viii | 3 | 0 | 28 | 11 | 42 | 0 | 467[f] |
| BB-202 | Brown Bear[o] | 21 ix-2 x | 4 | 1 | 9 | 0 | 14 | 0 | 121 |

| $O_2$ | $PO_4$-P | Depth determination: Usual No. Nansen btls | Depth determination: No. P therms/btl | Depth determination: Btls w/U therms | Surface T underway | Plankton tows | Surface currents | Other measurements and observations |
|---|---|---|---|---|---|---|---|---|
| 100 | 0 | 19 | 1-2, 17 pairs | 6 | at BT | 12[m] | - | Samples for $SiO_3$-Si[b] determination at 11 stas; $NO_3$-N,[s] 3; Secchi disc reading at some daylight stas |
| 0 | 0 | 7 | 2 | 0 | - | 24[a] | - | 48 samples of bottom sediments collected by Phleger corer or Orange Peel grab; measurements at 3 depths with Ekman current meter at 18 stas; bottom photographs; ice logs; various biological samples |
| 28[a] | 29[b] | 15 | 2 | all btls below 100 m | 33 | 13[c] 13[d] | - | Coring; 6 30-min. midwater-trawl hauls, 200-0 m, using a 3- or 6-ft modified Isaacs-Kidd trawl |
| 2[a] | 0 | 12 | 2 | all btls below 100 m | - | 0 | - | Thermistor measurements for Applied Physics Lab. |
| 42[g] | 39[h] | 22 | 2 | all btls below 100 m | 20 | 39[i] 39[k] 39[m] | GEK | Samples for $SiO_3$-Si[j] determination at 30 stas; pH,[l] 25; Alk.,[n] 25; Fe and Mn samples at 7 stas; 50-gal. water samples for C-14 analysis, 100 m above bottom, at 11 stas and at minimum $O_2$ layer at 5 stas; 8 50-gal. surface water samples for geochem. studies; 336 30-min. midwater-trawl hauls, 400-0 m, using a 3- or 6-ft modified Isaacs-Kidd trawl; 13 cores; productivity and light intensity studies; Secchi disc obs; albacore trolling |
| 14[a] | 14[p] | 12 | 2 | all btls below 100 m | 107 | 30[q] 30[r] | - | 89 30-min. midwater-trawl hauls, 400-0 m, using a 3- or 6-ft modified Isaacs-Kidd trawl; coring |

General Methods

Unless otherwise indicated, subsurface temperature by paired reversing thermometers; salinity by Knudsen method (reported to hundredths) or by conductivity bridge (reported to thousandths, except POG Cruises S-4-58 and NP-58-3 and UW Cruise BB-199); dissolved oxygen by Winkler method aboard ship; inorganic phosphate by the molybdenum-blue method (Wooster and Rakestraw, 1951).

When available, specific information on accuracy is indicated by footnotes. Absence of such information does not imply that the nominal accuracies have been achieved.

CCOFI

a CCOFI thermometer calibrations indicate the temperature accuracy to be 0.02°C; field tests indicate a salinity accuracy of ±0.025‰ (root mean square).
b Oblique plankton tow to approximately 140 m (200 m of wire out, or less in shallow water) taken with a 30XXX net, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze.
c BT lowering on all stations and halfway between stations and station lines.
d Twelve drift bottles were released at all stations on Lines 70 to 93, at the outer two stations on Line 97, at all stations except the inner two on Line 100, at the outer three stations on Line 103 and at the outer three stations on Line 107.
e Oblique plankton tow to approximately 424 m (600 m of wire out, or less in shallow water) taken with a 30XXX net, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze.
f A total of 768 drift bottles were released, 12 per station except on Stations 83.90, 83.43, 63.90 and 63.52 where 12 ballasted bottles and 12 unballasted bottles were released in order to compare recovery rates of the two types.
g Surface horizontal plankton tows taken with standard one-meter net in various bays of Baja California (except one tow off Cape Blanco). The duration of each tow was approximately 10-1/2 hours.
h Shallow oblique plankton tows to various depths ranging from 14 to 102 m (30 to 150 m of wire out) taken with a standard one-meter net. Two tows were made in South Bay of Cedros Island and nine in Sebastián Vizcaino Bay.
i Net-tow observations at 10 m only.
j Six special shallow tows to depths ranging from 29 to 68 m (40 to 100 m of wire out) taken in the Sebastián Vizcaino Bay area with a standard one-meter net.
k Twelve ballasted and 12 unballasted bottles were released on each station except Stations 143.55 and 140.55.
l Twenty-four bottles (12 ballasted and 12 unballasted) were released at designated stations.

SIO

a Thermometer calibrations indicate the temperature accuracy to be 0.02°C; field tests indicate a salinity accuracy of ±0.025‰ (root mean square).
b A total of approximately 3000 GEK observations were made by the five ships which participated in this study of the North Equatorial Countercurrent.
c A 900-ft BT lowering was made on regular forenoon and regular night stations and every three hours while underway between forenoon stations.
d Oblique plankton tow to approximately 300 m (450 m of wire out, or less in shallow water) taken with a nonclosing 30XXX net, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze. A flowmeter mounted in the center of the mouth measured the volume of water filtered. Usual duration of haul was about 32 minutes.
e Upon departure from Clipperton Island observations were made at 4-hour intervals and were continued more or less routinely throughout the remainder of the expedition.
f Oblique shallow plankton haul (200 m of wire out) taken with a nonclosing 30XXX net, 1.0 m in in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze. A flowmeter mounted in the center of the mouth measured the volume of water filtered. Usual duration of haul was about 14 minutes. On Stations 9, 11, 21, 26, 53 and 55, where the depth did not permit the shallow oblique haul, a subsurface shallow horizontal haul was made. The net was lowered to a depth close to the bottom, ranging from 12 to 63 m, and was towed horizontally.
g Surface horizontal plankton tow taken with a nonclosing 30XXX net, 1.0 m in diameter by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze. A flowmeter mounted in the center of the mouth measured the volume of water filtered.

h Horizontal plankton hauls made at depths ranging from 12 to 373 m taken with a closing net lowered to the desired depth and opened by lowering a messenger, then closed by means of another messenger at the end of the haul before being brought to the surface. The nets are of 30XXX nylon grit gauze, 1.0 m in diameter at mouth by approximately 5 m in over-all length with detachable cod end of 56XXX nylon grit gauze with flowmeter mounted in mouth to measure the volume of water filtered.

i Micronekton (small nekton, 0.5-10 cm long) net hauls using a very large coarse-meshed plankton net hauled obliquely at about 5 kt. The net, about 20 ft in over-all length and of Marion Textiles pattern No. 467 nylon throughout, was fastened at the mouth of a 5-ft-square iron frame to which towing bridles and weights were attached to keep it upright in the water when underway; a detachable cod end of 56XXX nylon grit gauze formed the catching part of the assembly.

HBL

a One only in Nansen bottle at the surface; two per bottle at other depths.

b Oblique plankton hauls to 140 m, taken with a net 1.0 m in diameter at mouth and 0.656 mm in aperture size; duration, 30 minutes. Twenty-one hauls were made during the offshore survey and 18 between Honolulu and the Marquesas Islands.

c Current measurements with Roberts meter, each at 12 to 18 levels between 10-300 m.

d Surface plankton tows using a one-meter net; duration, 30 minutes.

e On a station to measure diurnal variability, 12 pairs of hauls were made, upper nets open, from 0-140 m, and lower nets closing, from 140-280 m; duration, 45 minutes to one hour. All nets were 1.0 m in diameter at mouth and 0.65 mm in aperture size.

f Salinity determinations by a modification of Fajan's adsorption indicator method developed and described by Van Landingham (1957) which is essentially a mixture of indicators for the Knudsen titration.

g The inorganic phosphate determinations were analyzed by the hydrazine sulphate modification of Denigès' method developed by Van Landingham (King et al., 1957). The determinations for Stations 1 to 11 were made with the Automatic Servo-operated Photometer described by Wooster and Rakestraw (1951). After Station 11 this instrument failed and a Beckman photometer was used.

h Oblique plankton hauls to 140 m taken with a net 1.0 m in diameter at mouth and 0.65 mm in aperture size; duration, 30 minutes.

i Surface plankton tows using a net 1.0 m in diameter at mouth and 0.65 mm in aperture size (656 Nitex netting); duration, 20 minutes.

j Surface plankton tows using a net 45 cm in diameter at mouth and 0.30 mm in aperture size (303 Nitex netting).

HBL/IGY

a Oblique plankton hauls, 0 to 60 m, taken with a net 1.0 m in diameter at mouth; duration, approximately 30 minutes.

b Surface plankton tow using a Clarke-Bumpus sampler; duration, approximately 30 minutes.

SBL

a Vertical plankton hauls, 150 m to surface, taken with a standard half-meter net of No. 6 mesh at a speed of about 50 m per minute.

b In bottom six bottles.

c Vertical plankton hauls, 300 m to surface, taken with a standard half-meter net of No. 6 mesh at a speed of about 50 m per minute.

d On approach to a fishing location, a reduced model of a modified Isaacs-Kidd trawl was towed at three kt at the surface or from the surface to four depths (25, 50, 100, 150 m) at 3-minute intervals for a total of 15 minutes, at which time the vessel was stopped and the trawl retrieved. A total of 26 hauls were made by MV Attu: 16 at the surface and 10 stepped-trawl hauls from the surface to 150 m. A total of 41 hauls were made by MV Pioneer: 22 at the surface, 2 stepped-trawl hauls from the surface to 50 m, 7 stepped-trawl hauls from the surface to 100 m, 10 stepped-trawl hauls from the surface to 150 m.

e The otter trawls were towed on a straight-line course at approximately 3 miles per hour for 1-hour periods at stations spaced at 20-mile intervals throughout the area. The trawl used was a standard "400 mesh eastern" type with a 94-foot-long footrope. To assure the retention of smaller organisms, the trawl was modified by inserting a 1-1/2-inch mesh lining at the cod end. The box-type dredge was used for additional sampling at some stations. The galvanized screening of the dredge had four openings to the inch; in addition, it was lined with 1/8-inch mesh netting (McLaughlin, 1963).

POG

a Salinity samples analyzed ashore in a modified Wenner-Smith-Soule salinity bridge (Strickland, 1958a, b).

b Chemical analyses aboard ship (Strickland, 1958a).

c Unprotected thermometers used below 300 m.

d BT observations every three hours to and from station, weather permitting, to a depth of 900 ft. On-station lowerings at 0200 and 1700 GCT daily (except on P-58-1, at 0000 and 1700 GCT). On P-58-1, one 72-hour series of hourly lowerings and one 48-hour series of 2-hourly lowerings; on P-58-2, one 72-hourly series of hourly lowerings; on P-58-3, three hourly series for 25, 13 and 51 hours; on P-58-4, two 25-hour series and one 50-hour series of hourly observations.

e Vertical tows made twice a week from a depth of 150 m; vertical tows from depths of 500, 300, 200, 150 and 50 m to the surface were made in the morning and also in the evening twice during each cruise. Horizontal tows were made at the surface every two hours for 24 hours twice on each cruise, towed for one-half hour at a speed of from 2 to 4 kt. For these PAPA hauls a one-half-meter-diameter nylon net of 0.33-mm mesh size (standard NORPAC net) was used.

f Dodimead and Hollister (1958).

g Salinity determinations by conductivity salinometer (Strickland, 1958a).

h Up to Station 81, BT observations were made to 900 ft at each station and between stations separated by more than 30 miles. (At Sta. 82 the last working BT was lost.)

i An unprotected thermometer was used on the 300-m bottle of the first cast. At least four, and as many as six, were used on the second cast until five were lost at Station 72. One was used on the deep cast of the remaining stations.

j Up to Station 80, vertical plankton tows from 150 m to the surface were made using a one-half-meter-diameter nylon net of 0.33-mm mesh size (NORPAC net). The rate of haul-in was one-half to one meter per second. (Plankton hauls were suspended at Sta. 80 because no sounding weight heavy enough to haul down the net was available.)

k Salinity samples were analyzed in a conductivity salinometer (Paquette, 1958; Strickland, 1958a). Salinities were determined to three decimal places, but values have been smoothed to two places.

l On-station lowerings. One 11-hour series of observations taken every 20 minutes along latitude 48°20'N between 137° to 135°W.

m Vertical plankton tow from 150 m to the surface using a half-meter-diameter nylon net of 0.33-mm mesh size (standard NORPAC net). The rate of haul-in was one meter per second.

n Salinity determinations were done either on board ship during the survey or at the Nanaimo laboratory, using a conductivity salinometer (Paquette, 1958; Strickland, 1958a).

o At hourly and 2-hourly intervals. One 12-hour hourly series taken on the half hour.

p Salinity determinations aboard ship immediately following the completion of station observations, using a modified Wenner-Smith-Soule salinometer (Strickland, 1958a, b).

q On station and when light-attenuation measurements were attempted. Extra lowerings were made when any strongly marked thermocline or inversion was indicated. Both 450-ft and 900-ft instruments were used, depending upon water depth.

r Fjarlie reversing bottles were used (Fjarlie, 1953), and on each cast five 5-liter Van Dorn bottles (Van Dorn, 1956) were used to obtain samples for such determinations as particulate phosphorus and iron. On all stations a deep sample was taken with a Van Dorn bottle.

s Method described by Strickland (1958b).

t Determination of salinity aboard ship using a conductivity salinometer (Strickland, 1958a).

u A 900-ft BT lowering at each station and one midway between stations.

v One unprotected thermometer at 300 m on the first cast; three on second cast at top, bottom and at an intervening depth.

w Determination of salinity aboard ship using a conductivity salinometer (Strickland, 1958a, b). but tabulated to two decimal places only.

x A BT lowering at each station and during the run between stations. One 12-hour series of observations taken every 20 minutes.

y A BT lowering immediately after the hydrographic cast at each station and, in addition, between stations on the seaward end of the three northern 200-mile sections.

USNOO

a Plankton tows using half-meter net.

UW

a Dissolved oxygen by the modified Winkler method described by Thompson and Robinson (1939).

b Dissolved inorganic phosphate by the method of Robinson and Thompson (1948) as modified by Wooster and Rakestraw (1951), using a Beckman Model DU Spectrophotometer. A constant-temperature bath was used to bring all phosphate samples and standards to a uniform temperature of about 27°C. The use of this bath eliminated errors in the determination due to temperature fluctuation. Values have been corrected for salt error. The accuracy is estimated to be ±10 per cent.

c Vertical plankton tow, 200 m to surface, taken with a half-meter net of No. 6 mesh size. Duration of haul was 10 minutes.

d Oblique plankton tow, 200 m to surface, taken with a Clarke-Bumpus sampler of No. 6 mesh size. Duration of haul was 10 minutes.

e Salinity determinations by conductivity measurements made on shipboard with the modified Wenner-Smith-Soule salinity bridge (Paquette, 1958). Values are tabulated to two places only. Such values have a reproducibility of ±0.004‰ salinity at the 95 per cent probability level and a probable accuracy of ±0.01‰ salinity or better at the same level of probability.

f Lowering with 450- or 900-ft BT at 2-hour intervals except on part of the return leg when observations were made every 3 hours.

g Dissolved oxygen by the modified Winkler method described by Thompson and Robinson (1939). Standardizations were made using potassium bi-iodate. The accuracy is estimated to be 0.06 ml/L. Because there has been some deterioration of the tin coating on the sampling bottles, small negative errors are likely at the greatest depths when hydrographic casts were prolonged.

h Dissolved inorganic phosphate by the method described by Robinson and Thompson (1948) as modified by Wooster and Rakestraw (1951). Measurements were made with a Lumetron Model 402-E Colorimeter using 15-cm cells. Values have been corrected for salt error. Accuracy is estimated to be ±10 per cent.

i Vertical plankton tow, 200 m to surface, taken with a half-meter net of No. 6 mesh size. Duration of haul was 15 minutes.

j Inorganic silicate determinations were made immediately after collection by a spectrophotometric modification of Atkins method as applied to sea water. The data are corrected for salt effect and the precision is within ±5 per cent.

k Vertical plankton tow, 400 m to surface, taken with a half-meter net of No. 6 mesh size. Duration of haul was 30 minutes.

l The pH measurements were conducted electrometrically using a Beckman Model G pH Meter and a probe glass electrode and saturated half-cell calomel-electrode assembly. The method was adapted for use aboard ship. The precision of replicate samples in the shore laboratory is ±0.02 pH units. The precision aboard ship in the field is within ±0.04 pH units.

m Oblique plankton tow, 200 m to surface, taken with a Clarke-Bumpus sampler of No. 6 mesh size. Duration of haul was 10 to 25 minutes.

n Alkalinity determinations were made using the method described by Anderson and Robinson (1946) of excess acid and electrometric determination of the pH after converting all carbonates and bicarbonates to carbonic acid.

o Salinity determinations by University of Washington-Pacific Naval Laboratory salinometer which is a modification of the Wenner-Smith-Soule salinity bridge (Paquette, 1958). All values reported are the means of duplicates. Such values have a reproducibility of ±0.004‰ salinity at the 95 per cent probability level and a probable accuracy of ±0.01‰ salinity or better at the same level of probability.

p Dissolved inorganic phosphate by the method of Robinson and Thompson (1948), as modified by Wooster and Rakestraw (1951), using either a Lumetron Model 402-E Colorimeter or a Beckman Model DU Spectrophotometer. The colorimeter in use aboard ship broke down and could not be repaired at sea after the samples from Stations 1 through 7 had been analyzed. For the remainder of the cruise each phosphate sample was "pickled" by adding three or four drops of chloroform and then frozen. Samples were analyzed ashore immediately on return to Seattle by spectrophotometer. Aboard ship a constant-temperature bath was used to bring all phosphate samples and standards to a uniform temperature of about 27°C and thereby eliminate errors in determination due to temperature fluctuation. Values have been corrected for salt error. Accuracy is estimated to be ±10 per cent.

q Vertical plankton tow, 200 m to surface, taken with a half-meter net of No. 6 mesh size. Duration of haul was 15 to 20 minutes.

r Oblique plankton tow, 200 m to surface, taken with a Clarke-Bumpus sampler of No. 6 mesh size. Duration of tow was 15 minutes.

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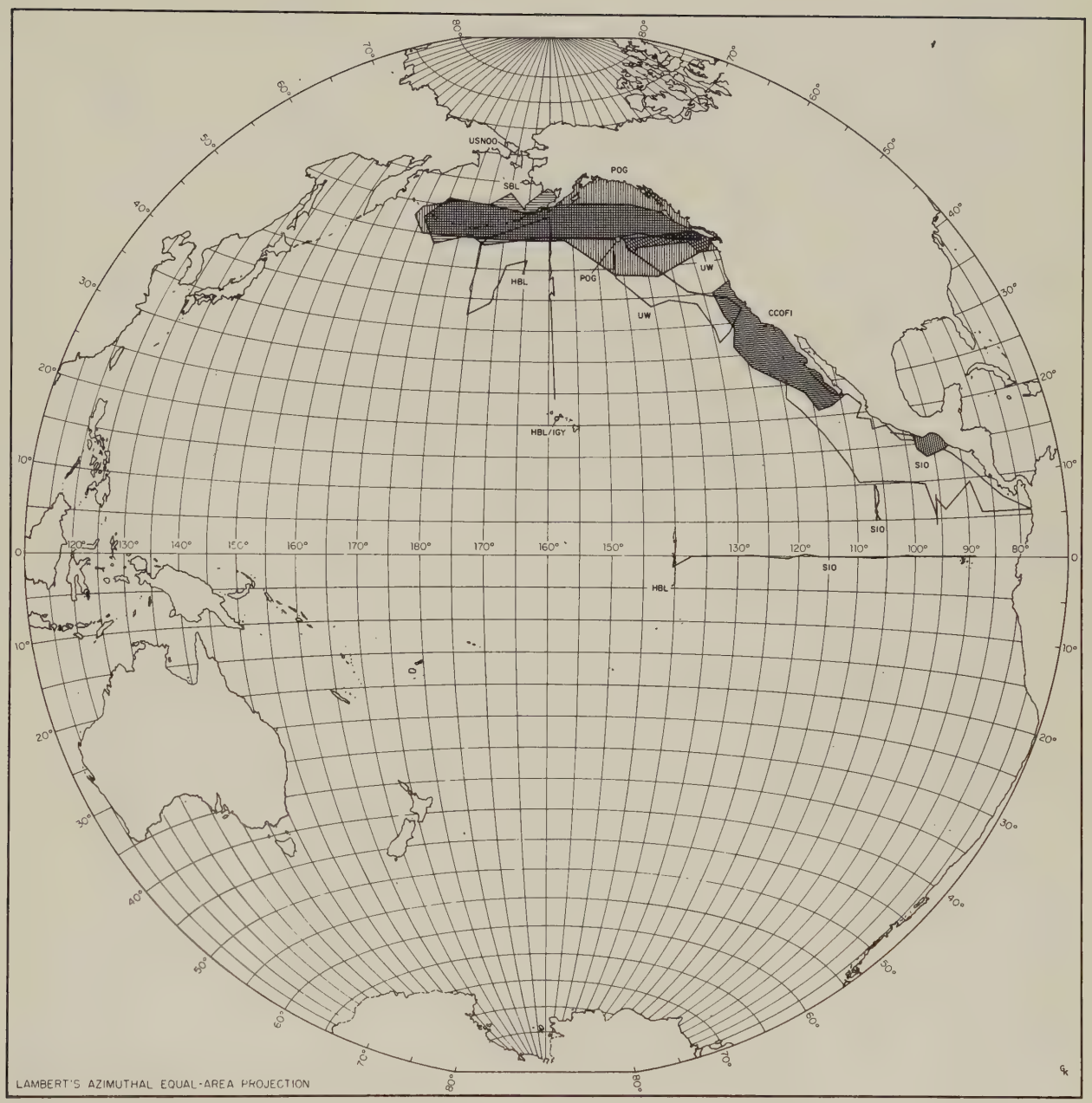


CHART 1. General location chart

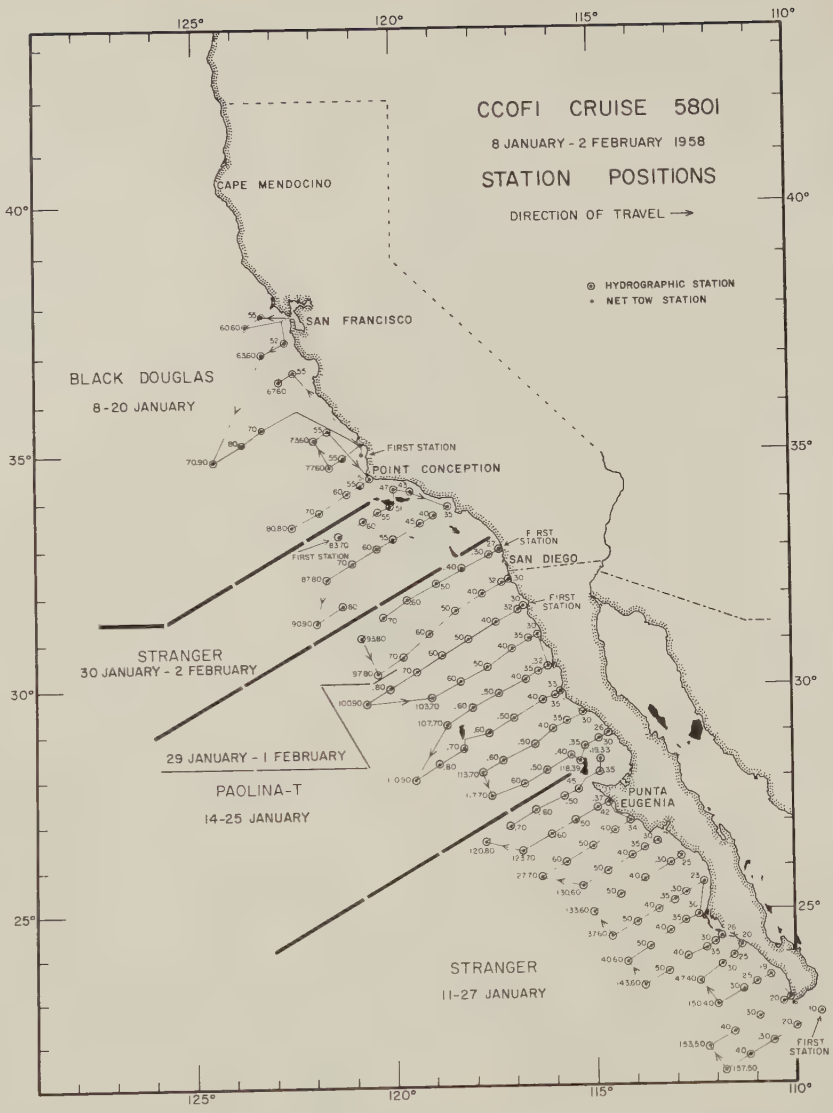


CHART 2. Station positions, CCOFI, Cruise 5801

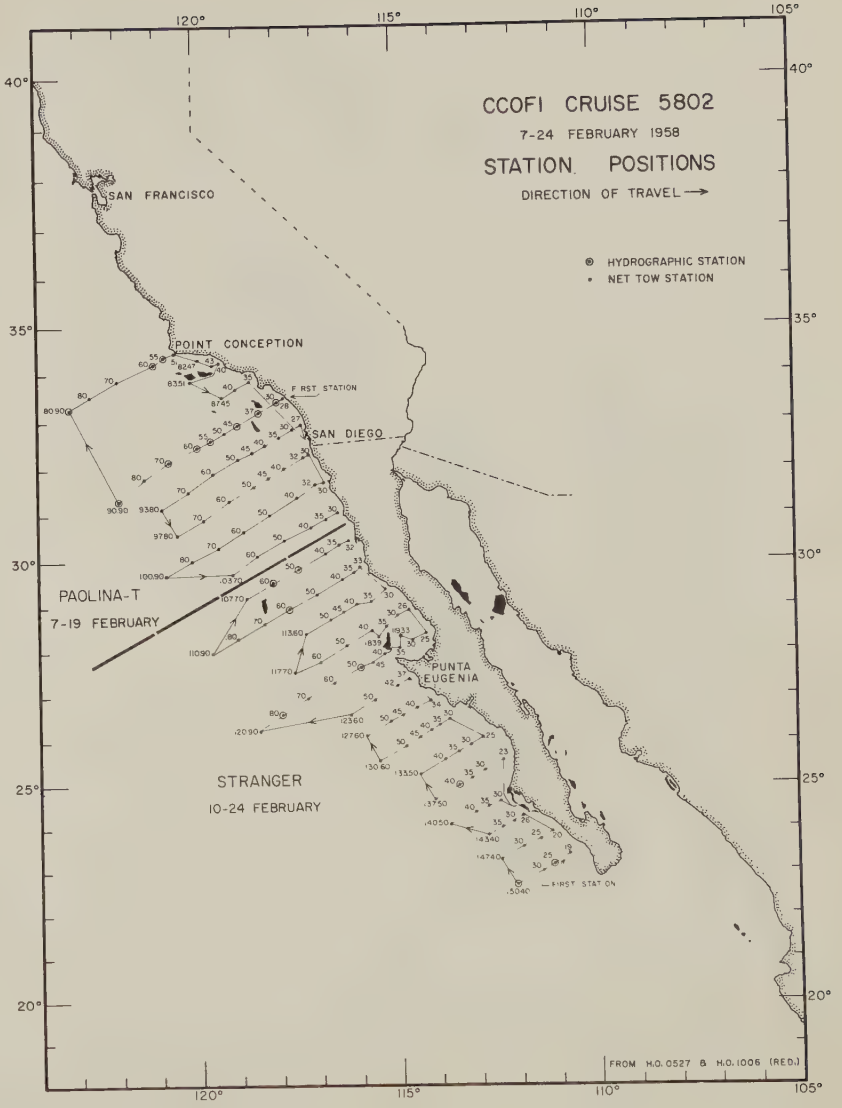


CHART 3. Station positions, CCOFI, Cruise 5802

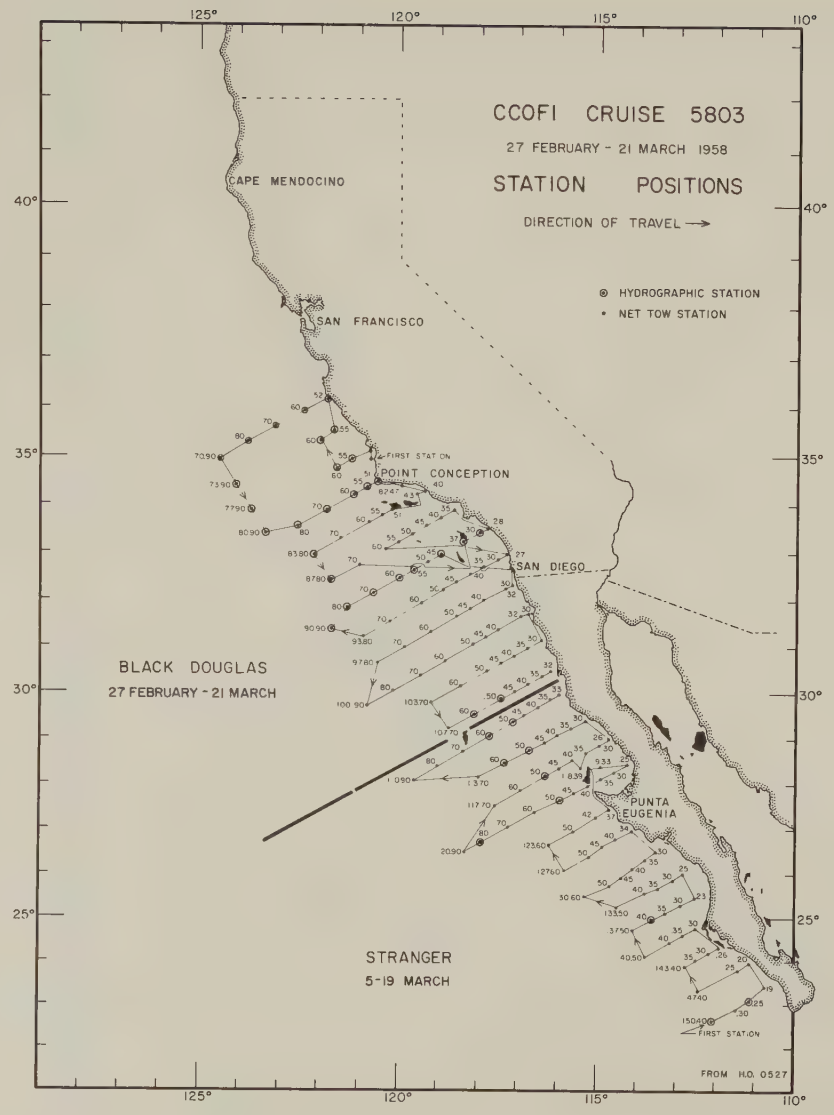


CHART 4. Station positions, CCOFI, Cruise 5803

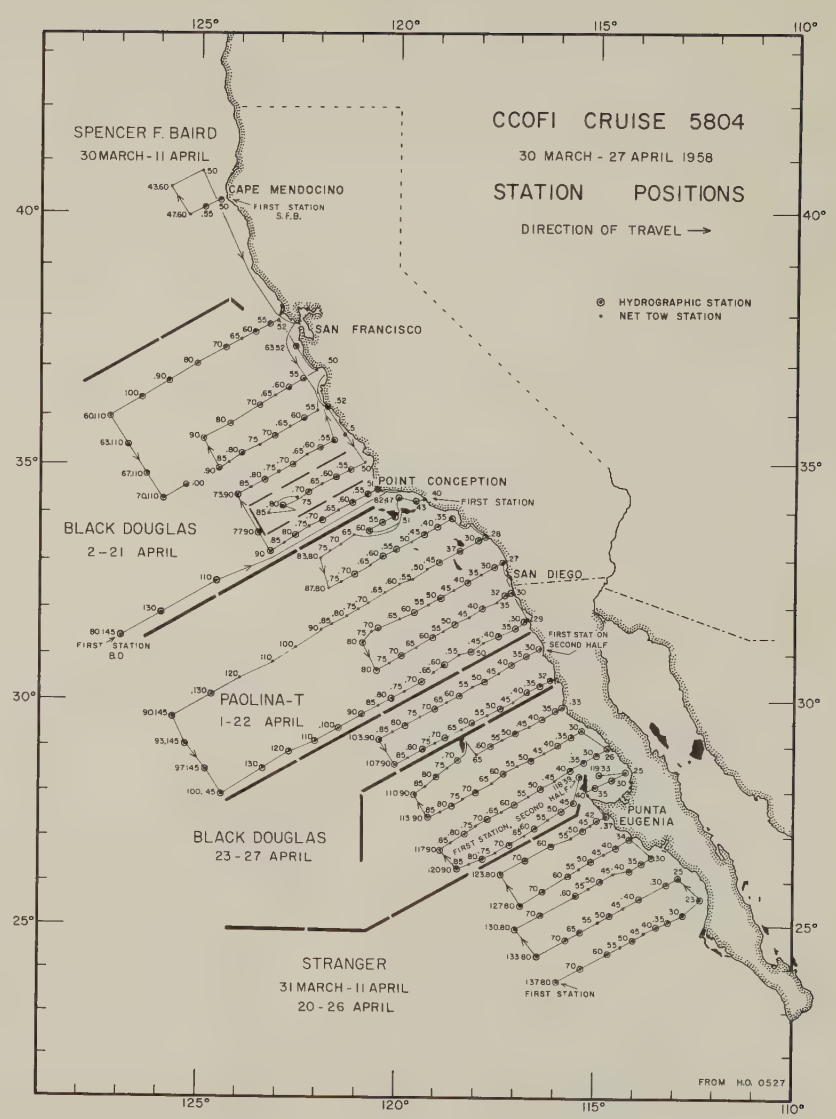


CHART 5. Station positions, CCOFI, Cruise 5804

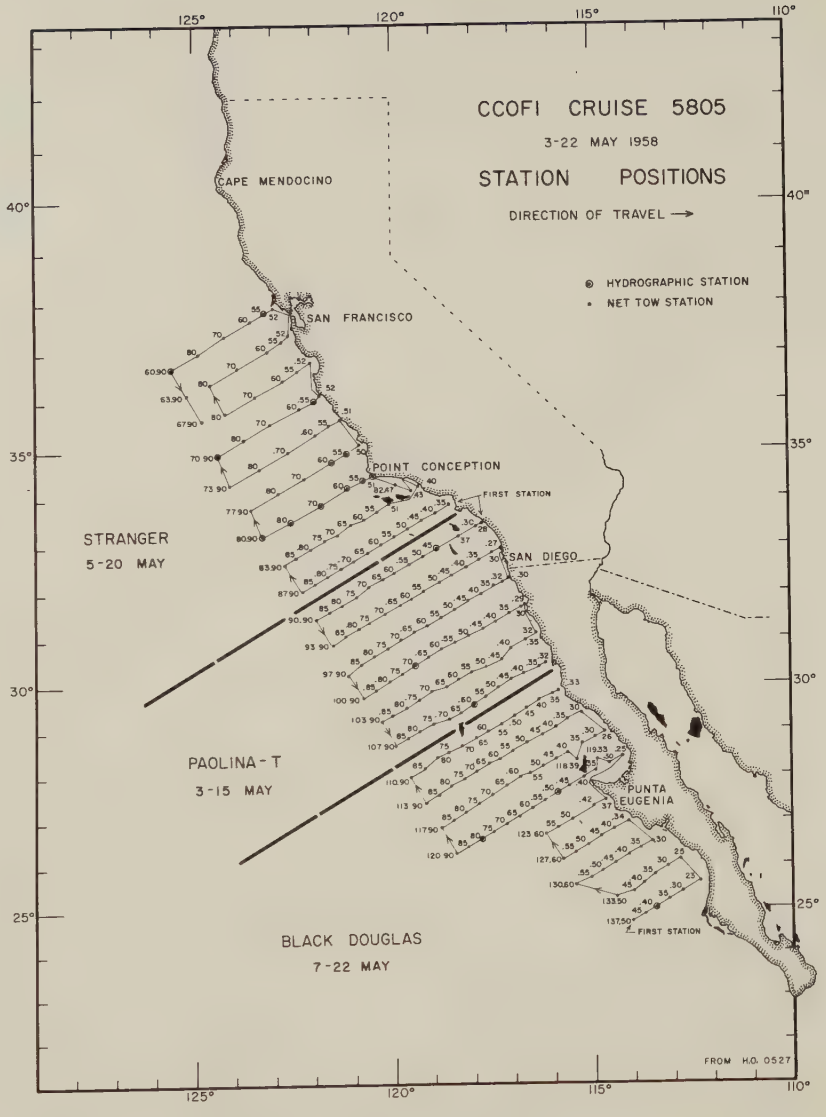


CHART 6. Station positions, CCOFI, Cruise 5805

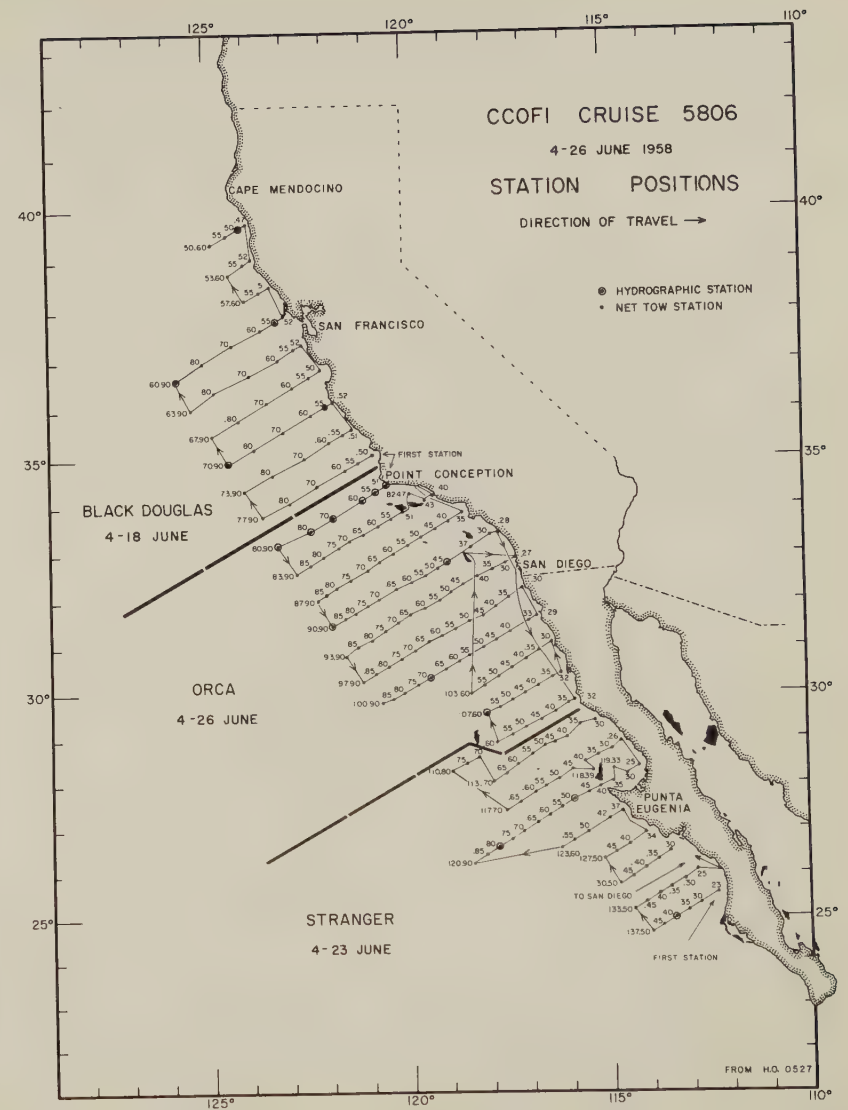


CHART 7. Station positions, CCOFI, Cruise 5806

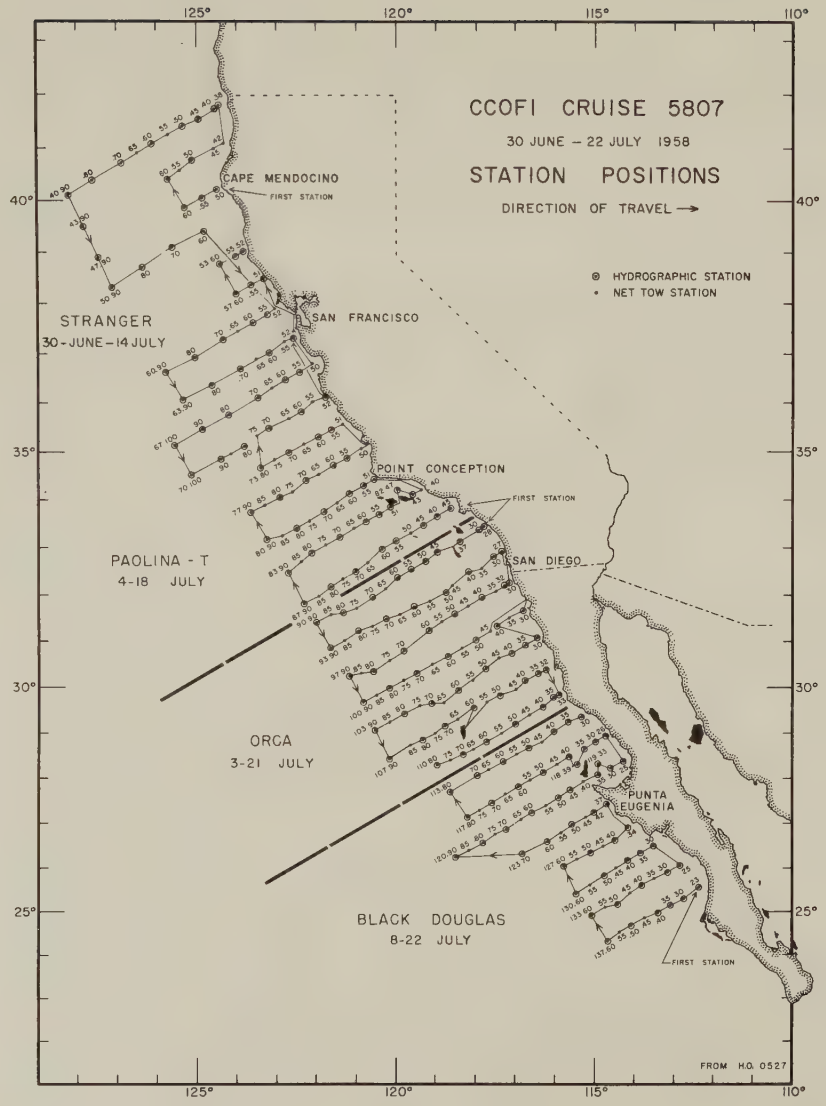


CHART 8. Station positions, CCOFI, Cruise 5807

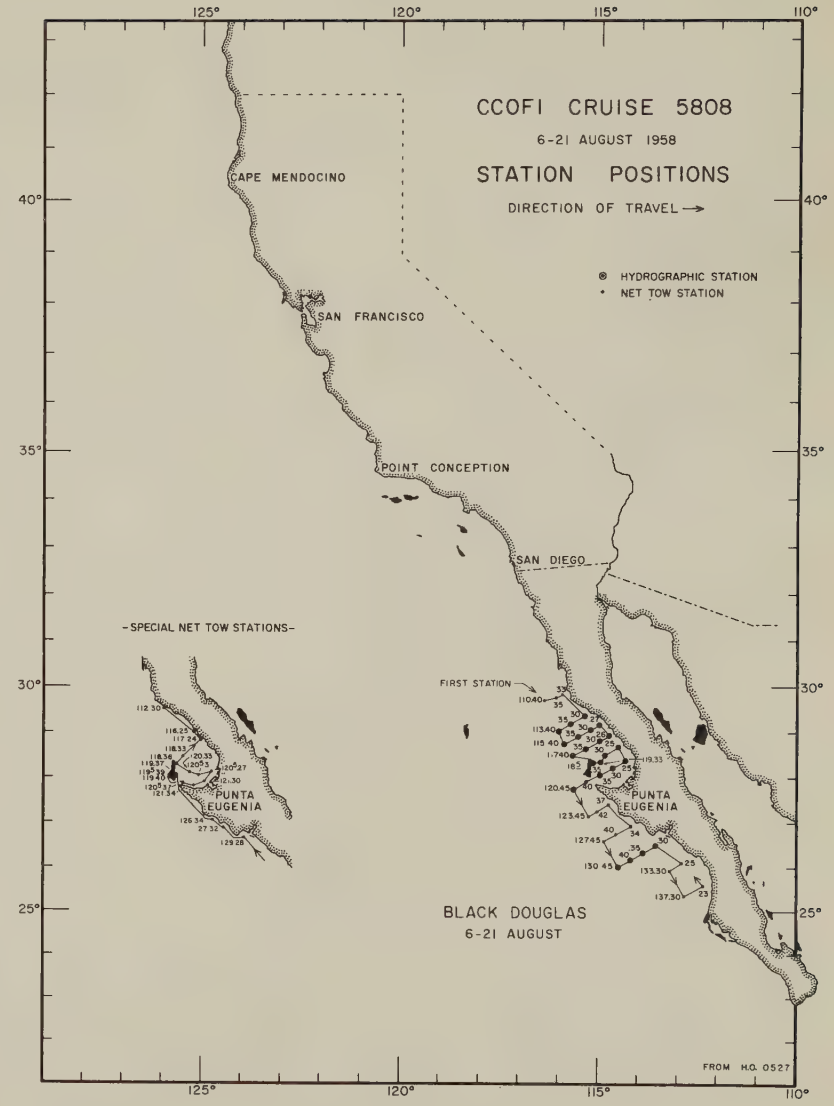


CHART 9. Station positions, CCOFI, Cruise 5808

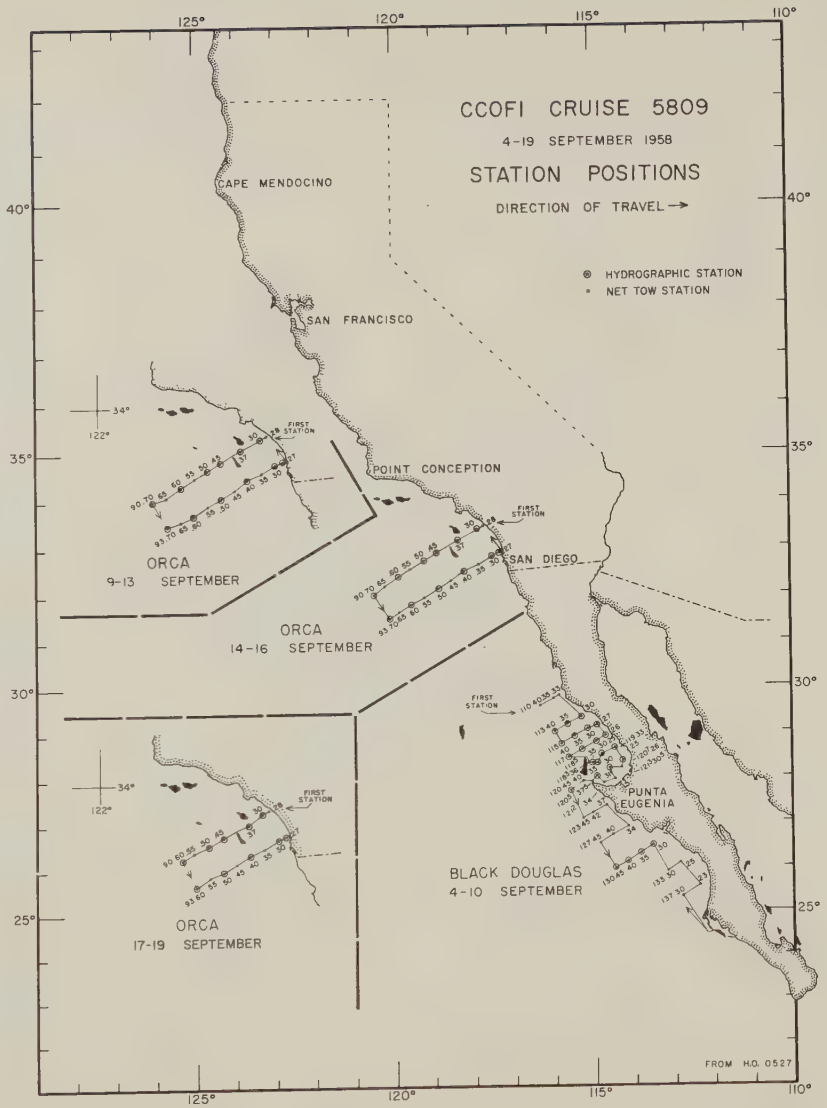


CHART 10. Station positions, CCOFI, Cruise 5809

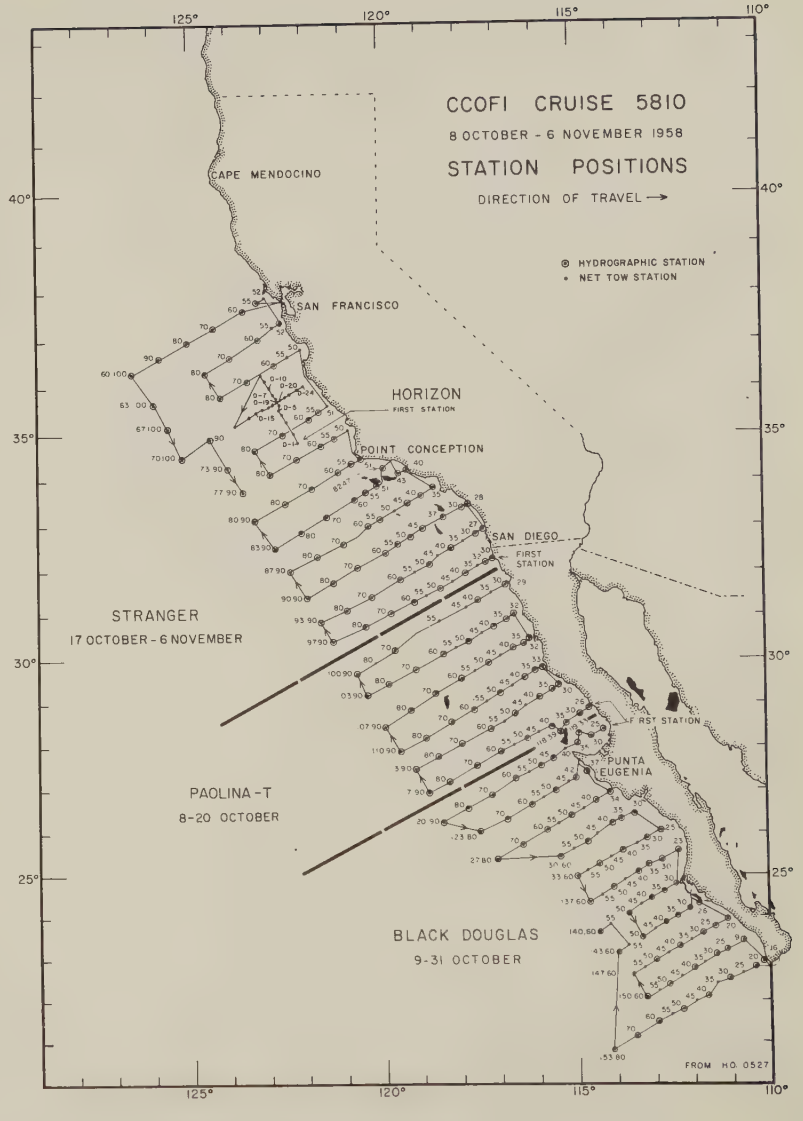


CHART 11. Station positions, CCOFI, Cruise 5810

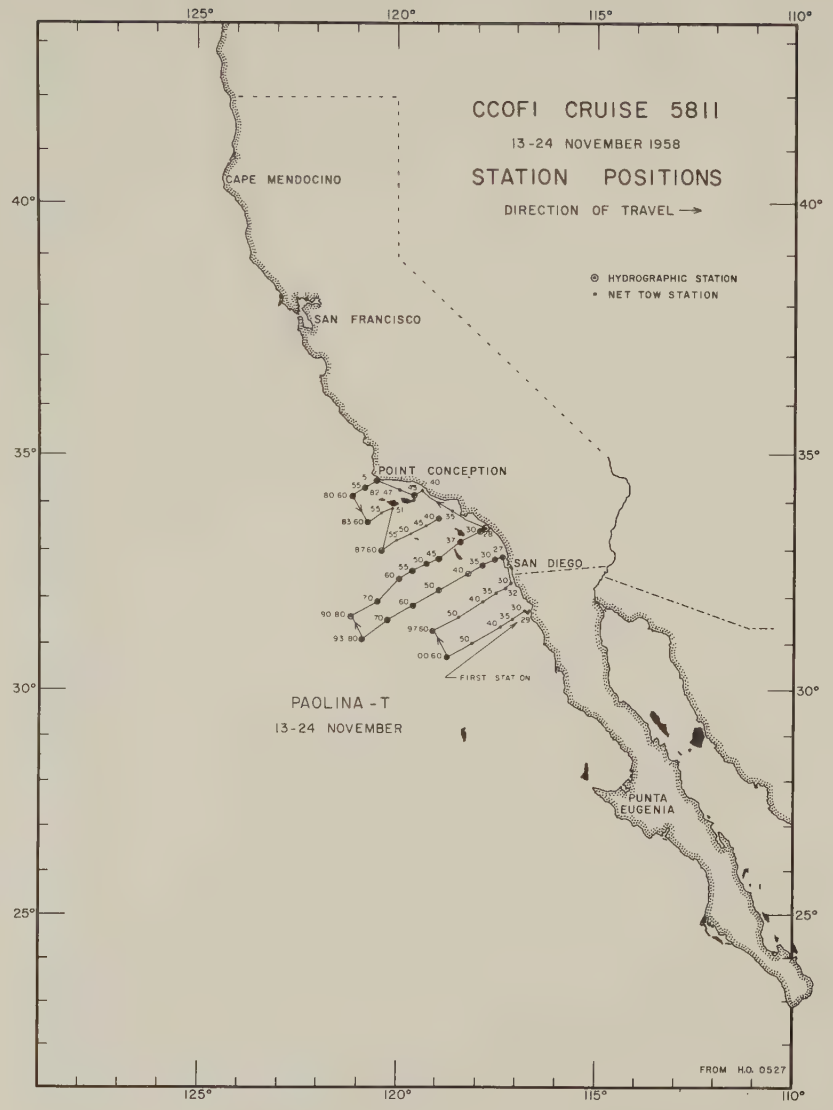


CHART 12. Station positions, CCOFI, Cruise 5811

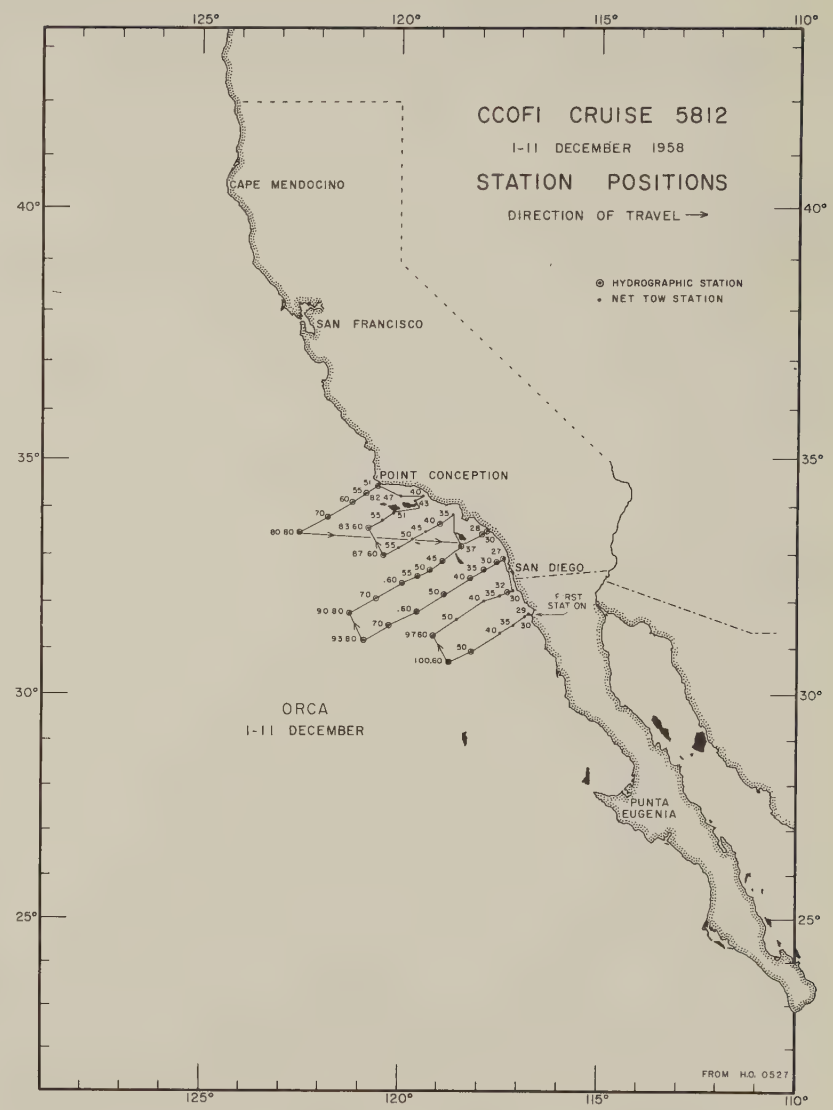


CHART 13. Station positions, CCOFI, Cruise 5812

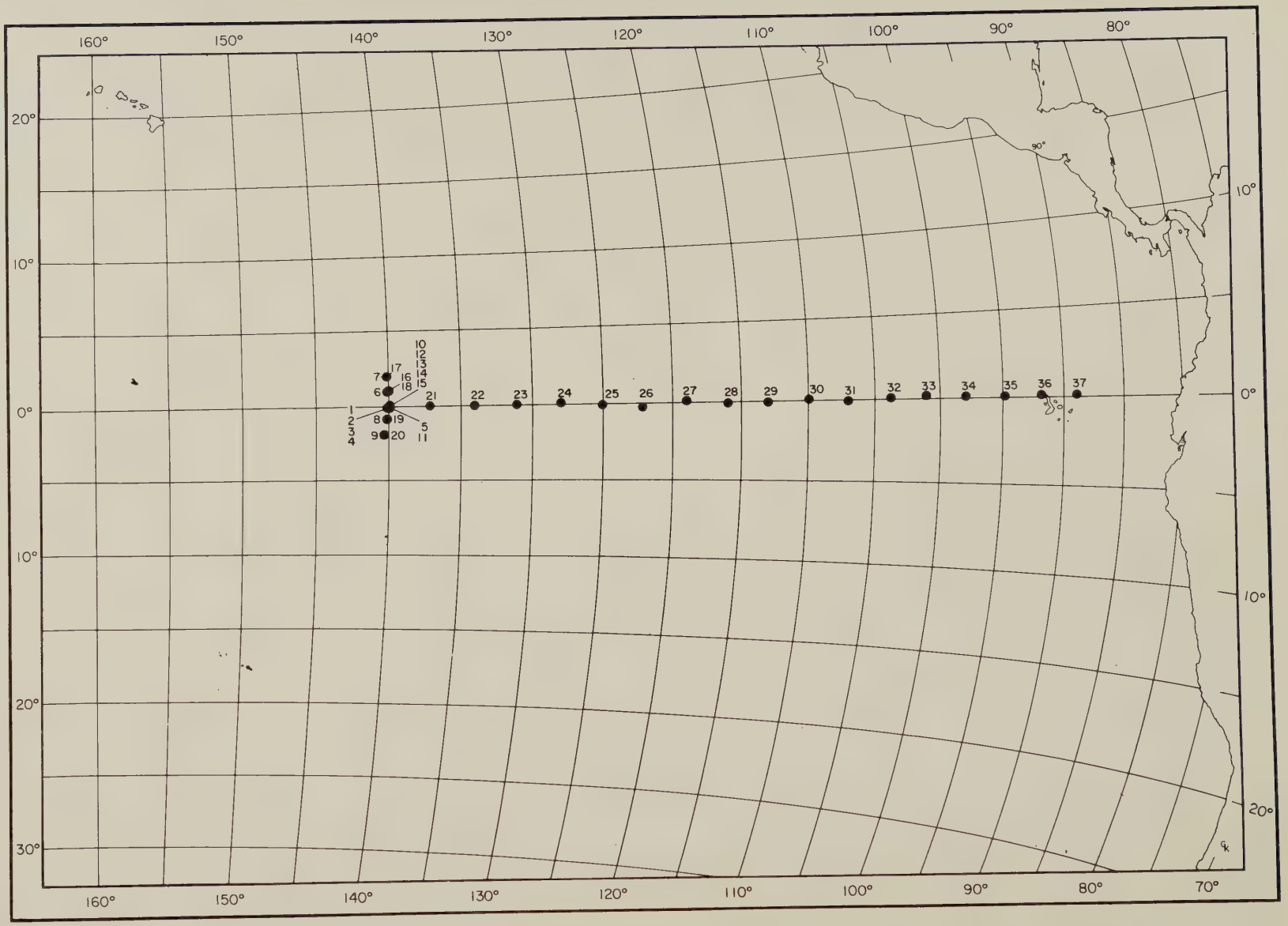


CHART 14. Station positions, Scripps Institution of Oceanography for International Geophysical Year, RV Horizon on Expedition Dolphin

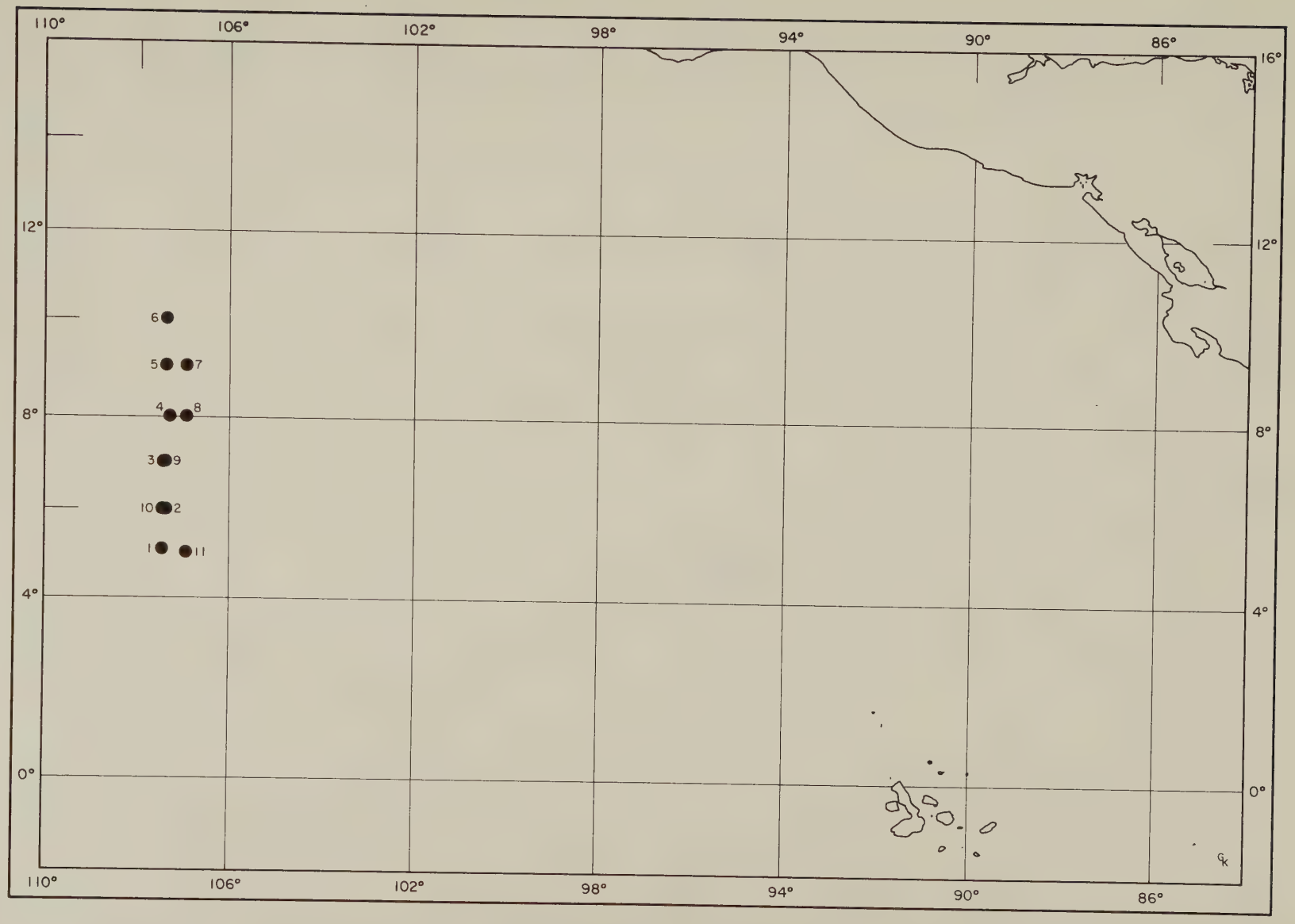


CHART 15. Station positions, Scripps Institution of Oceanography for International Geophysical Year, RV Stranger on Expedition Doldrums

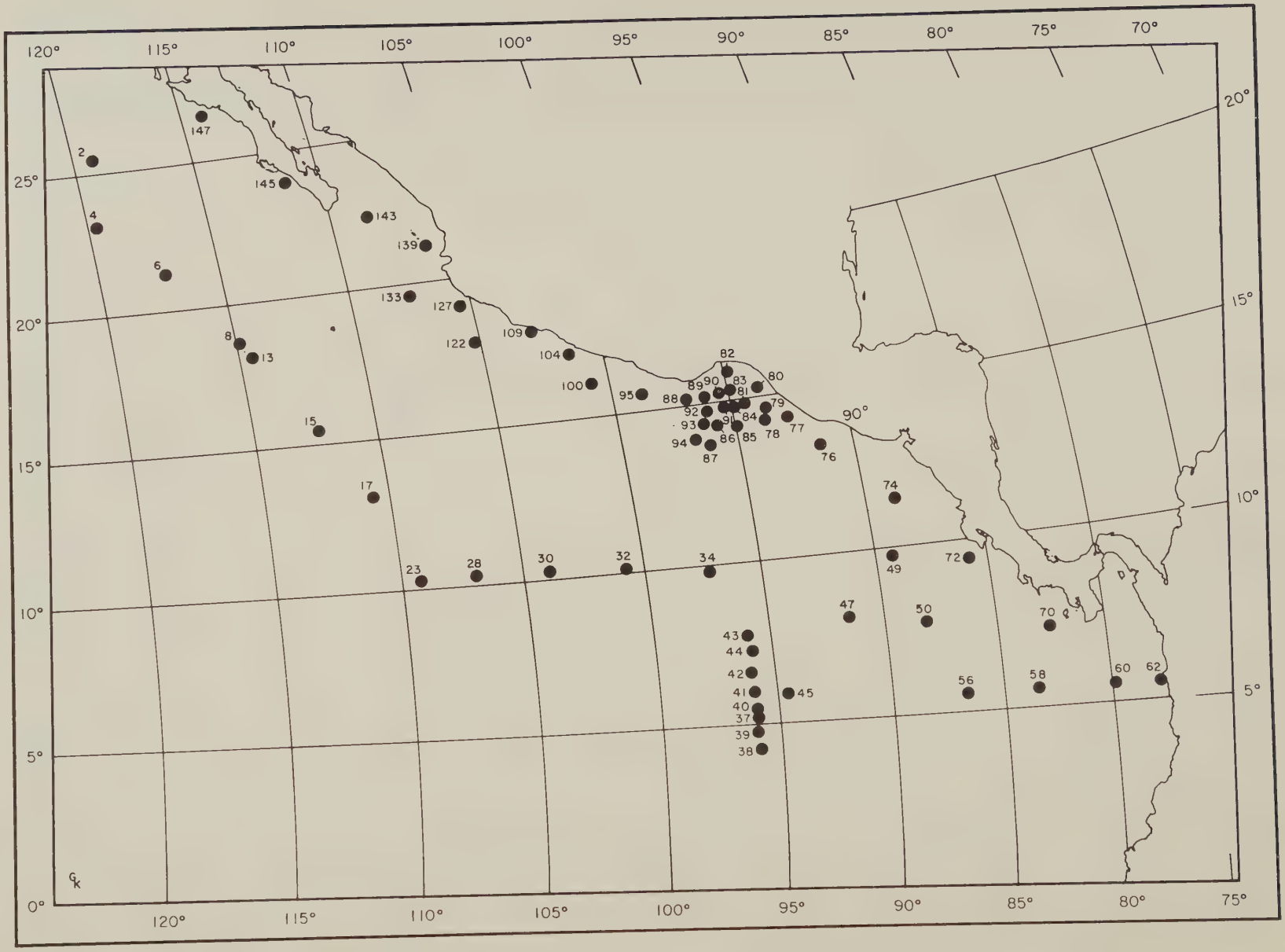


CHART 16. Station positions, Scripps Institution of Oceanography, RV Spencer F. Baird on Expedition SCOT (TO-58-1)

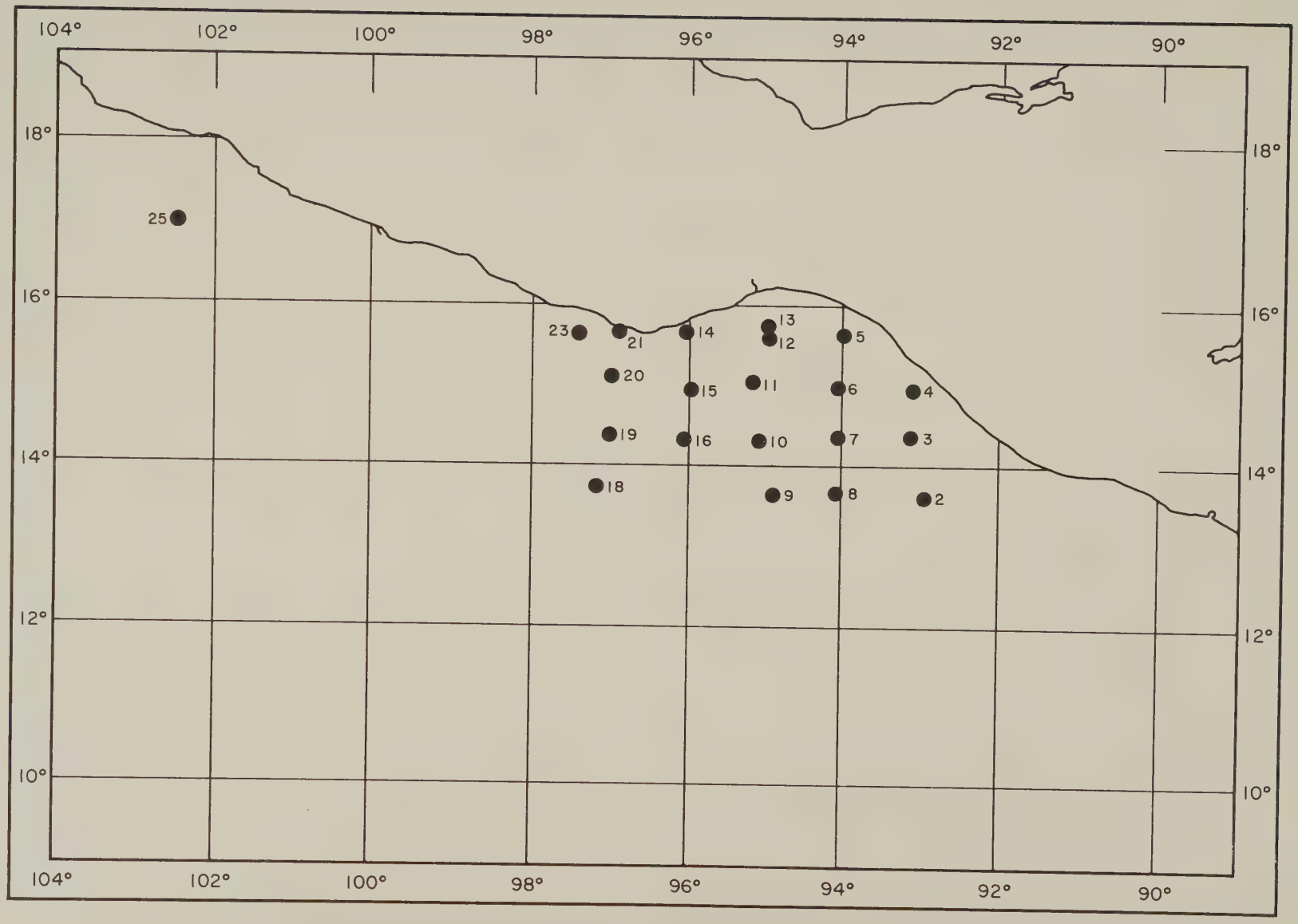


CHART 17. Station positions, Scripps Institution of Oceanography, RV Spencer F. Baird on Cruise TO-58-2

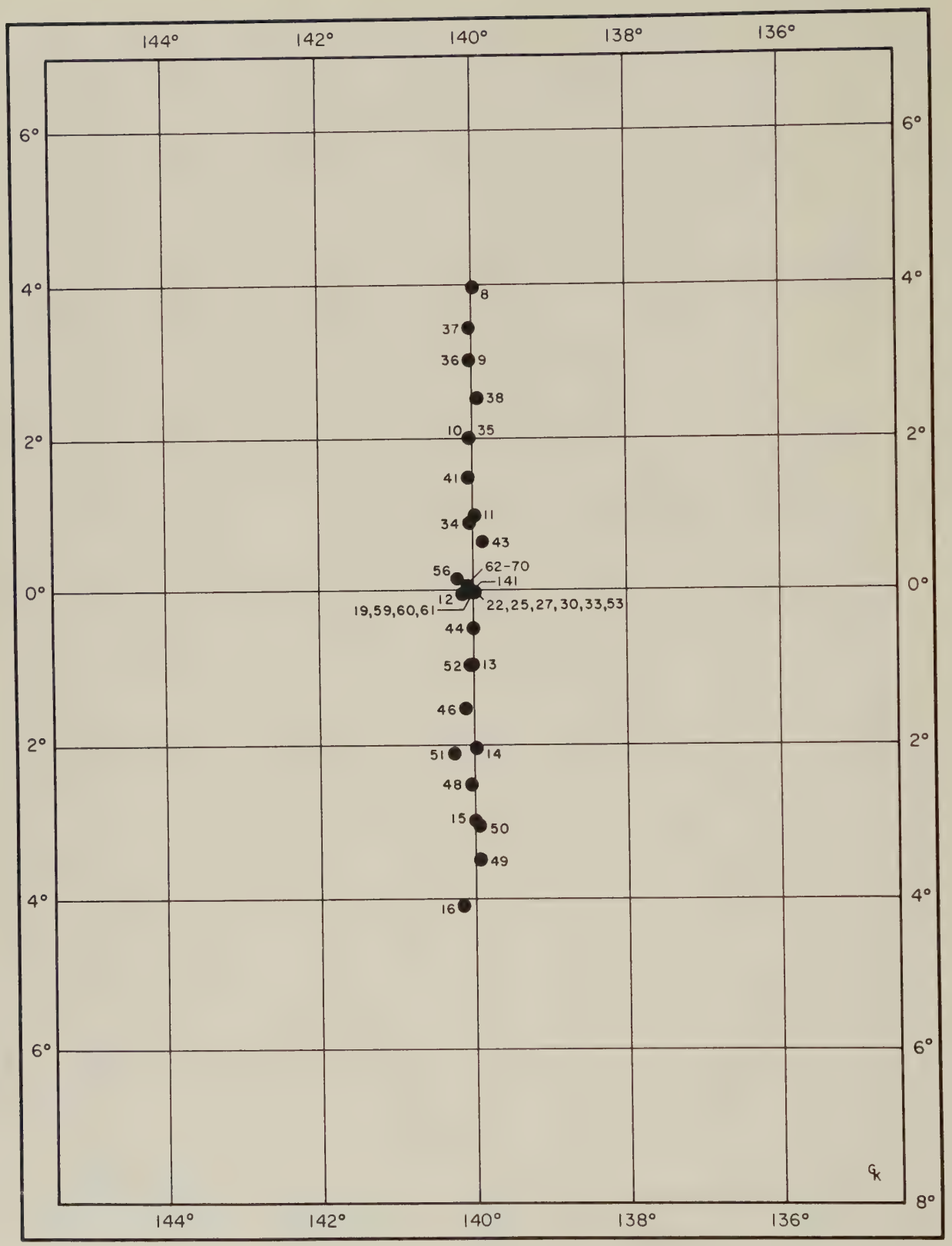


CHART 18. Station positions, Bureau of Commercial Fisheries, Honolulu, Cruise 45 of RV Hugh M. Smith

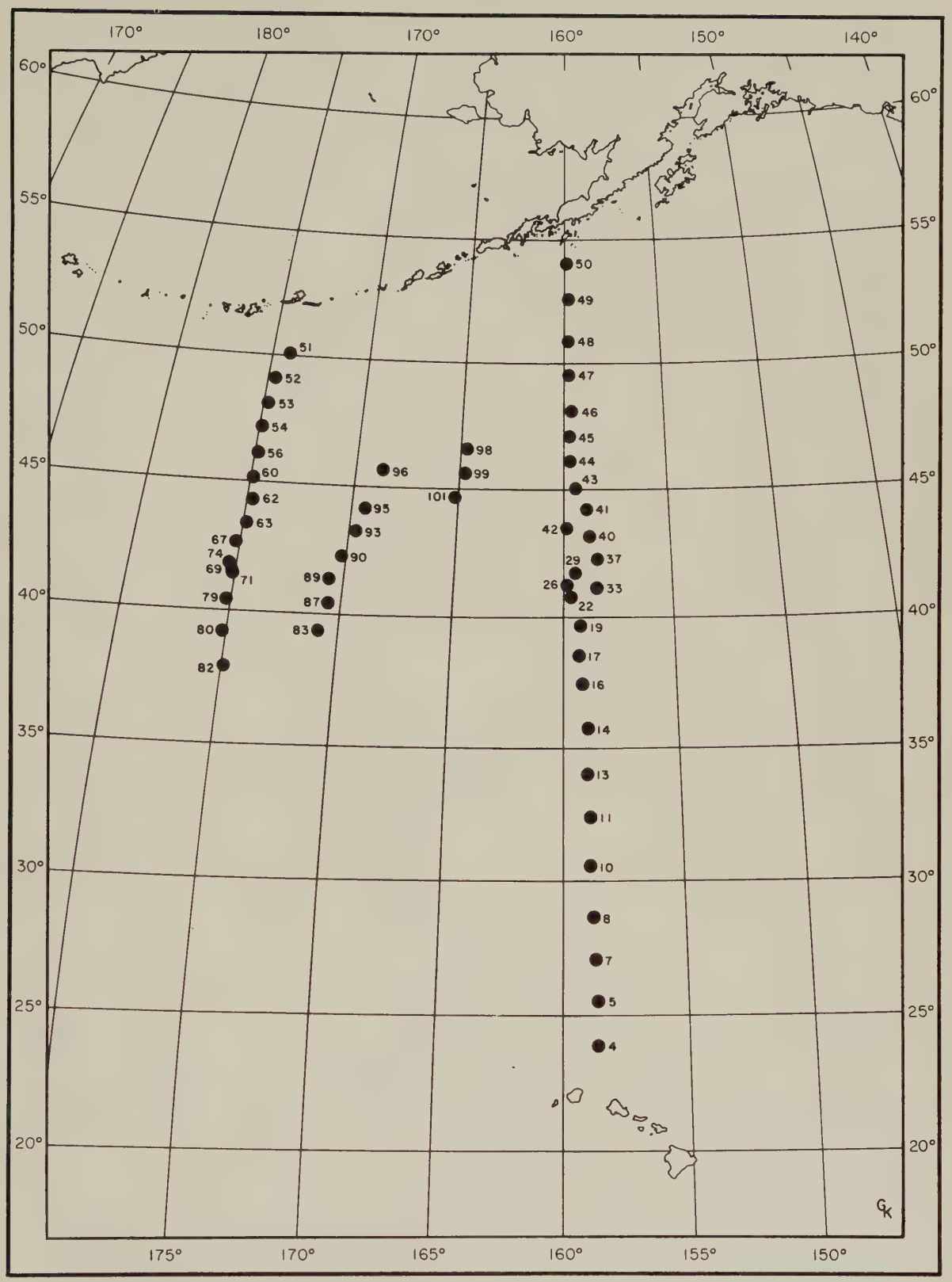


CHART 19. Station positions, Bureau of Commercial Fisheries, Honolulu, Cruise 46 of RV Hugh M. Smith

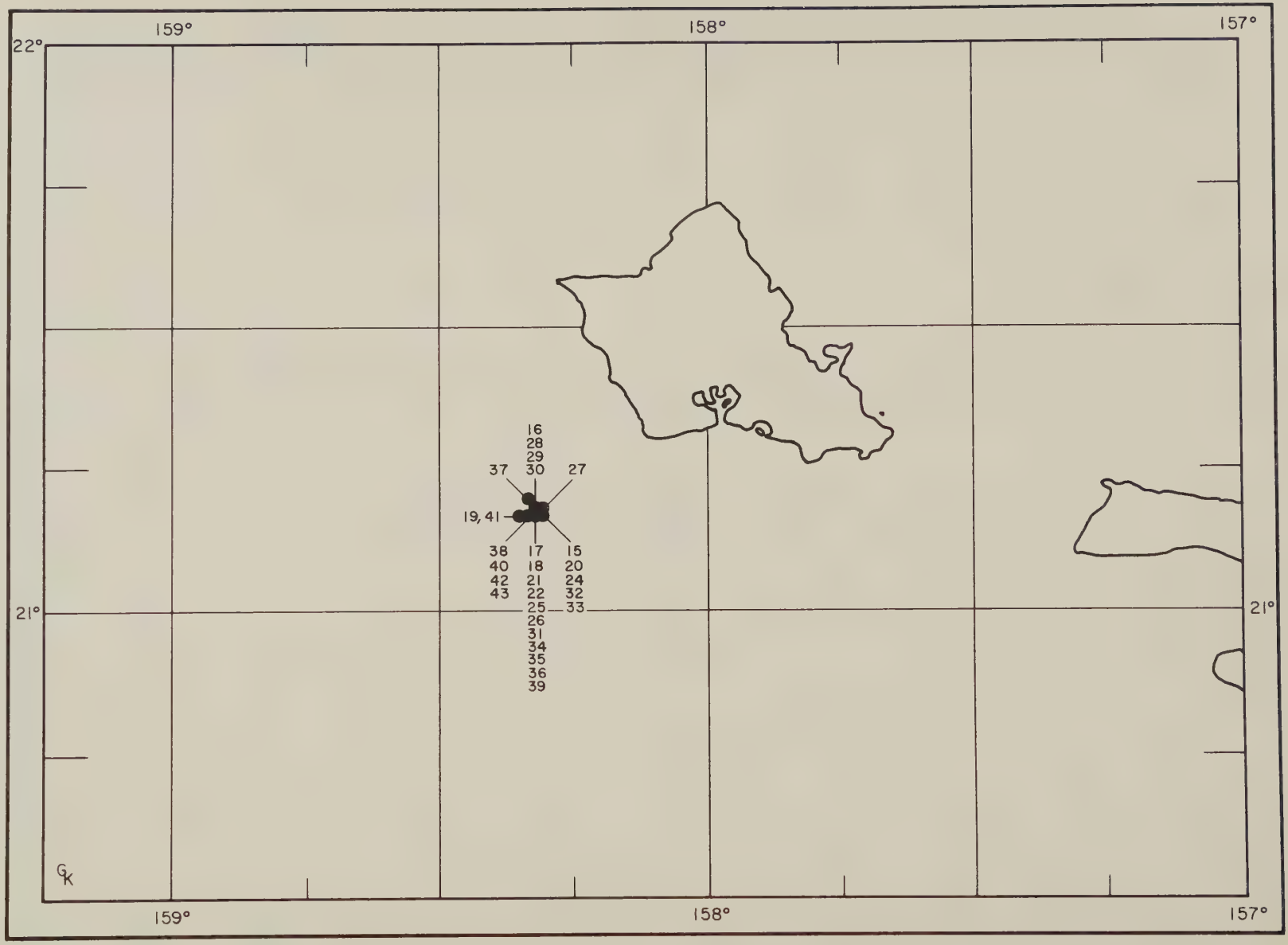


CHART 20. Station positions, Bureau of Commercial Fisheries, Honolulu, International Geophysical Year cruises, RV Charles H. Gilbert, RV Hugh M. Smith and RV Makua

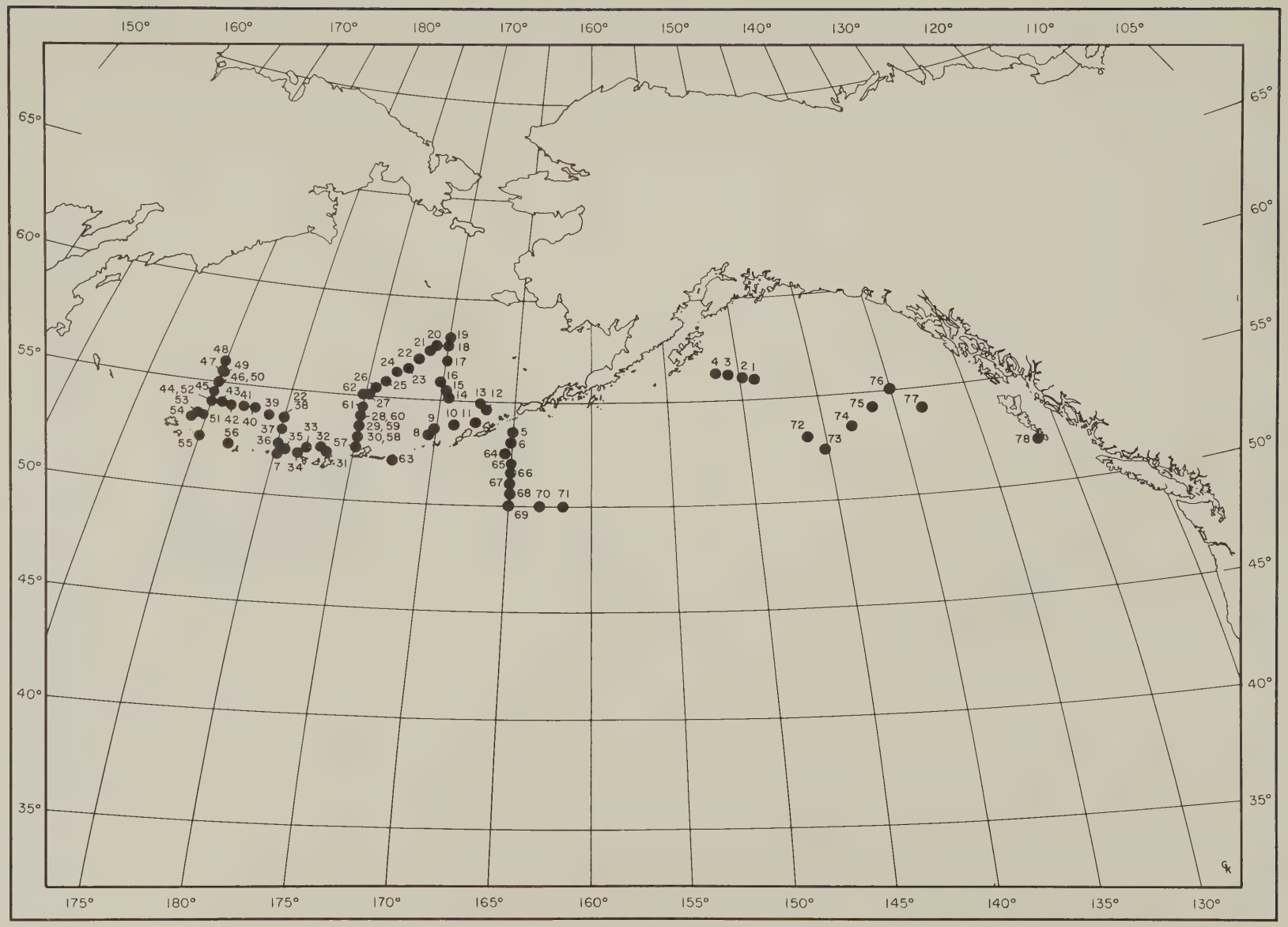


CHART 21. Station positions, Bureau of Commercial Fisheries, Seattle, MV Attu

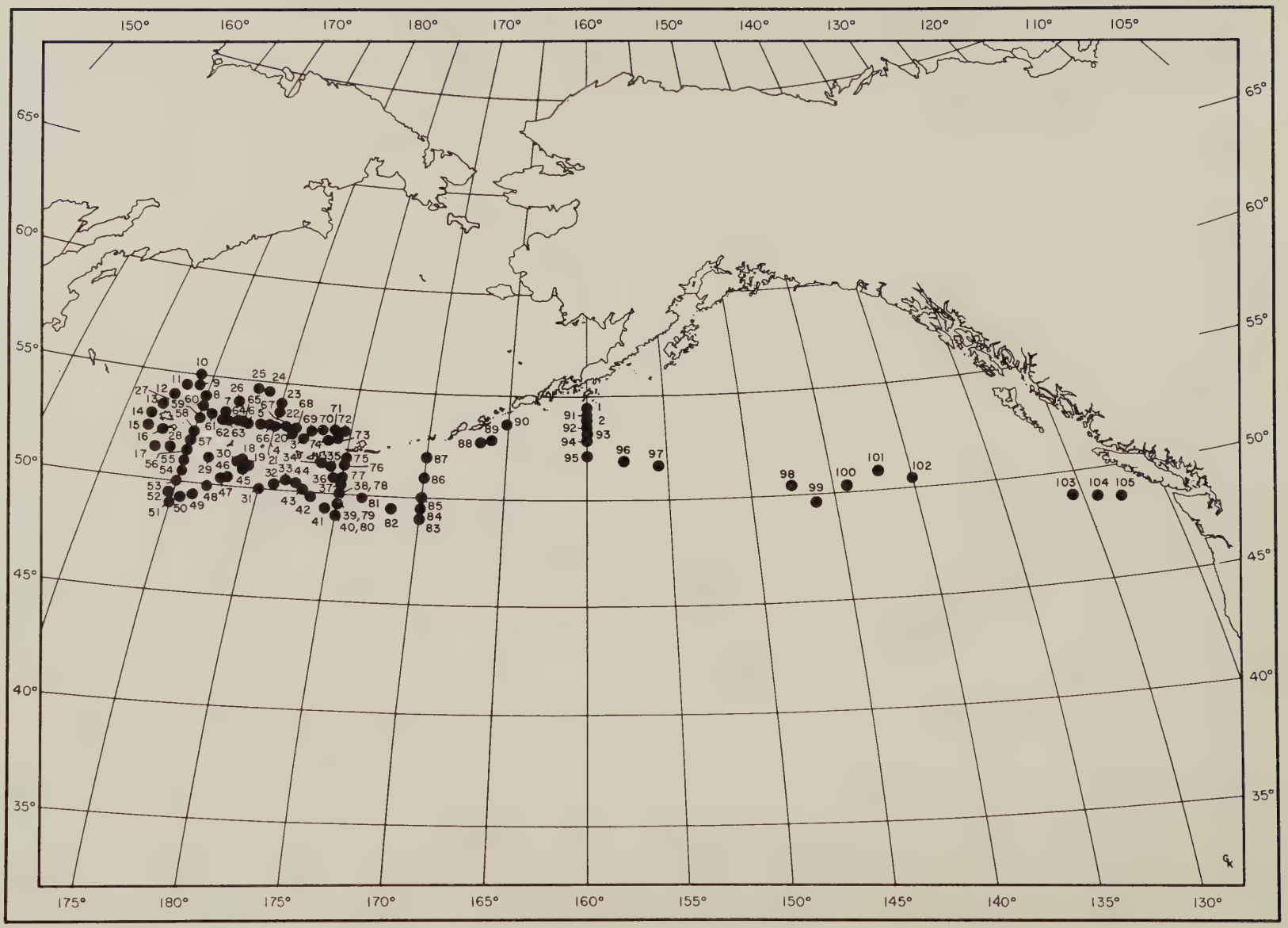


CHART 22. Station positions, Bureau of Commercial Fisheries, Seattle, MV Pioneer

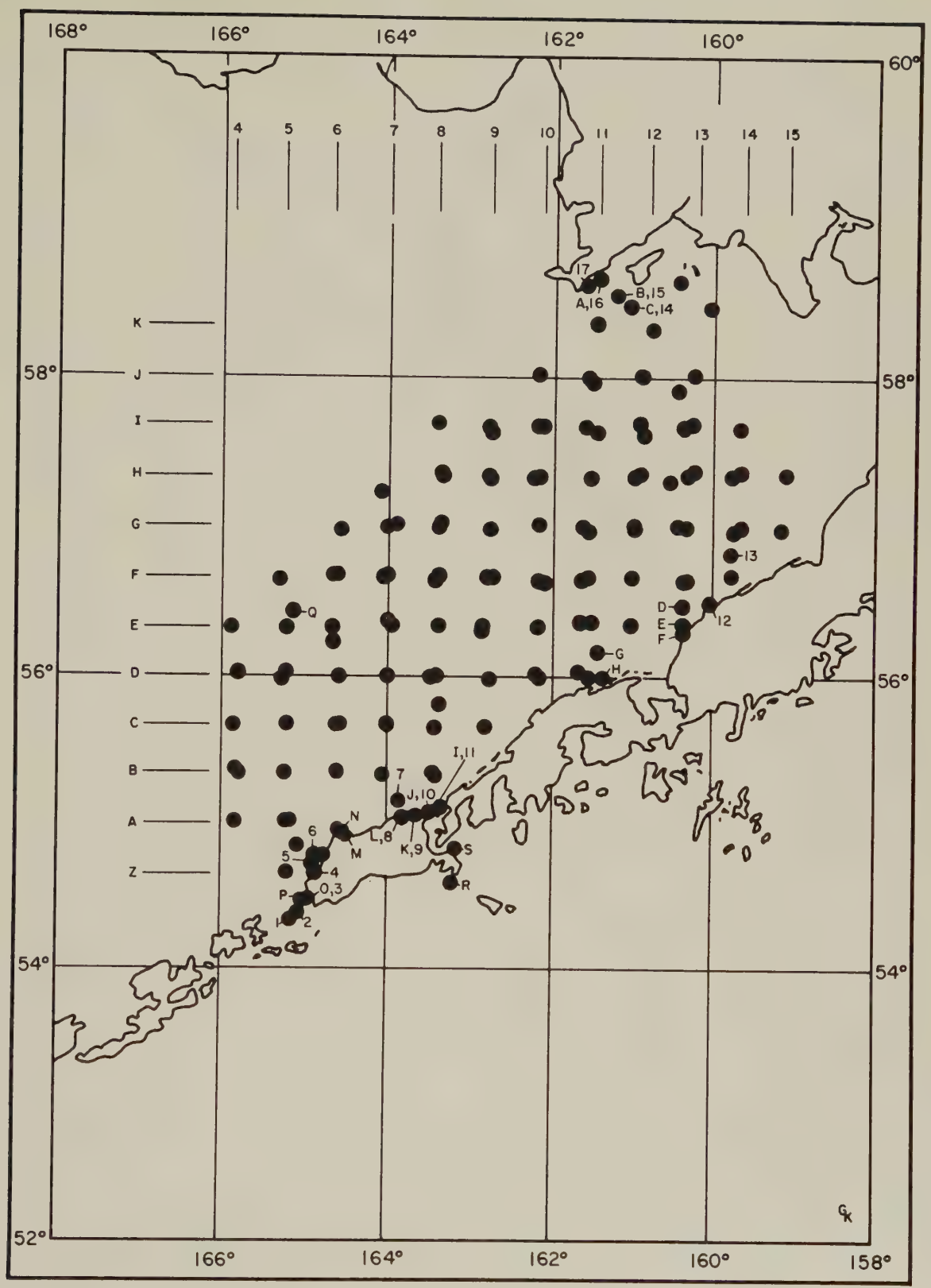


CHART 23. Station positions, Bureau of Commercial Fisheries, Seattle, King Crab Investigations, MV Tordenskjold

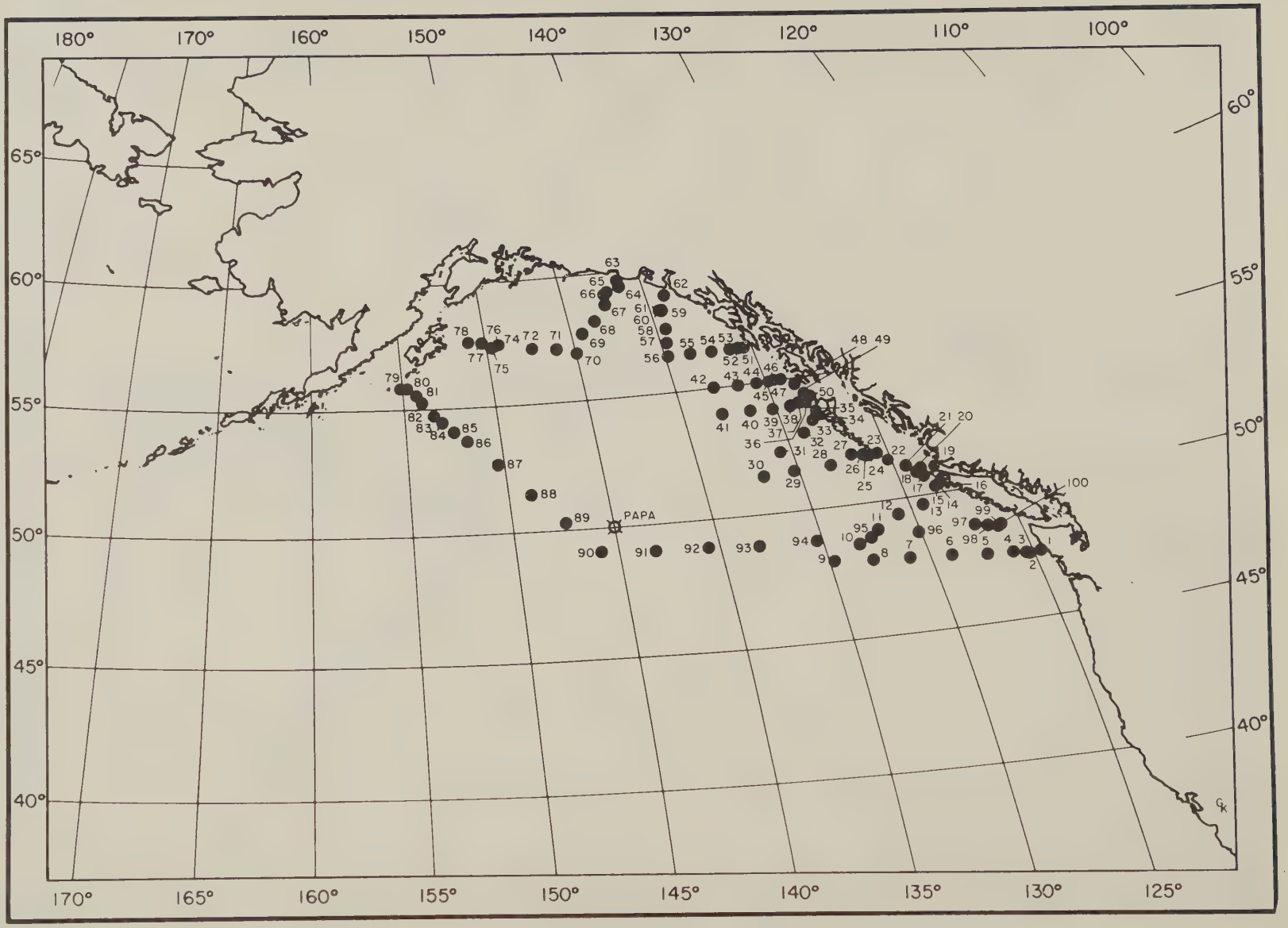


CHART 24. Station positions, Pacific Oceanographic Group, CGS St. Catharines on Cruises P-58-1 through P-58-4 (Ocean Weather Station PAPA) and HMCS Oshawa on Cruise NP-58-1

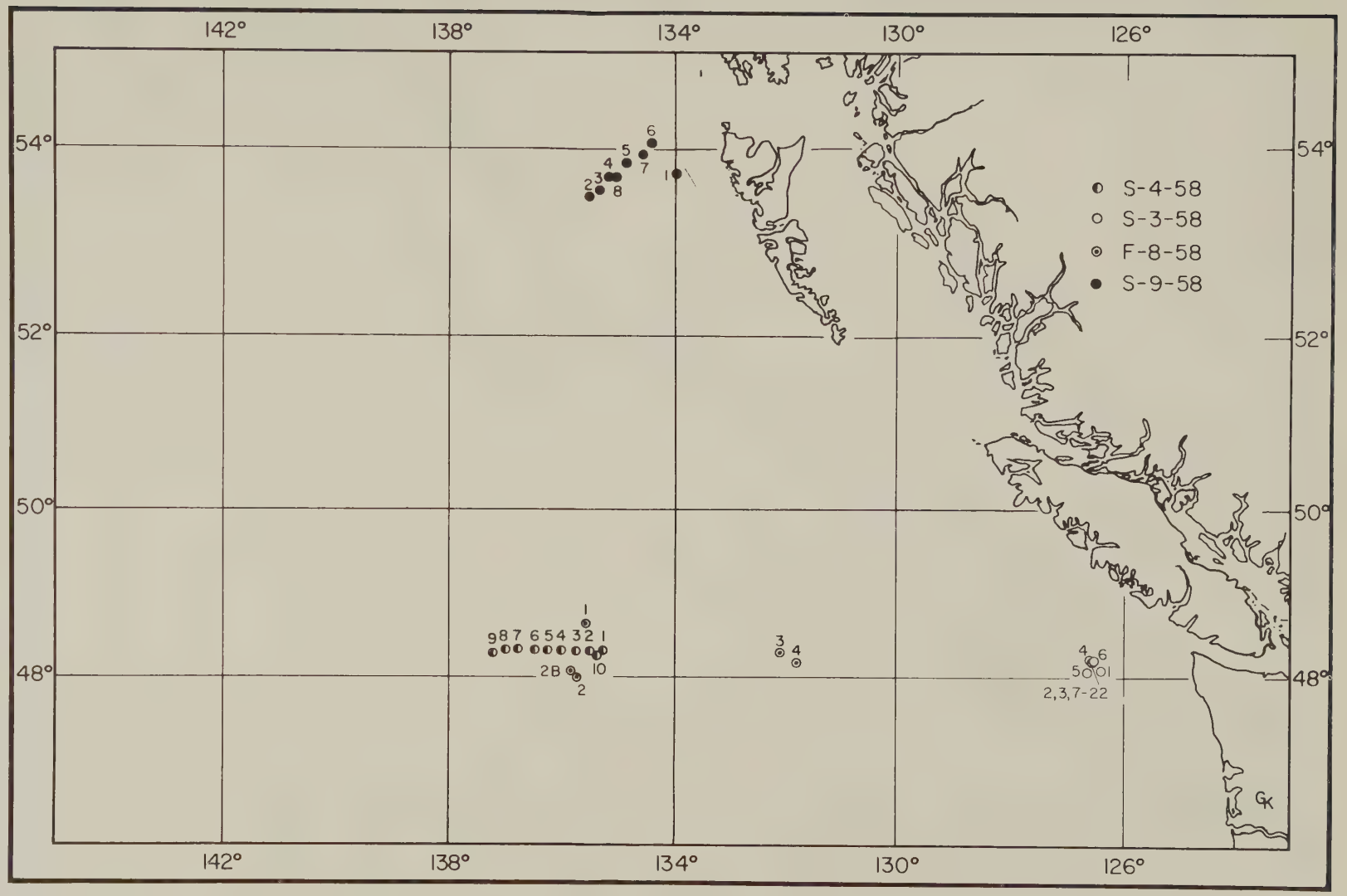


CHART 25. Station positions, Pacific Oceanographic Group, HMCS Oshawa on Cruises S-4-58, S-3-58, F-8-58 and S-9-58

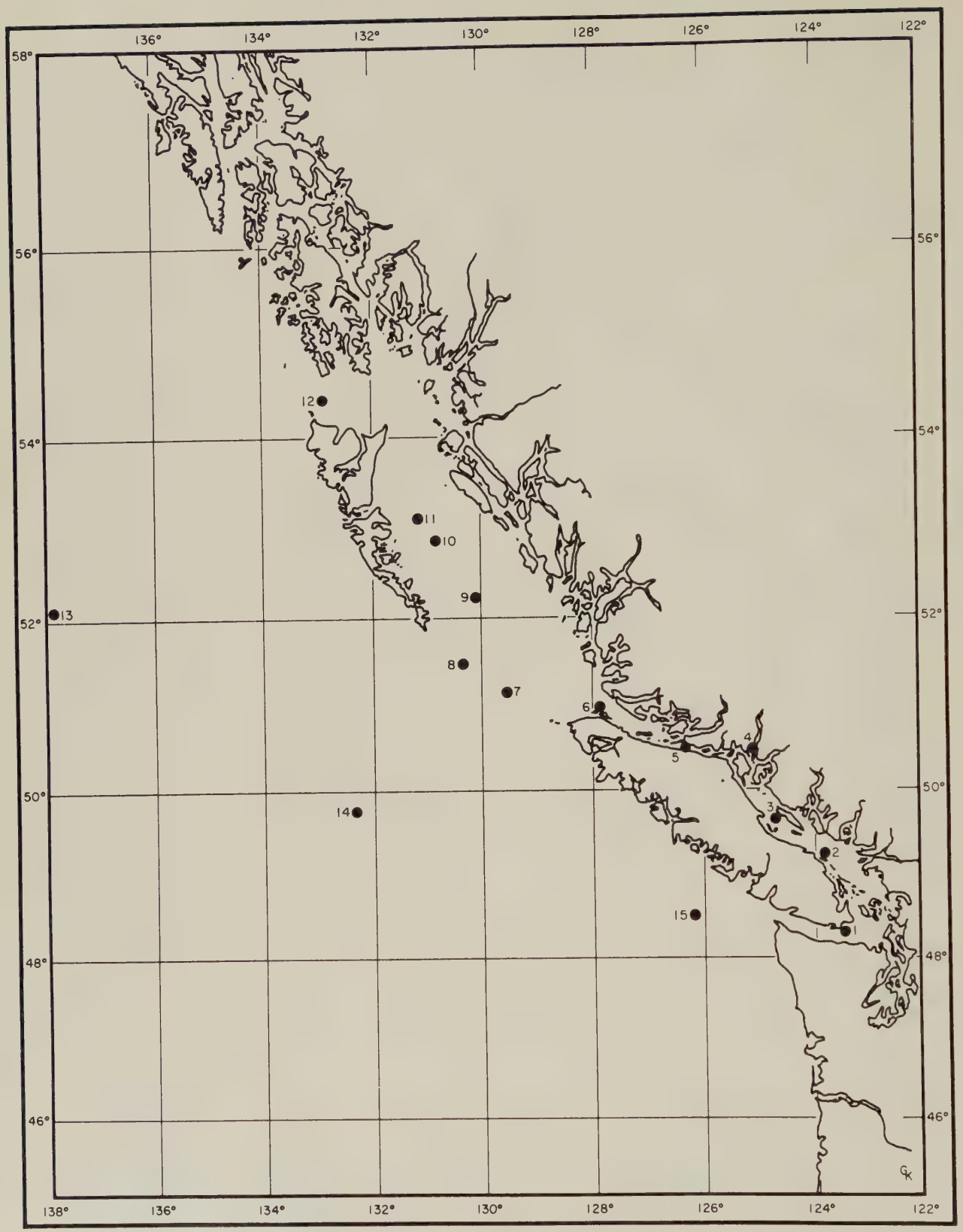


CHART 26. Station positions, Pacific Oceanographic Group, HMCS Oshawa on Cruise CC-58-1

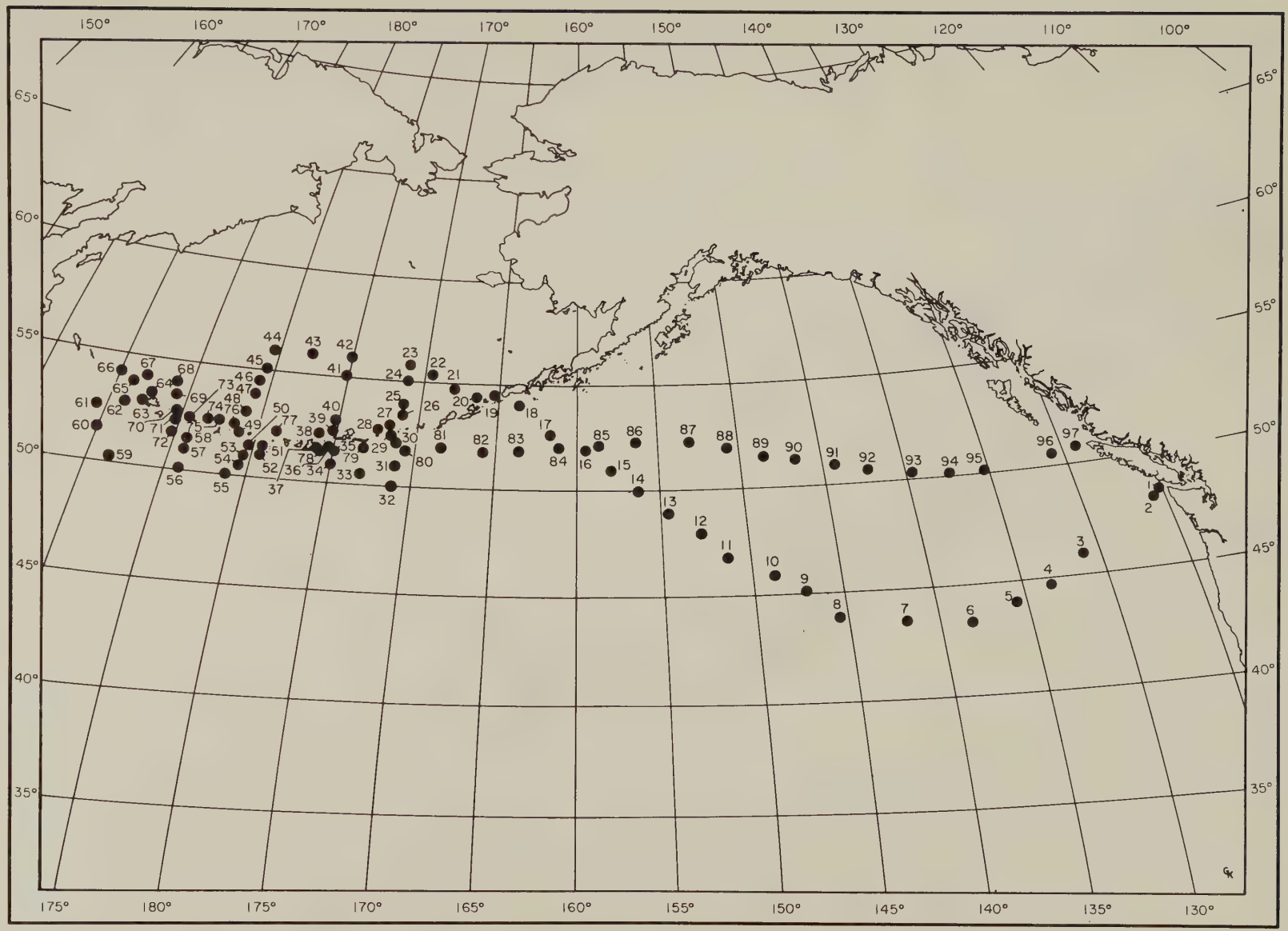


CHART 27. Station positions, Pacific Oceanographic Group, CNAV Whitethroat on Cruise NP-58-2

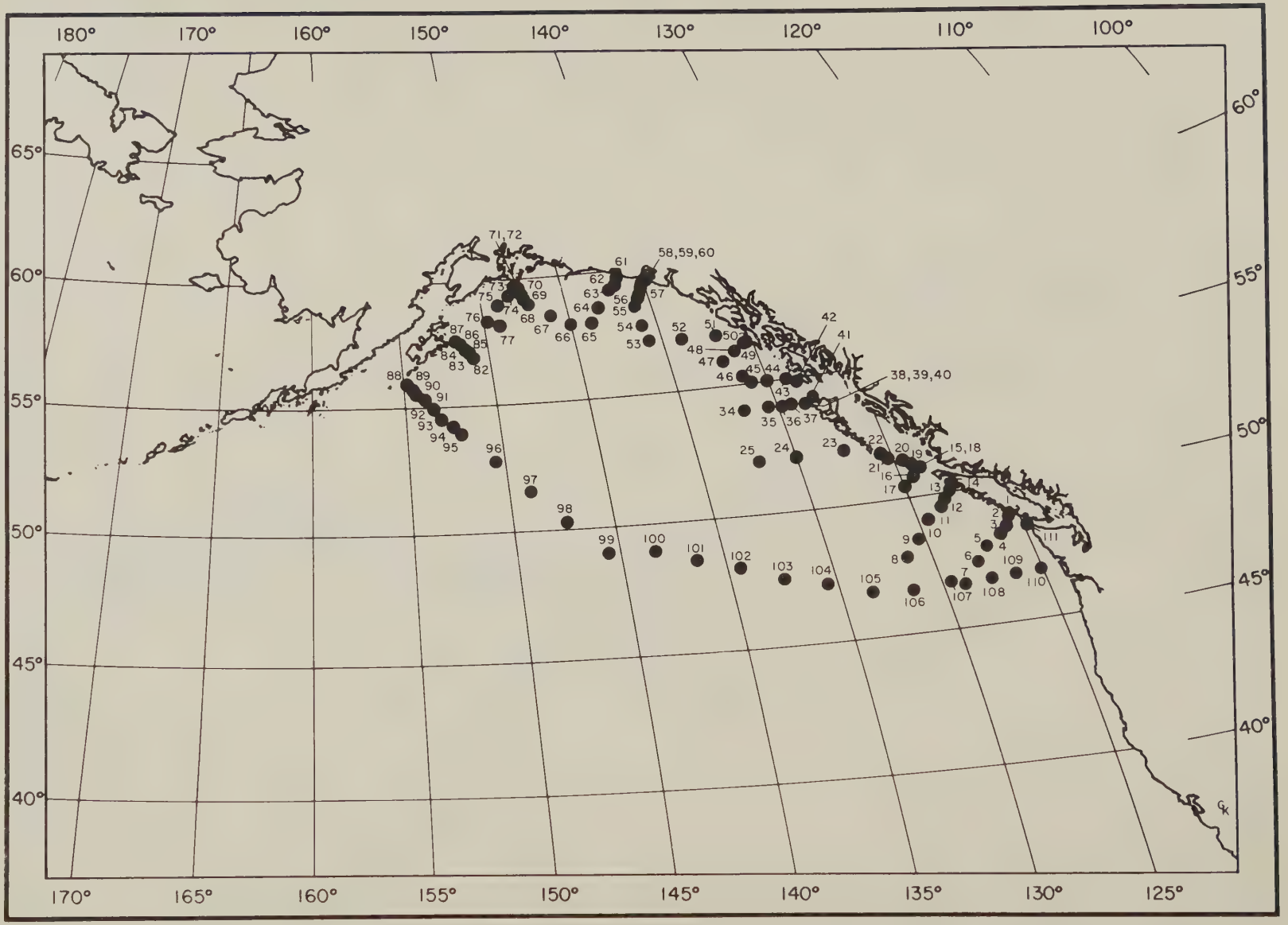


CHART 28. Station positions, Pacific Oceanographic Group, HMCS Oshawa on Cruise NP-58-3

CHART 29. Station positions, Pacific Oceanographic Group, CNAV Whitethroat on Cruise CS-58-1

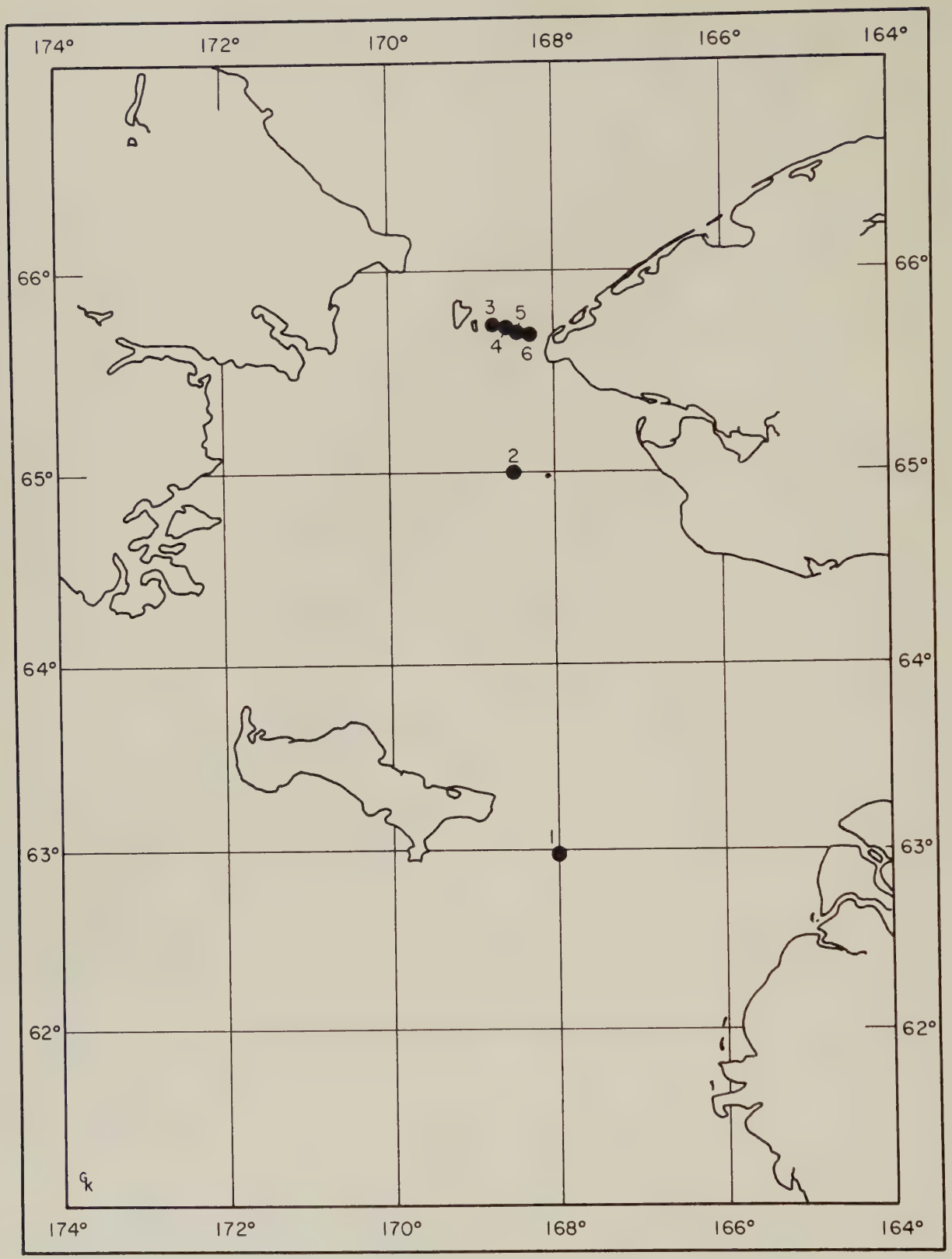


CHART 30. Station positions, U. S. Naval Oceanographic Office, USS Burton Island

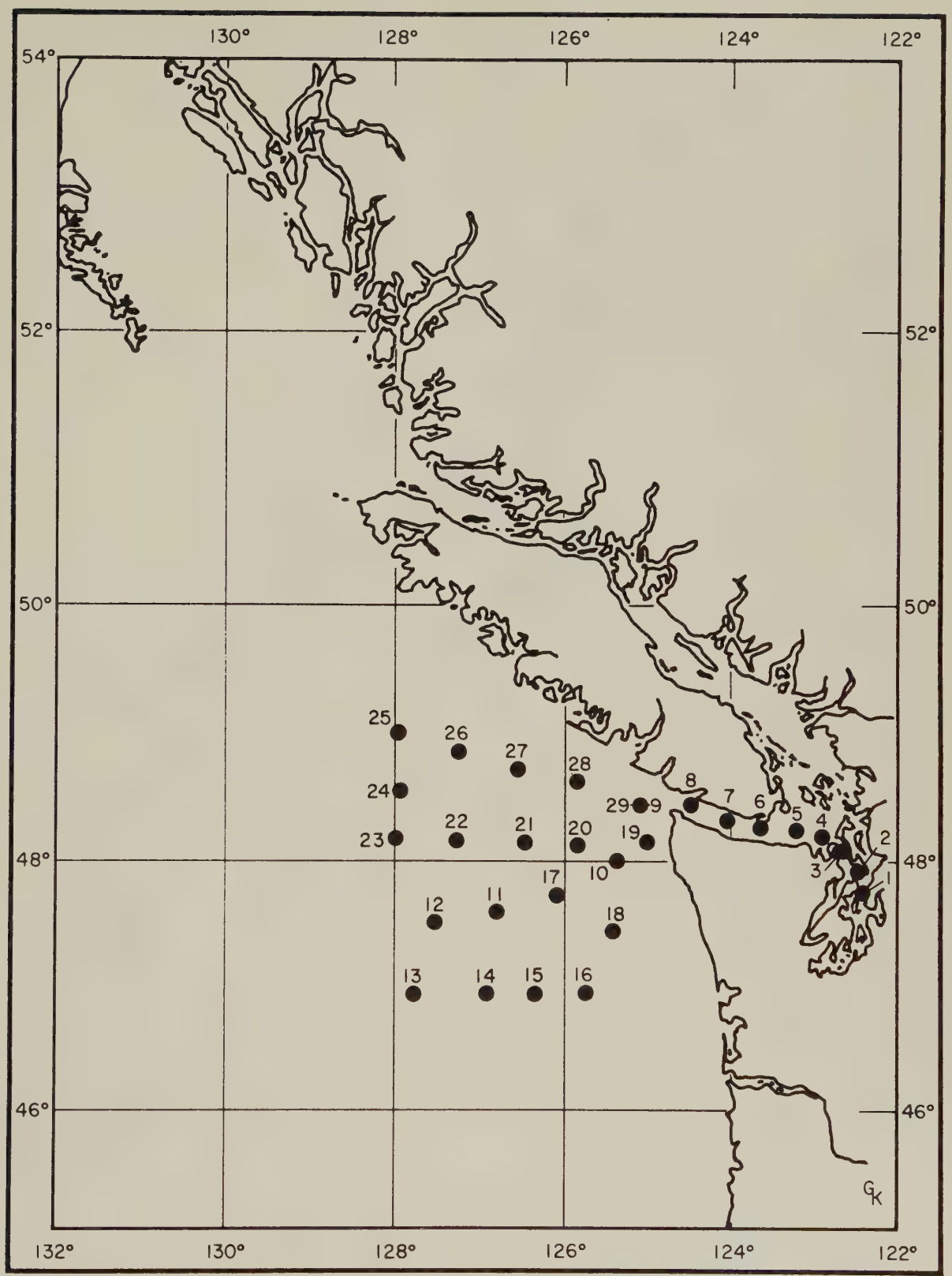


CHART 31. Station positions, University of Washington, Cruise 188 of RV Brown Bear

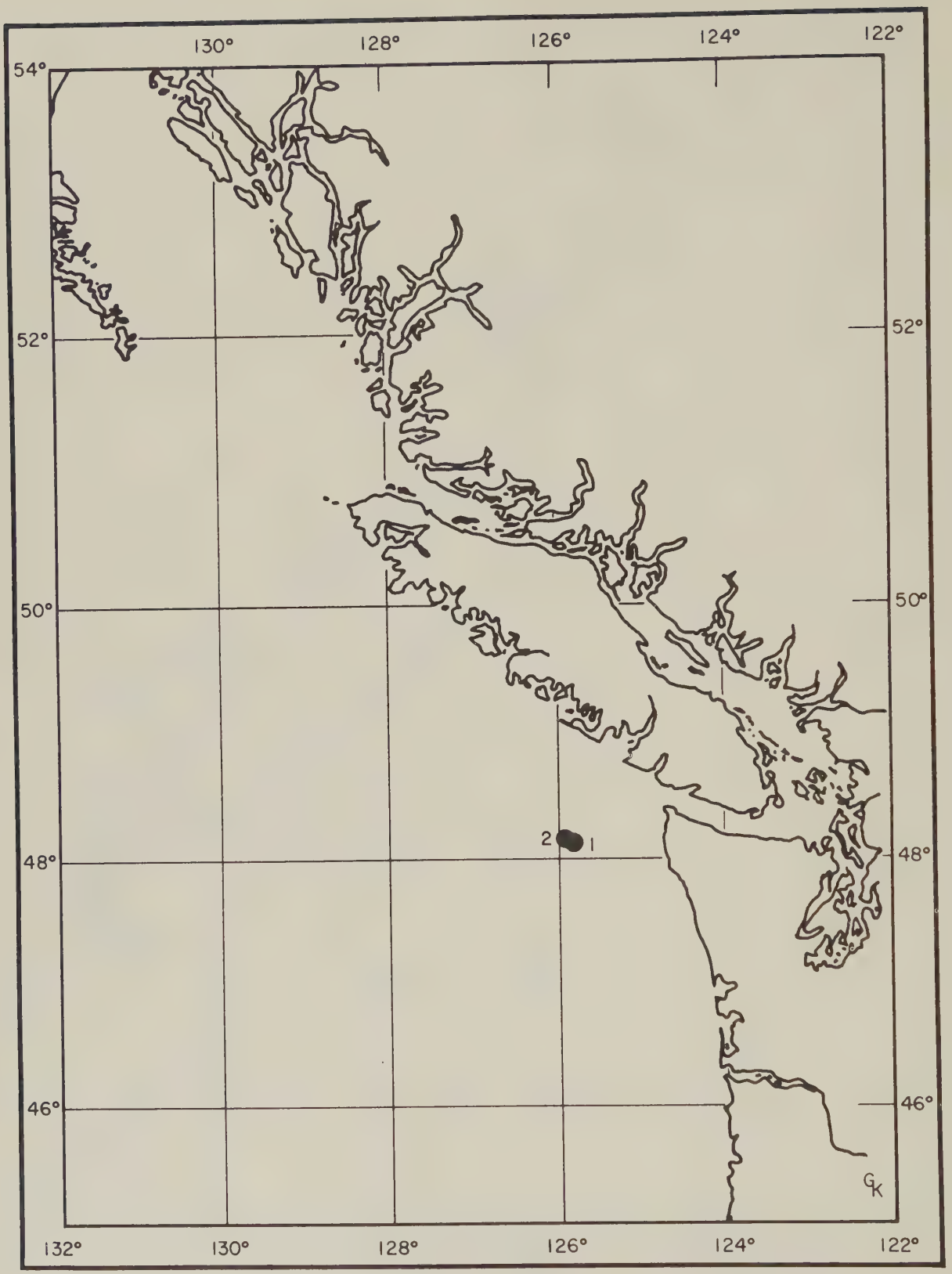


CHART 32. Station positions, University of Washington, Cruise 193 of RV Brown Bear

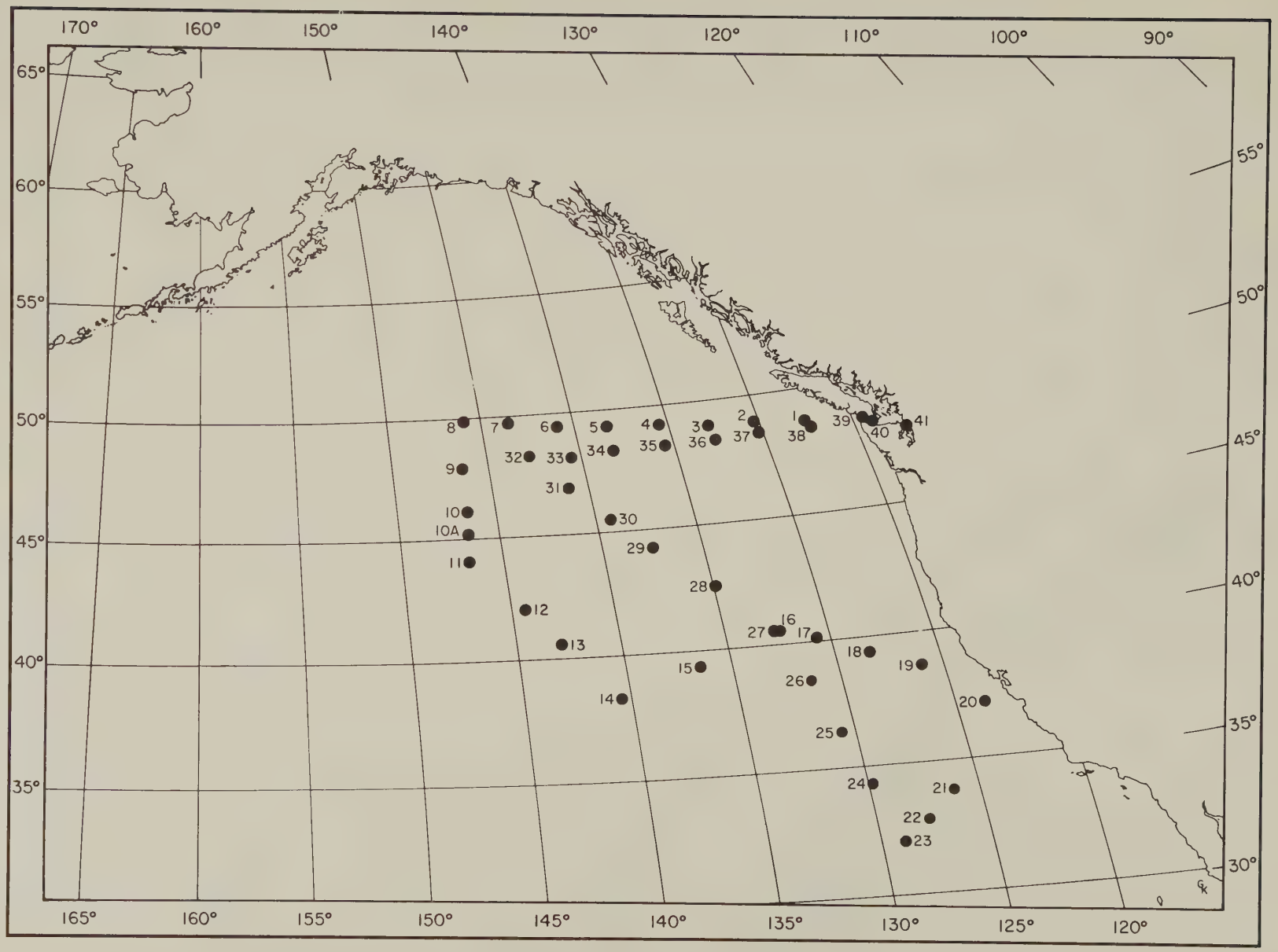


CHART 33. Station positions, University of Washington, Cruise 199 of RV Brown Bear

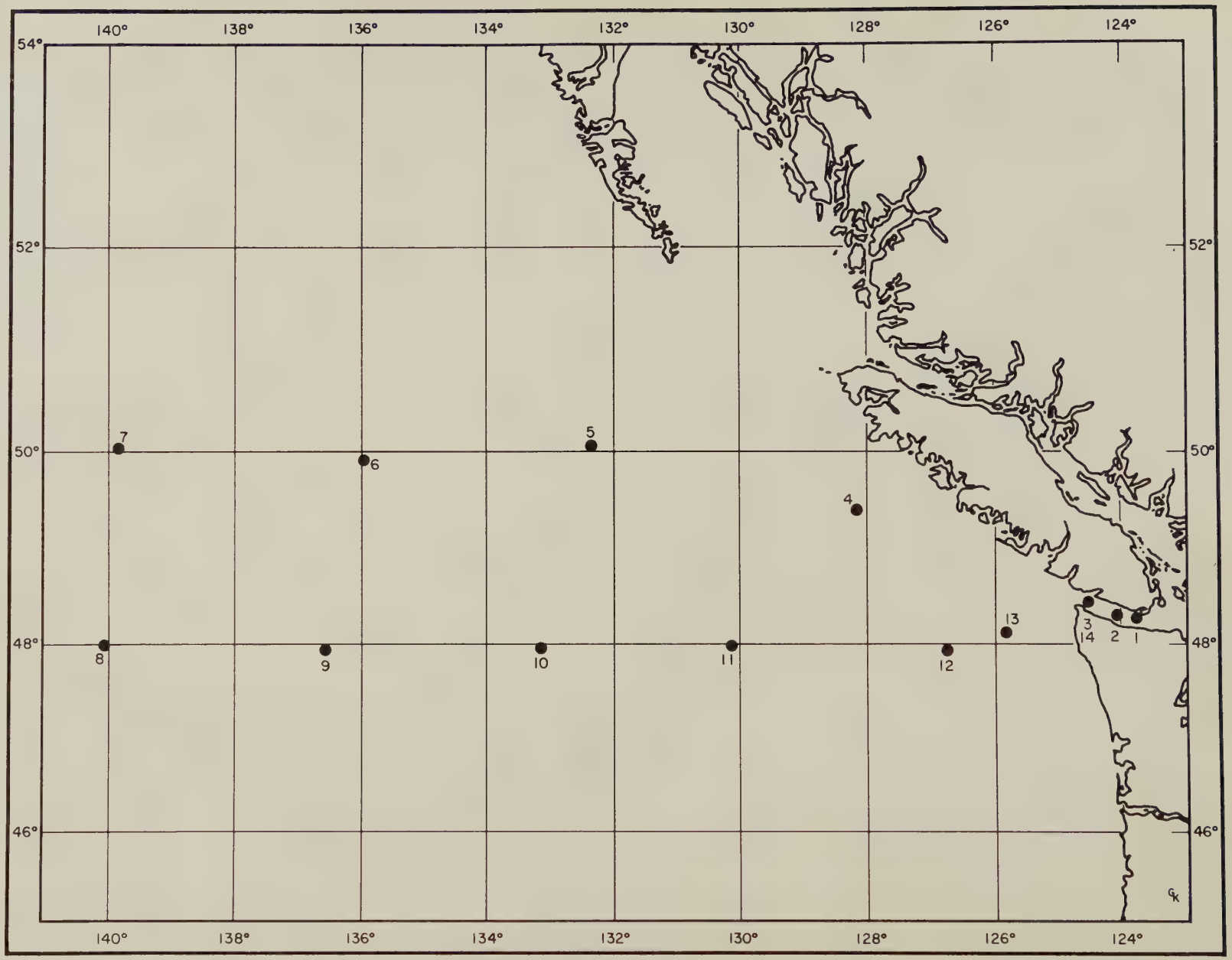


CHART 34. Station positions, University of Washington, Cruise 202 of RV Brown Bear

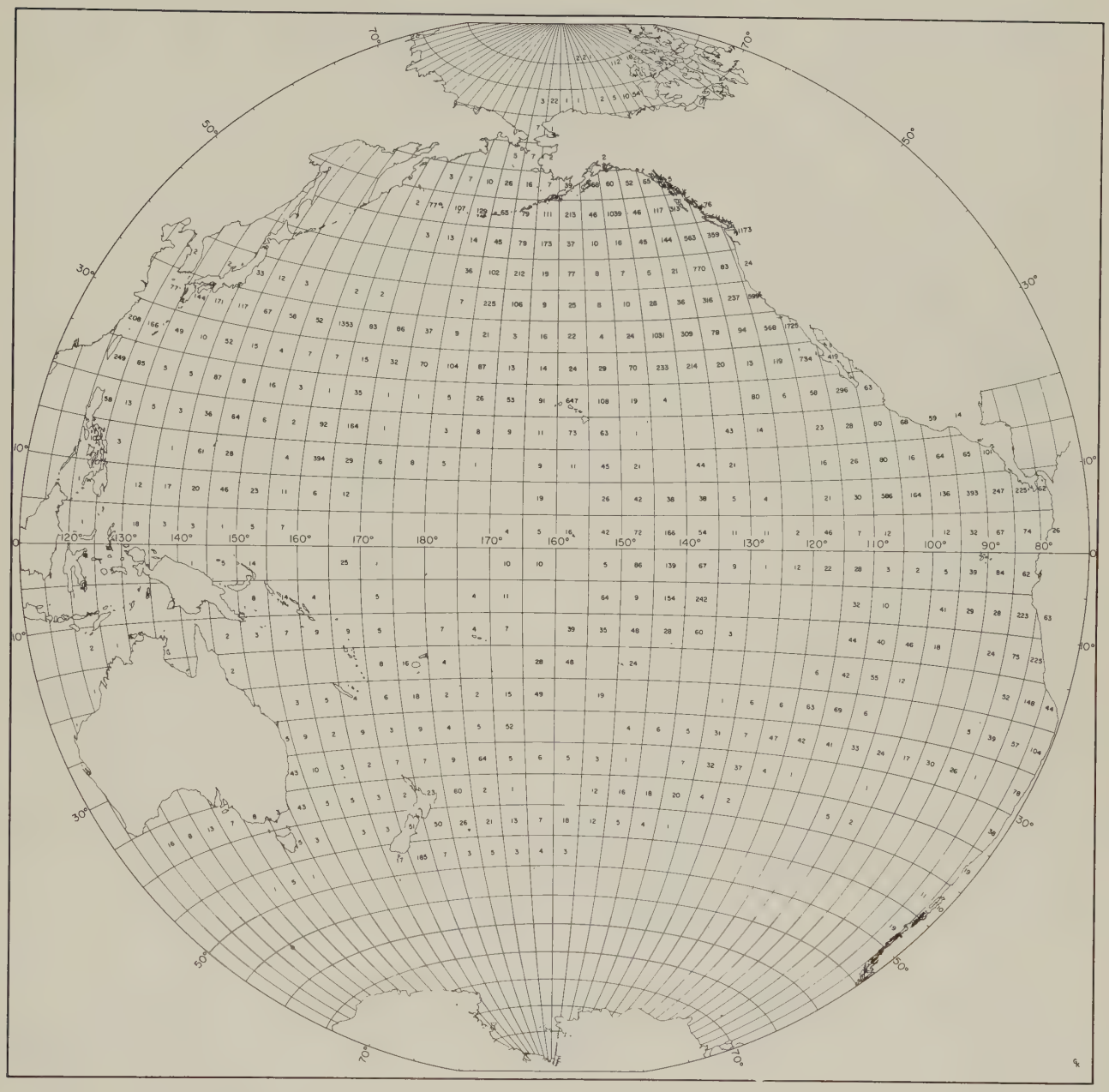

CHART 35. Bathythermograph observations, North and South Pacific, 1958; total, 29,208

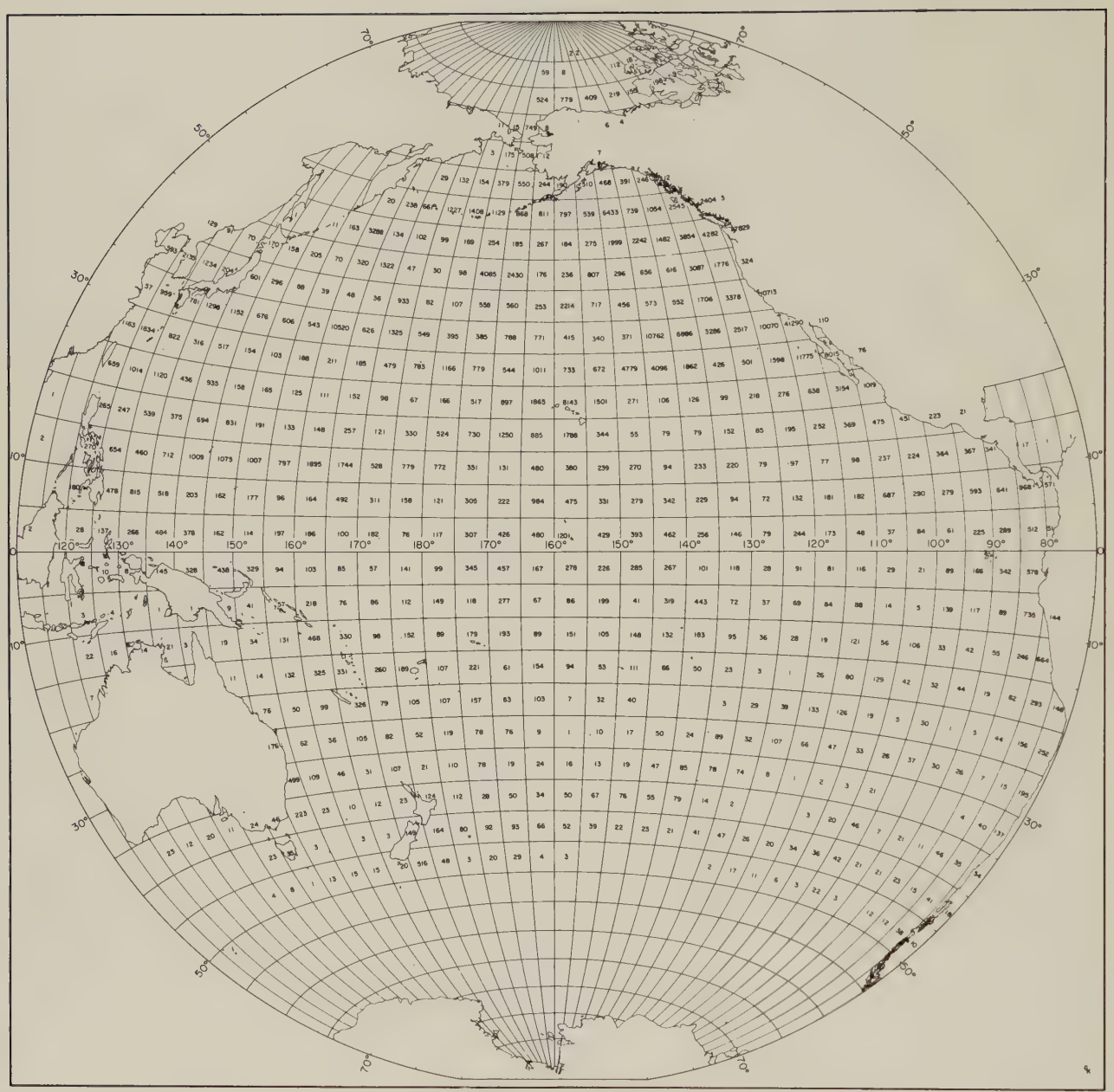

CHART 36. Bathythermograph observations, North and South Pacific, 1941–1958; total, 340,226

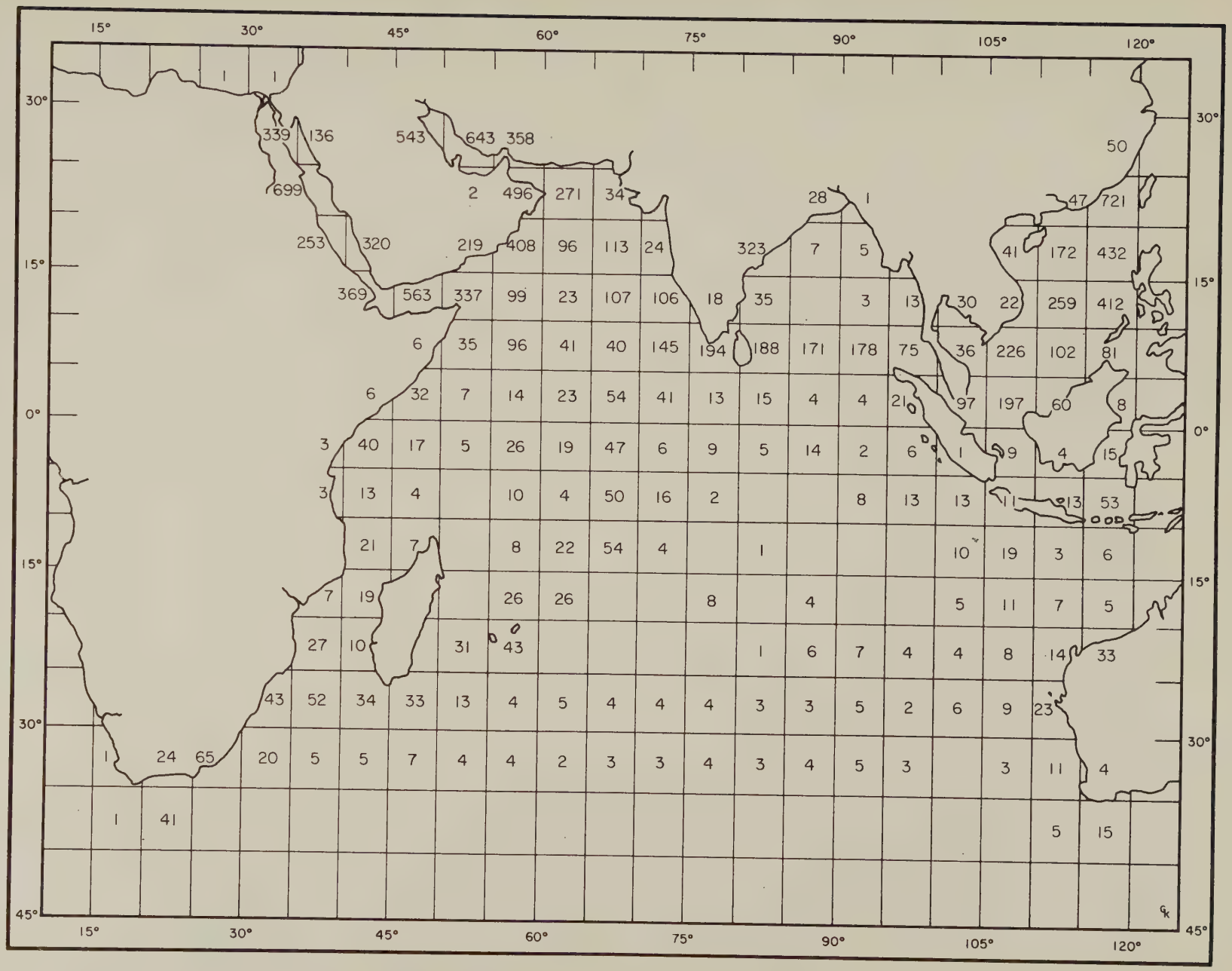


CHART 37. Bathythermograph observations, Indian Ocean, 1941–1958; total, 12,750

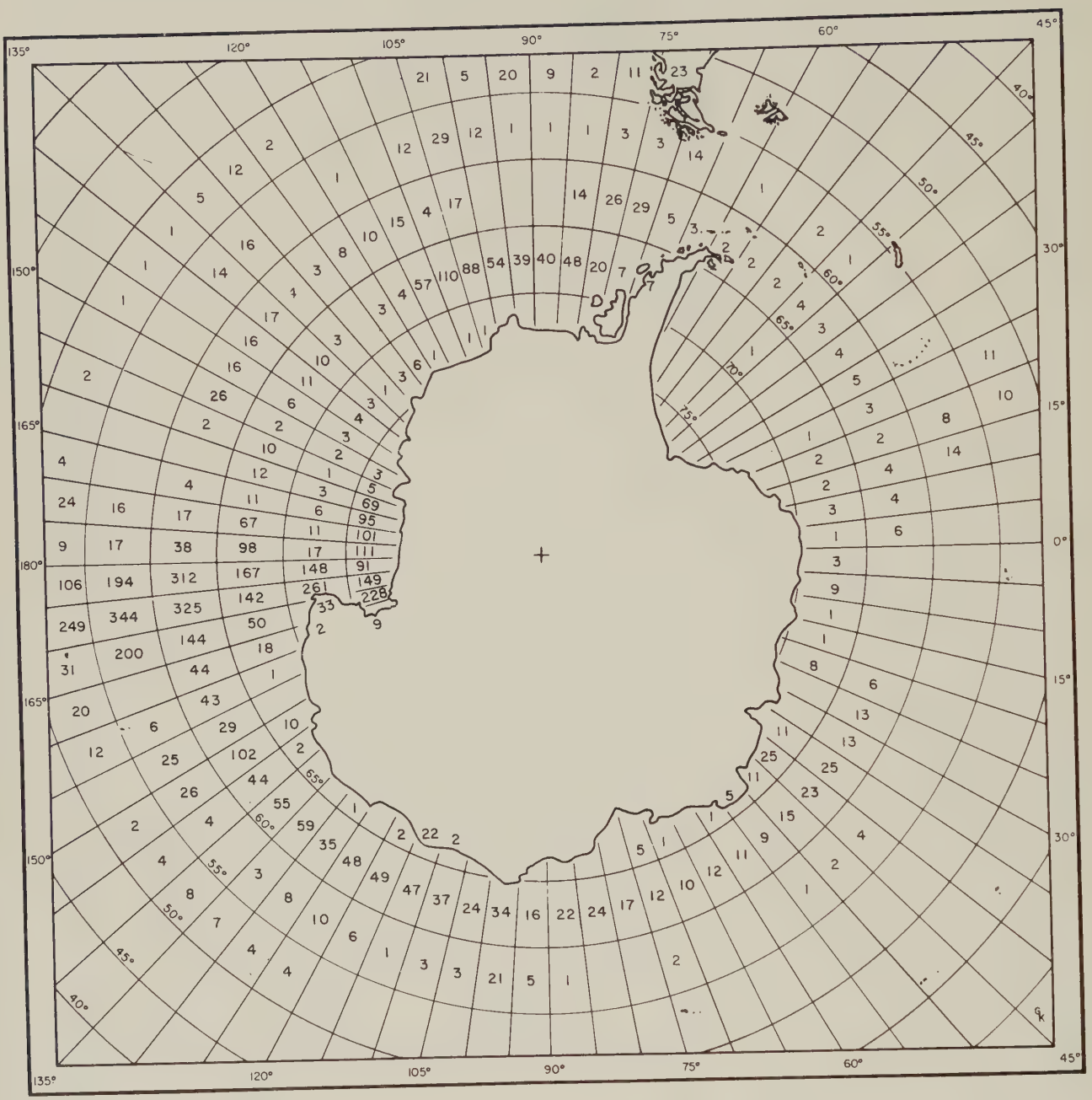


CHART 38. Bathythermograph observations, Antarctic Ocean, 1941–1958; total, 6, 222

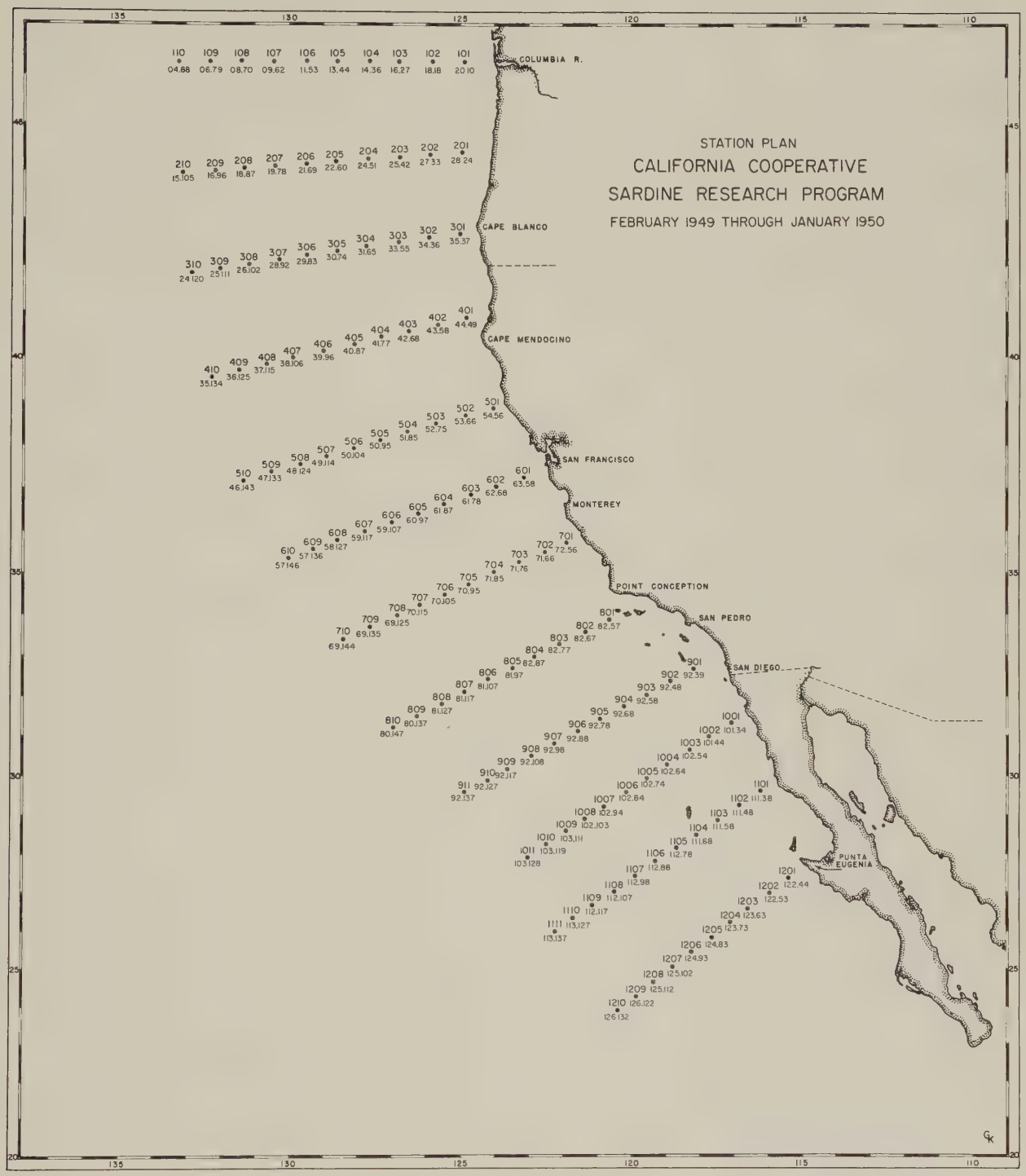


CHART 39. Station plan of the California Cooperative Oceanic Fisheries Investigations (formerly California Cooperative Sardine Research Program) from February, 1949, to January, 1950, inclusive, with equivalent numbers according to present station numbering system

# Explanation of Tables

SIDE RUNNING HEADS

Cruise-identifying information is shown in the margin near the top of the page. The first line is an abbreviation of the name of the organization responsible for the data. The second and third lines give the cruise identification. In the case of data collected in the California Cooperative Oceanic Fisheries Investigations research program, for example, CCOFI 5801 signifies the January cruise of 1958.

Individual station numbers are given in the margin opposite the station data. The letter "D" preceding the number indicates a drogue station. Raised numbers for the CCOFI stations indicate a position between lines or between stations of the standard station pattern. Station locations are shown in the appropriate position charts.

HEADINGS OF GROUPS OF COLUMNS

OBSERVED: Corrected data at accepted depths of observation.

INTERPOLATED: Data at standard depths, interpolated from smooth distribution curves or by machine-interpolation programs (see Notes on Particular Cruises). The standard depths are those selected by the agencies.

COMPUTED: The results of computations based, in general, on interpolated values.

COLUMN HEADINGS

| | |
|---|---|
| Z | Depth in meters at which observation was made or an interpolated value obtained. |
| T | Temperature of water in degrees Celsius. |
| S | Salinity of water in grams per kilogram (‰). |
| $O_2$ | Concentration of dissolved oxygen in milliliters per liter (ml/L). |
| $PO_4$-P | The phosphorus (expressed in microgram atoms per liter, µg at/L, or micromoles per liter) that reacts with acidified molybdate within a few minutes at room temperature. It will be largely inorganic orthophosphate but the figures include any acid soluble phosphate adsorbed onto particles and any organically combined phosphorus that is very rapidly hydrolyzed in cold water. |
| $SiO_3$-Si | The silicic acid in sea water that is reactive to acidified molybdate at room temperature, expressed in microgram atoms per liter (µg at/L) or micromoles per liter. |
| $NO_2$-N | Concentration of dissolved inorganic nitrite nitrogen in microgram atoms per liter (µg at/L) or micromoles per liter. |
| $NO_3$-N | Concentration of dissolved inorganic nitrate nitrogen in microgram atoms per liter (µg at/L) or micromoles per liter. |
| $NH_3$-N | Concentration of ammonia nitrogen in microgram atoms per liter (µg at/L). |
| pH | Negative logarithm of the hydrogen ion concentration. |
| pH *in situ* | Measured pH corrected for the *in situ* temperature and pressure of the sample. |
| Alk. | Alkalinity is defined as the number of milliequivalents of hydrogen ion that are neutralized by one kg of sea water at 20°C when a large excess of acid is added. |
| Total Alk. | The number of milliequivalents of hydrogen ion that are neutralized by one liter of sea water at 20°C when a large excess of strong acid is added. |
| Carb. Alk. | The number of milliequivalents of hydrogen ion that are neutralized by one liter of sea water at 20°C in converting all carbonate and bicarbonate ions to carbon dioxide gas. |
| Sp. Alk. | The specific alkalinity of a sample defined by the ratio of total alkalinity to chlorosity. |
| Total Reactive Iron | The iron in sea water in microgram atoms per liter (µg at/L) that is converted to a reactive ionic condition by an arbitrary treatment with hydrochloric acid. This treatment is designed to attack only those ferric iron compounds likely to be immediately available to growing phytoplankters. |
| Part. Reactive Iron | The particulate fraction of the reactive iron, that fraction withheld on filtering a sample through a 0.5-micron-pore-size membrane filter, expressed in microgram atoms per liter (µg at/L). |

Sol. Reactive Iron — The soluble fraction of the reactive iron, that fraction passing through the membrane filter, expressed in microgram atoms per liter (μg at/L).

Total Phosphorus — Amount of total phosphorus in microgram atoms per liter or micromoles per liter, irrespective of the form of combination of the element.

Part. Phosphorus — The phosphorus in microgram atoms per liter contained in the material held on a 0.5-micron-millipore filter.

Org. Phosphorus — The phosphorus in microgram atoms per liter that passes a 0.5-micron filter but does not react in three minutes with cold acidified molybdate. The material is probably largely organically combined phosphorus in true solution but it could include ultra-fine colloidal detritus and condensed polyphosphates, if these latter exist in sea water.

$\sigma_t$ — Sigma-t in grams per liter (g/L). Sigma-t can be defined

$$\sigma_t = 1000\ (\rho_{ST0} - 1)$$

where $\rho_{ST0}$ is the density, in grams per milliliter, of water of salinity, S, temperature, T, and at standard atmospheric pressure. Density is expressed in these units to be consistent with the tables used for the computations.

$\delta$ — Specific volume anomaly, in centiliters per ton (cl/ton), although most of the column headings state $10^{-5}cm^3/g$. The difference between the two units is negligible in these data (Pollak, 1961), but the correct units are centiliters per ton (or $10^{-5}ml/g$). Specific volume anomaly is defined as the difference between the specific volume of the water at a specified depth and the specific volume of a standard water with salinity of 35‰ and temperature of 0°C at the same depth. Specific volume anomaly is expressed in these units to be consistent with the tables used for the computations.

$\delta_T$ — Thermosteric anomaly, the pressure-independent part of the specific volume anomaly. Specific volume anomaly is defined

$$\delta = \alpha_{stp} - \alpha_{35,0,p}$$

and is computed as

$$\delta = \Delta_{st} + \delta_{sp} + \delta_{tp}$$

The quantity $\Delta_{st}$ has been discussed by Sverdrup, Johnson and Fleming (1946, p. 58) and approximately represents potential specific volume anomaly. It is used here with the name (thermosteric anomaly), symbol ($\delta_T$) and unit (centiliter per ton) suggested by Montgomery and Wooster (1954) although most of the column headings state $10^{-5}cm^3/g$. The difference between the two units is negligible in these data (Pollak, 1961), but the correct units are centiliters per ton.

$\Delta D$ — Geopotential anomaly, in dynamic meters (dynamic height), of the layer of water between the surface and the designated standard pressure. Geopotential anomaly is the difference between the geopotential thickness of the observed layer and the geopotential thickness of a layer bounded by the same pressures but having standard temperature, 0°C, and salinity, 35‰. The tabulated anomaly is determined from an approximation of the integral

$$\Delta D = \int_0^{p_z} \delta\ dp$$

where p is pressure in decibars (assumed equal to depth in meters) and subscript z denotes the value at the bottom of the layer under consideration. Since geopotential thickness is the product of geometrical thickness and the acceleration of gravity, a dynamic meter is equal to $10^5$ ergs per gram and is the change in geopotential over a vertical distance of approximately 1.02 meter.

## SUPPLEMENTARY STATION INFORMATION

Supplementary information about each station is to be found just above the tabulated data. This information includes name of ship, date and time of observation, geographical location of station, depth of water, wind direction and force (usually Beaufort scale), a description of surface weather and sea state, and wire angle. When there is more than one cast on a station, messenger times and wire angles are given for the casts in the order of increasing depth.

NOTES ON THE TABULATION OF DATA

1. Observed temperatures obtained by thermograph, bucket thermometer or bathythermograph are reported only to tenths of a degree. Temperatures by reversing thermometer are reported to hundredths of a degree.

2. Observed salinities determined by the Knudsen method are reported to hundredths of a part per mille. Observed values determined by conductivity bridge are reported to thousandths of a part per mille.

3. Missing observed values are indicated by a hyphen (-).

4. Extrapolated values and values interpolated between remote observations are entered within parentheses.

5. Observed data from different casts are separated by a blank line.

6. The following notations have been used where appropriate.

For premature or delayed closure of water bottle and reversal of thermometers:

p pretrip or posttrip

For values which are not used in interpolation because they seem to be in error:

r rejected value

u uncertain value

SIO
CCOFI
5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{10^{-5}}^{-3}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{10^{-5}}^{-3}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; January 14, 1958; 0155 GCT; 37°47.5'N, 123°15'W; sounding, 60 fm; wind, 290°, force 4; weather, partly cloudy; sea, very rough; wire angle, 06°. | | | | | | | | | | | 60.55 |
| 0 | 12.69 | 32.95 | 6.00 | 307 | 0 | 12.69 | 32.95 | 6.00 | 24.89 | 307 | 0.00 |
| 10 | 12.68 | 32.98 | 5.86 | 305 | 10 | 12.68 | 32.98 | 5.86 | 24.91 | 305 | 0.03 |
| 29 | 12.96 | 33.26 | 5.79 | 289 | 20 | 12.78 | 33.12 | 5.83 | 25.02 | 294 | 0.06 |
| 48 | 13.12 | 33.36 | 5.89 | 285 | 30 | 13.00 | 33.28 | 5.81 | 25.08 | 289 | 0.09 |
| 72 | 11.82 | 33.44 | 4.88 | 255 | 50 | 13.14 | 33.37 | 5.80 | 25.14 | 284 | 0.15 |
| 95 | 11.16 | 33.46 | 4.60 | 242 | 75 | 11.73 | 33.44 | 4.83 | 25.45 | 254 | 0.21 |
| | | | | | 100 | (11.00) | (33.46) | (4.51) | (25.60) | (239) | (0.28) |
| BLACK DOUGLAS; January 14, 1958; 0520 GCT; 37°37'N, 123°37'W; sounding, 1600 fm; wind, 280°, force 4; weather, partly cloudy; sea, rough; wire angle, 04°. | | | | | | | | | | | 60.60 |
| 0 | 13.50 | 33.40 | 6.03 | 290 | 0 | 13.50 | 33.40 | 6.03 | 25.07 | 290 | 0.00 |
| 10 | 13.50 | 33.40 | 6.08 | 290 | 10 | 13.50 | 33.40 | 6.08 | 25.07 | 290 | 0.03 |
| 29 | 13.50 | 33.40 | 6.07 | 290 | 20 | 13.50 | 33.40 | 6.08 | 25.07 | 290 | 0.06 |
| 44 | 13.50 | 33.41 | 5.98 | 288 | 30 | 13.50 | 33.40 | 6.07 | 25.07 | 290 | 0.09 |
| 53 | 13.32 | 33.40 | 5.94 | 286 | 50 | 13.41 | 33.40 | 5.94 | 25.10 | 287 | 0.14 |
| 62 | 11.83 | 33.39 | 5.39 | 259 | 75 | 10.90 | 33.45 | 4.86 | 25.61 | 239 | 0.21 |
| 72 | 11.18 | 33.43 | 5.00 | 245 | 100 | 9.87 | 33.55 | 4.31 | 25.86 | 215 | 0.27 |
| 92 | 9.97 | 33.52 | 4.44 | 218 | 150 | 9.32 | 33.74 | 3.49 | 26.10 | 192 | 0.37 |
| 106 | 9.86 | 33.68a) | 4.29 | | 200 | 8.59 | 33.92 | 2.88 | 26.36 | 167 | 0.46 |
| 120 | 9.72 | 33.64 | 3.93 | 206 | 250 | 8.10 | 34.05 | 2.10 | 26.54 | 150 | 0.54 |
| 143 | 9.41 | 33.72 | 3.64 | 195 | 300 | 7.68 | 34.13 | 1.56 | 26.66 | 139 | 0.62 |
| 169 | 9.15 | 33.80 | 3.07 | 185 | 400 | 6.69 | 34.18 | 1.05 | 26.84 | 122 | 0.75 |
| 206 | 8.48 | 33.93 | 2.85 | 166 | 500 | 5.79 | 34.22 | 0.68 | 26.99 | 108 | 0.87 |
| 255 | 8.04 | 34.07 | 2.00 | 149 | | | | | | | |
| 331 | 7.31 | 34.16 | 1.32 | 132 | | | | | | | |
| 427 | 6.42 | 34.18 | 0.96 | 119 | | | | | | | |
| 564 | 5.28 | 34.27 | 0.47 | 99 | | | | | | | |
| BLACK DOUGLAS; January 16, 1958; 0527 GCT; 37°19'N, 122°36'W; sounding, 48 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | | 63.52 |
| 0 | 13.24 | 33.43 | 5.99 | 282 | 0 | 13.24 | 33.43 | 5.99 | 25.16 | 282 | 0.00 |
| 10 | 13.24 | 33.42 | 6.01 | 283 | 10 | 13.24 | 33.42 | 6.01 | 25.15 | 283 | 0.03 |
| 30 | 13.24 | 33.42 | 6.12 | 283 | 20 | 13.24 | 33.42 | 6.06 | 25.15 | 283 | 0.06 |
| 49 | 12.65 | 33.46b) | 5.19 | 269 | 30 | 13.24 | 33.42 | 6.12 | 25.15 | 283 | 0.08 |
| 72 | 11.21 | 33.49 | 5.54 | 241 | 50 | 12.60 | 33.46 | 5.14 | 25.30 | 268 | 0.14 |
| | | | | | 71 | (11.00) | (33.49) | (4.47) | (25.63) | (237) | (0.20) |
| BLACK DOUGLAS; January 16, 1958; 0953 GCT; 37°02.5'N, 123°11.5'W; sounding, 1700 fm; wind, 300°, force 4; weather, missing; sea, moderate; wire angle, 03°. | | | | | | | | | | | 63.60 |
| 0 | 13.68 | 33.51 | 5.73 | 286 | 0 | 13.68 | 33.51 | 5.73 | 25.12 | 286 | 0.00 |
| 10 | 13.66 | 33.99 | 5.85 | 286 | 10 | 13.66 | 33.49 | 5.85 | 25.11 | 286 | 0.03 |
| 29 | 13.67 | 33.52 | 5.85 | 284 | 20 | 13.66 | 33.51 | 5.85 | 25.12 | 285 | 0.06 |
| 44 | 13.64 | 33.51 | 5.84 | 284 | 30 | 13.67 | 33.52 | 5.84 | 25.13 | 284 | 0.08 |
| 54 | 13.68 | 33.50 | 5.80 | 286 | 50 | 13.68 | 33.50 | 5.82 | 25.12 | 286 | 0.14 |
| 64 | 13.65 | 33.52b) | 5.71 | 283 | 75 | 12.70 | 33.48 | 5.46 | 25.30 | 269 | 0.21 |
| 73 | 12.90 | 33.48 | 5.53 | 272 | 100 | 10.75 | 33.59 | 4.04 | 25.74 | 226 | 0.28 |
| 91 | 11.06 | 33.57 | 4.20 | 233 | 150 | 9.36 | 33.79 | 3.08 | 26.13 | 189 | 0.38 |
| 105 | 10.62 | 33.59 | 4.04 | 224 | 200 | 8.39 | 33.96 | 2.59 | 26.43 | 161 | 0.47 |
| 119 | 9.96 | 33.62 | 3.94 | 210 | 250 | 7.78 | 34.04 | 2.35 | 26.58 | 147 | 0.55 |
| 141 | 9.29 | 33.69 | 3.42 | 195 | 300 | 7.18 | 34.08 | 1.92 | 26.70 | 136 | 0.62 |
| 168 | 8.76 | 33.85 | 2.89 | 176 | 400 | 6.41 | 34.20 | 0.89 | 26.89 | 117 | 0.75 |
| 203 | 8.35 | 33.97 | 2.55 | 160 | 500 | 5.95 | 34.27 | 0.66 | 27.00 | 106 | 0.87 |
| 252 | 7.72 | 34.04 | 2.33 | 146 | | | | | | | |
| 330 | 6.88 | 34.11 | 1.53 | 130 | | | | | | | |
| 427 | 6.32 | 34.22 | 0.81 | 114 | | | | | | | |
| 564 | 5.58 | 34.30 | 0.55 | 100 | | | | | | | |

a) Loose bottle cap; value does not fall on property curve.
b) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |

67.55 BLACK DOUGLAS; January 9, 1958; 1740 GCT; 36°39'N, 122°26'W; sounding, 1100 fm; wind, 140°, force 3; weather, cloudy; sea, very rough; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.69 | 33.51 | 5.78 | 285 | 0 | 13.69 | 33.51 | 5.78 | 25.12 | 285 | 0.00 |
| 10 | 13.67 | 33.48 | 5.97 | 287 | 10 | 13.67 | 33.48 | 5.97 | 25.10 | 287 | 0.03 |
| 29 | 13.54 | 33.47 | 5.72 | 285 | 20 | 13.62 | 33.48 | 5.77 | 25.11 | 286 | 0.06 |
| 39 | 13.44 | 33.46 | 3.75r | 284 | 30 | 13.53 | 33.47 | 5.72 | 25.12 | 285 | 0.08 |
| 59 | 13.05 | 33.45 | 5.32 | 278 | 50 | 13.30 | 33.46 | 5.59 | 25.17 | 281 | 0.14 |
| 69 | 11.68 | 33.42 | 4.84 | 255 | 75 | 11.31 | 33.45 | 4.64 | 25.53 | 246 | 0.21 |
| 82 | 10.98 | 33.49 | 4.30 | 237 | 100 | 10.10 | 33.50 | 4.32 | 25.78 | 222 | 0.27 |
| 96 | 10.28 | 33.48 | 4.42 | 227 | 150 | 9.00 | 33.80 | | 26.20 | 183 | 0.37 |
| 108 | 9.86 | 33.55 | 4.12 | 215 | 200 | 8.30 | 33.96 | 2.30 | 26.43 | 161 | 0.46 |
| 131 | 9.14 | 33.61 | 3.00r | 199 | 250 | 8.23 | 34.14 | 1.58 | 26.58 | 146 | 0.54 |
| 157 | 8.99 | 33.86 | 4.06r | 178 | 300 | 7.53 | 34.20 | 1.40 | 26.74 | 132 | 0.61 |
| 187 | 8.48 | 33.93 | 2.59 | 165 | 400 | 6.70 | 34.18 | 0.89 | 26.84 | 122 | 0.74 |
| 231 | 8.16 | 34.07 | 1.92 | 150 | 500 | 6.02 | 34.23 | 0.68 | 26.96 | 110 | 0.86 |
| 304 | 7.45 | 34.20 | 1.37 | 131 | | | | | | | |
| 395 | 6.73 | 34.18a) | 0.90 | 122 | | | | | | | |
| 518 | 5.85 | 34.24 | 0.65 | 108 | | | | | | | |

67.60 BLACK DOUGLAS; January 9, 1958; 2115 GCT; 36°29'N, 122°47.5'W; sounding, 1600 fm; wind, 120°, force 5; weather, cloudy; sea, very rough; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.99 | 33.48 | 6.14 | 293 | 0 | 13.99 | 33.48 | 6.14 | 25.04 | 293 | 0.00 |
| 10 | 13.99 | 33.48 | 6.24 | 293 | 10 | 13.99 | 33.48 | 6.24 | 25.04 | 293 | 0.03 |
| 28 | 13.94 | 33.49 | 5.84 | 291 | 20 | 13.97 | 33.48 | 5.85 | 25.04 | 292 | 0.06 |
| 38 | 13.95 | 33.49 | 5.87 | 292 | 30 | 13.95 | 33.49 | 5.85 | 25.06 | 291 | 0.09 |
| 47 | 13.96 | 33.53 | 5.84 | 290 | 50 | 13.85 | 33.52 | 5.71 | 25.10 | 287 | 0.14 |
| 56 | 12.88 | 33.47 | 5.00 | 273 | 75 | 11.62 | 33.59 | 3.98 | 25.59 | 241 | 0.21 |
| 65 | 12.23 | 33.58 | 4.23 | 253 | 100 | 10.42 | 33.56 | 4.33 | 25.78 | 223 | 0.27 |
| 78 | 11.36 | 33.59 | 3.96 | 236 | 150 | 8.74 | 33.83 | 3.33 | 26.26 | 176 | 0.37 |
| 91 | 10.64 | 33.50 | 4.44 | 231 | 200 | 8.14 | 33.99 | 2.43 | 26.48 | 156 | 0.46 |
| 104 | 10.30 | 33.60 | 4.03 | 218 | 250 | 7.49 | 34.06 | 2.00 | 26.64 | 142 | 0.53 |
| 124 | 9.22 | 33.65 | 3.87 | 197 | 300 | 7.01 | 34.11 | 1.51 | 26.74 | 132 | 0.60 |
| 148 | 8.76 | 33.81 | 3.37 | 178 | 400 | 6.45 | 34.18 | 0.93 | 26.87 | 119 | 0.73 |
| 178 | 8.40 | 33.96 | 2.57 | 162 | 500 | (5.95) | (34.28) | (0.53) | (27.01) | (106) | (0.85) |
| 220 | 7.84 | 34.02 | 2.28 | 150 | | | | | | | |
| 288 | 7.11 | 34.09 | 1.58 | 134 | | | | | | | |
| 376 | 6.60 | 34.16 | 1.04 | 122 | | | | | | | |
| 494 | 5.98 | 34.27 | 0.58 | 107 | | | | | | | |

70.70 BLACK DOUGLAS; January 17, 1958; 1555 GCT; 35°32'N, 123°17'W; sounding, 2000 fm; wind, 390°, force 6; weather, fog; sea, very rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.33 | 33.13 | | 306 | 0 | 13.33 | 33.13 | | 24.91 | 306 | 0.00 |
| 10 | 13.32 | 33.12 | | 307 | 10 | 13.32 | 33.12 | | 24.90 | 307 | 0.03 |
| 29 | 13.28 | 33.15 | | 304 | 20 | 13.30 | 33.14 | | 24.92 | 305 | 0.06 |
| 44 | 13.10 | 33.18 | | 298 | 30 | 13.27 | 33.15 | | 24.94 | 303 | 0.09 |
| 53 | 13.08 | 33.22 | | 295 | 50 | 13.10 | 33.22 | | 25.01 | 296 | 0.15 |
| 62 | 12.20 | 33.23 | | 278 | 75 | 10.65 | 33.16 | | 25.42 | 256 | 0.22 |
| 72 | 10.92 | 33.15 | | 261 | 100 | 9.43 | 33.41 | | 25.82 | 218 | 0.28 |
| 90 | 9.64 | 33.28 | | 231 | 150 | 8.87 | 33.84 | | 26.25 | 178 | 0.38 |
| 104 | 9.08 | 33.44 | | 211 | 200 | 8.30 | 34.05 | | 26.51 | 153 | 0.46 |
| 117 | 9.00 | 33.58 | | 199 | 250 | 7.69 | 34.07 | | 26.61 | 143 | 0.54 |
| 139 | 8.94 | 33.78 | | 183 | 300 | 7.29 | 34.12 | | 26.70 | 135 | 0.61 |
| 163 | 8.78 | 33.94 | | 169 | 400 | 6.60 | 34.21 | | 26.88 | 118 | 0.74 |
| 197 | 8.38 | 34.04 | | 155 | 500 | 5.93 | 34.25 | | 26.98 | 108 | 0.86 |
| 245 | 7.79 | 34.07 | | 145 | | | | | | | |
| 323 | 7.09 | 34.15 | | 130 | | | | | | | |
| 421 | 6.50 | 34.22 | | 117 | | | | | | | |
| 561 | 5.48 | 34.26 | | 102 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; January 17, 1958; 0940 GCT; 35°13'N, 123°48'W; sounding, 2000 fm; wind, 320°, force 5; weather, fog; sea, very rough; wire angle, 20°. 70.80

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.66 | 33.12 | | 313 | 0 | 13.66 | 33.12 | 24.82 | 313 | 0.00 |
| 9 | 13.68 | 33.13 | | 313 | 10 | 13.68 | 33.13 | 24.83 | 313 | 0.03 |
| 27 | 13.65 | 33.14 | | 312 | 20 | 13.66 | 33.14 | 24.84 | 312 | 0.06 |
| 41 | 13.64 | 33.21 | | 306 | 30 | 13.64 | 33.16 | 24.86 | 310 | 0.09 |
| 50 | 13.72 | 33.27 | | 304 | 50 | 13.72 | 33.27 | 24.93 | 304 | 0.16 |
| 59 | 13.14 | 33.30 | | 290 | 75 | 10.69 | 33.46 | 25.66 | 234 | 0.22 |
| 67 | 11.08 | 33.33 | | 251 | 100 | 10.15 | 33.69 | 25.92 | 209 | 0.28 |
| 83 | 10.44 | 33.62 | | 219 | 150 | 9.46 | 33.87 | 26.18 | 185 | 0.38 |
| 95 | - | 33.68 | | | 200 | 8.93 | 34.02 | 26.39 | 165 | 0.47 |
| 108 | 10.02 | 33.71 | | 205 | 250 | 8.40 | 34.11 | 26.54 | 150 | 0.55 |
| 127 | 9.72 | 33.78 | | 195 | 300 | 8.03 | 34.19 | 26.65 | 140 | 0.62 |
| 151 | 9.44 | 33.87 | | 184 | | | | | | |
| 183 | 9.12 | 33.98 | | 171 | | | | | | |
| 228 | 8.60 | 34.08 | | 156 | | | | | | |
| 300 | 8.03 | 34.19 | | 140 | | | | | | |

BLACK DOUGLAS; January 17, 1958; 0305 GCT; 34°53'N, 124°30'W; sounding, 2000 fm; wind, 300°, force 4; weather, fog; sea, high; wire angle, 15°. 70.90

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.61 | 33.13 | | 311 | 0 | 13.61 | 33.13 | 24.85 | 311 | 0.00 |
| 10 | 13.62 | 33.15 | | 310 | 10 | 13.62 | 33.15 | 24.86 | 310 | 0.03 |
| 29 | 13.64 | 33.20 | | 307 | 20 | 13.63 | 33.18 | 24.88 | 308 | 0.06 |
| 43 | 13.62 | 33.22 | | 305 | 30 | 13.63 | 33.20 | 24.89 | 307 | 0.09 |
| 52 | 13.22 | 33.23 | | 297 | 50 | 13.37 | 33.23 | 24.97 | 299 | 0.15 |
| 62 | 12.42 | 33.24 | | 282 | 75 | 11.09 | 33.22 | 25.39 | 260 | 0.22 |
| 71 | 11.39 | 33.21 | | 265 | 100 | 9.28 | 33.38 | 25.82 | 218 | 0.28 |
| 91 | 10.06 | 33.28 | | 238 | 150 | 8.85 | 33.78 | 26.20 | 182 | 0.39 |
| 105 | 9.08 | 33.41 | | 213 | 200 | 8.01 | 33.92 | 26.45 | 159 | 0.47 |
| 119 | 9.14 | 33.54 | | 204 | 250 | 7.39 | 33.96 | 26.56 | 148 | 0.55 |
| 141 | 8.92 | 33.72 | | 187 | 300 | 6.85 | 34.00 | 26.67 | 138 | 0.62 |
| 168 | 8.72 | 33.84 | | 176 | 400 | 6.57 | 34.12 | 26.82 | 124 | 0.76 |
| 203 | 7.96 | 33.92 | | 158 | 500 | 6.10 | 34.22 | 26.95 | 112 | 0.88 |
| 250 | 7.39 | 33.96 | | 148 | | | | | | |
| 326 | 6.61 | 34.02 | | 133 | | | | | | |
| 435 | 6.51 | 34.20 | | 118 | | | | | | |
| 570 | 5.64 | 34.22 | | 106 | | | | | | |

BLACK DOUGLAS; January 19, 1958; 2113 GCT; 35°27.5'N, 121°37.5'W; sounding, 550 fm; wind, calm; weather, cloudy; sea, rough; wire angle, 00°. 73.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.12 | 33.57 | 6.17 | 289 | 0 | 14.12 | 33.57 | 6.17 | 25.08 | 289 | 0.00 |
| 10 | 13.88 | 33.53 | 6.19 | 287 | 10 | 13.88 | 33.53 | 6.19 | 25.10 | 287 | 0.03 |
| 29 | 13.87 | 33.55 | 6.03 | 285 | 20 | 13.88 | 33.54 | 6.10 | 25.11 | 286 | 0.06 |
| 39 | 13.81 | 33.56 | 6.05 | 284 | 30 | 13.87 | 33.55 | 6.05 | 25.12 | 285 | 0.09 |
| 49 | 13.82 | 33.60 | 5.96 | 281 | 50 | 13.82 | 33.60 | 5.96 | 25.17 | 281 | 0.14 |
| 59 | 13.80 | 33.60 | 5.95 | 281 | 75 | 12.46 | 33.55 | 4.85 | 25.39 | 259 | 0.21 |
| 68 | 13.14 | 33.55 | 5.35 | 271 | 100 | 10.50 | 33.62 | 3.83 | 25.81 | 219 | 0.27 |
| 82 | 11.62 | 33.57 | 4.28 | 243 | 150 | 9.01 | 33.94 | 2.79 | 26.30 | 173 | 0.37 |
| 96 | 10.66 | 33.60 | 3.89 | 224 | 200 | 8.50 | 34.05 | 2.24 | 26.48 | 156 | 0.45 |
| 110 | 10.12 | 33.67 | 3.68 | 210 | 250 | 7.74 | 34.08 | 2.02 | 26.62 | 143 | 0.53 |
| 133 | 9.59 | 33.85 | 2.95 | 188 | 300 | 7.35 | 34.11 | 1.75 | 26.69 | 136 | 0.60 |
| 159 | 8.74 | 33.96 | 2.74 | 167 | 400 | 6.72 | 34.16 | 0.97 | 26.82 | 124 | 0.74 |
| 191 | 8.64 | 34.03 | 2.34 | 160 | 500 | 6.17 | 34.26 | 0.72 | 26.97 | 110 | 0.86 |
| 233 | 7.96 | 34.07 | 2.14 | 147 | | | | | | | |
| 306 | 7.33 | 34.11 | 1.74 | 136 | | | | | | | |
| 397 | 6.74 | 34.15 | 0.99 | 125 | | | | | | | |
| 517 | 6.05 | 34.27 | 0.67 | 108 | | | | | | | |

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

73.60 BLACK DOUGLAS; January 19, 1958; 1815 GCT; 35°17'N, 121°57'W; sounding, 500 fm; wind, 140°, force 2; weather, clear; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.59 | 33.48 | 5.94 | 286 | 0 | 13.59 | 33.48 | 5.94 | 25.11 | 286 | 0.00 |
| 10 | 13.60 | 33.46 | 6.12 | 287 | 10 | 13.60 | 33.46 | 6.12 | 25.10 | 287 | 0.03 |
| 29 | 13.60 | 33.49 | 6.08 | 284 | 20 | 13.60 | 33.47 | 6.11 | 25.11 | 286 | 0.06 |
| 39 | 12.88 | 33.42 | 5.64 | 276 | 30 | 13.59 | 33.49 | 6.07 | 25.13 | 284 | 0.08 |
| 48 | 11.60 | 33.37 | 5.16 | 257 | 50 | 11.43 | 33.38 | 5.12 | 25.46 | 253 | 0.14 |
| 58 | 11.14 | 33.40 | 4.97 | 247 | 75 | 10.43 | 33.48 | 4.64 | 25.71 | 229 | 0.20 |
| 67 | 10.78 | 33.45 | 4.79 | 237 | 100 | 9.17 | 33.68 | 3.92 | 26.08 | 194 | 0.25 |
| 81 | 10.06 | 33.50 | 4.61 | 222 | 150 | 8.84 | 33.90 | 3.06 | 26.30 | 173 | 0.35 |
| 94p | 9.29 | 33.66 | 4.04 | 197 | 200 | 8.00 | 33.98 | 2.65 | 26.50 | 154 | 0.43 |
| 123p | 8.96 | 33.76 | 3.57 | 185 | 250 | 7.44 | 34.08 | 2.07 | 26.66 | 140 | 0.50 |
| 165p | 8.51 | 33.91 | 3.05 | 167 | 300 | 7.00 | 34.15 | 1.62 | 26.77 | 128 | 0.57 |
| 233p | 7.60 | 34.05 | 2.21 | 144 | 400 | 6.28 | 34.16 | 1.08 | 26.88 | 118 | 0.70 |
| 321p | 6.84 | 34.16 | 1.45 | 125 | | | | | | | |
| 434p | 6.00 | 34.16 | 0.95 | 115 | | | | | | | |

77.55 BLACK DOUGLAS; January 19, 1958; 0835 GCT; 34°54.5'N, 121°13'W; sounding, 290 fm; wind, 030°, force 4; weather, clear; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.86 | 33.55 | 5.87 | 286 | 0 | 13.86 | 33.55 | 5.87 | 25.11 | 286 | 0.00 |
| 9 | 13.85 | 33.55 | 6.15 | 286 | 10 | 13.85 | 33.55 | 6.15 | 25.11 | 286 | 0.03 |
| 28 | 13.85 | 33.53 | 6.12 | 286 | 20 | 13.85 | 33.54 | 6.14 | 25.11 | 286 | 0.06 |
| 46 | 13.22 | 33.49 | 5.95 | 278 | 30 | 13.84 | 33.53 | 6.11 | 25.11 | 286 | 0.08 |
| 69 | 10.88 | 33.51 | 4.74 | 234 | 50 | 12.82 | 33.49 | 5.82 | 25.27 | 271 | 0.14 |
| 91 | 10.40 | 33.50 | 4.75 | 227 | 75 | 10.70 | 33.50 | 4.74 | 25.69 | 231 | 0.20 |
| 113 | 10.10 | 33.64 | 3.83 | 212 | 100 | 10.28 | 33.52 | 4.60 | 25.77 | 223 | 0.26 |
| 148 | 9.46 | 33.84a) | 3.49 | 187 | 150 | 9.41 | 33.87 | 3.46 | 26.19 | 184 | 0.36 |
| 184 | 8.48 | 34.09 | 2.98 | 154 | 200 | 8.28 | 34.08 | 2.77 | 26.54 | 151 | 0.45 |
| 228 | 8.06 | 34.07 | 2.54 | 149 | 250 | 7.93 | 34.08 | 2.44 | 26.58 | 146 | 0.53 |
| 273 | 7.78 | 34.11 | 2.26 | 142 | 300 | 7.51 | 34.16 | 1.95 | 26.71 | 134 | 0.60 |
| 368 | 7.12 | 34.23 | 1.07 | 124 | | | | | | | |

77.60 BLACK DOUGLAS; January 19, 1958; 1237 GCT; 34°44'N, 121°34'W; sounding, 500 fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.37 | 33.60 | 5.88 | 292 | 0 | 14.37 | 33.60 | 5.88 | 25.05 | 292 | 0.00 |
| 10 | 14.36 | 33.60 | 5.92 | 292 | 10 | 14.36 | 33.60 | 5.92 | 25.05 | 292 | 0.03 |
| 29 | 19.38 | 33.62 | 5.89 | 291 | 20 | 14.37 | 33.61 | 5.90 | 25.06 | 291 | 0.06 |
| 38 | 14.32 | 33.63 | 5.94 | 289 | 30 | 14.38 | 33.62 | 5.90 | 25.06 | 291 | 0.09 |
| 48 | 13.92 | 33.60 | 5.77 | 283 | 50 | 13.75 | 33.60 | 5.66 | 25.18 | 280 | 0.14 |
| 57 | 12.55 | 33.64 | 4.20 | 254 | 75 | 10.91 | 33.72 | 3.45 | 25.82 | 219 | 0.21 |
| 67 | 11.52 | 33.67 | 3.73 | 234 | 100 | 10.20 | 33.83 | 2.90 | 26.03 | 199 | 0.26 |
| 81 | 10.58 | 33.76 | 3.24 | 210 | 150 | 9.72 | 33.97 | 2.46 | 26.22 | 181 | 0.36 |
| 108 | 10.08 | 33.86 | 2.81 | 195 | 200 | 9.40 | 34.06 | 2.40 | 26.34 | 169 | 0.44 |
| 130 | 9.88 | 33.91 | 2.64 | 188 | 250 | 8.90 | 34.15 | 1.98 | 26.49 | 155 | 0.53 |
| 157 | 9.66 | 33.99 | 2.44 | 179 | 300 | 8.52 | 34.22 | 1.61 | 26.60 | 144 | 0.60 |
| 186 | 9.54 | 34.04 | 2.46 | 173 | 400 | 7.39 | 34.22 | 1.32 | 26.78 | 128 | 0.75 |
| 229 | 9.08 | 34.11 | 2.14 | 101 | 500 | 6.70 | 34.24 | 0.48 | 26.89 | 117 | 0.87 |
| 300 | 8.52 | 34.22 | 1.61 | 144 | | | | | | | |
| 389 | 7.46 | 34.22 | 1.36 | 130 | | | | | | | |
| 508 | 6.62 | 34.25 | 0.36 | 116 | | | | | | | |

80.51 BLACK DOUGLAS; January 20, 1958; 0650 GCT; 34°26.5'N, 120°32.5'W; sounding, 59 fm; wind, 040°, force 3; weather, clear; sea, rough; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.41 | 33.64 | 6.00 | 311 | 0 | 15.41 | 33.64 | 6.00 | 24.85 | 311 | 0.00 |
| 9 | 15.40 | 33.64 | 6.07 | 310 | 10 | 15.40 | 33.64 | 6.05 | 24.86 | 310 | 0.03 |
| 29 | 13.83 | 33.54 | 5.34 | 286 | 20 | 15.00 | 33.60 | 5.92 | 24.91 | 305 | 0.06 |
| 48 | 13.47 | 33.53a) | 5.14 | 280 | 30 | 13.81 | 33.54 | 5.33 | 25.12 | 285 | 0.09 |
| 72 | 12.08 | 33.58 | 4.32 | 250 | 50 | 13.44 | 33.53 | 5.06 | 25.19 | 279 | 0.15 |
| | | | | | 75 | (11.86) | (33.60) | | (25.54) | (245) | (0.21) |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; January 20, 1958; 0920 GCT; 34°19'N, 120°48'W; sounding, 420 fm; wind, 320°, force 3; weather, clear; sea, slight; wire angle, 07°. 80.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.18 | 33.58 | 6.07 | 289 | 0 | 14.18 | 33.58 | 6.07 | 25.08 | 289 | 0.00 |
| 10 | 14.16 | 33.58 | 6.17 | 289 | 10 | 14.16 | 33.58 | 6.17 | 25.08 | 289 | 0.03 |
| 29 | 14.01 | 33.66u | 5.97 | | 20 | 14.10 | 33.58 | 6.08 | 25.10 | 288 | 0.06 |
| 38 | 13.83 | 33.58 | 5.81 | 283 | 30 | 14.00 | 33.58 | 5.94 | 25.11 | 286 | 0.09 |
| 47 | 12.41 | 33.53 | 4.90 | 260 | 50 | 12.21 | 33.52 | 4.86 | 25.42 | 256 | 0.14 |
| 57 | 11.85 | 33.51 | 4.83 | 251 | 75 | 11.13 | 33.57 | 4.39 | 25.66 | 234 | 0.20 |
| 66 | 11.41 | 33.54 | 4.58 | 241 | 100 | 10.50 | 33.61 | 3.95 | 25.81 | 220 | 0.26 |
| 80 | 11.00 | 33.58 | 4.33 | 231 | 150 | 9.57 | 33.99 | 2.54 | 26.26 | 177 | 0.36 |
| 94 | 10.69 | 33.59 | 4.10 | 225 | 200 | 9.13 | 34.07 | 2.08 | 26.39 | 164 | 0.45 |
| 107 | 10.28 | 33.64 | 3.81 | 215 | 250 | 8.77 | 34.13 | 1.68 | 26.49 | 154 | 0.53 |
| 130 | 9.78 | 33.83 | 2.97 | 192 | 300 | 8.14 | 34.16 | 1.46 | 26.61 | 144 | 0.60 |
| 156 | 9.54 | 34.00 | 2.50 | 176 | 400 | 7.00 | 34.18 | 1.15 | 26.80 | 126 | 0.74 |
| 187 | 9.23 | 34.04 | 2.23 | 168 | 500 | 6.23 | 34.21 | 0.75 | 26.92 | 114 | 0.87 |
| 231 | 8.95 | 34.11 | 1.81 | 159 | | | | | | | |
| 302 | 8.13 | 34.16 | 1.44 | 143 | | | | | | | |
| 393 | 7.06 | 34.18 | 1.18 | 127 | | | | | | | |
| 514 | 6.16 | 34.21 | 0.72 | 103 | | | | | | | |

BLACK DOUGLAS; January 20, 1958; 1245 GCT; 34°09'N, 121°09'W; sounding, 1200 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 20°. 80.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.46 | 33.66 | 6.40 | 289 | 0 | 14.46 | 33.66 | 6.40 | 25.08 | 289 | 0.00 |
| 9 | 14.45 | 33.64 | 5.90 | 290 | 10 | 14.45 | 33.64 | 5.90 | 25.07 | 290 | 0.03 |
| 28 | 14.46 | 33.68 | 5.94 | 288 | 20 | 14.46 | 33.66 | 5.92 | 25.08 | 288 | 0.06 |
| 37 | 14.23 | 33.64 | 5.85 | 286 | 30 | 14.42 | 33.67 | 5.92 | 25.10 | 287 | 0.09 |
| 46 | 13.83 | 33.60 | 5.59 | 281 | 50 | 13.33 | 33.58 | 5.27 | 25.24 | 274 | 0.14 |
| 55 | 11.82 | 33.54 | 4.61 | 247 | 75 | 10.62 | 33.67 | 3.65 | 25.83 | 218 | 0.20 |
| 63 | 10.97 | 33.60 | 4.03 | 228 | 100 | 10.06 | 33.84 | 2.97 | 26.06 | 196 | 0.26 |
| 76 | 10.60 | 33.68 | 3.62 | 217 | 150 | 9.39 | 34.06 | 2.29 | 26.34 | 169 | 0.35 |
| 88 | 10.19 | 33.82 | 3.31 | 200 | 200 | 8.90 | 34.12 | 1.99 | 26.46 | 158 | 0.43 |
| 100 | 10.06 | 33.84 | 2.97 | 196 | 250 | 8.33 | 34.23 | 1.46 | 26.64 | 141 | 0.51 |
| 120 | 9.99 | 33.91 | 2.89 | 190 | 300 | 7.90 | 34.25 | 1.25 | 26.72 | 133 | 0.58 |
| 145 | 9.44 | 34.05 | 2.36 | 171 | 400 | 7.00 | 34.25 | 0.80 | 26.85 | 121 | 0.71 |
| 182 | 9.10 | 34.08 | 2.16 | 164 | 500 | (6.09) | (34.30) | (0.53) | (27.02) | (105) | (0.83) |
| 217 | 8.69 | 34.16 | 1.70 | 151 | | | | | | | |
| 283 | 8.05 | 34.25 | 1.34 | 135 | | | | | | | |
| 368 | 7.28 | 34.24 | 0.93 | 126 | | | | | | | |
| 484 | 6.22 | 34.29 | 0.55 | 108 | | | | | | | |

BLACK DOUGLAS; January 20, 1958; 1910, 1940 GCT; 33°47'N, 121°52'W; sounding, 2000 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 26°, 15°. 80.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.05 | 33.58 | | 287 | 0 | 14.05 | 33.58 | | 25.10 | 287 | 0.00 |
| 8 | 14.06 | 33.55 | | 289 | 10 | 14.05 | 33.55 | | 25.08 | 289 | 0.03 |
| 26 | 14.03 | 33.55 | | 288 | 20 | 14.05 | 33.55 | | 25.08 | 289 | 0.06 |
| 40 | 14.02 | 33.57 | | 287 | 30 | 14.03 | 33.55 | | 25.09 | 288 | 0.09 |
| 48 | 13.99 | 33.56 | | 287 | 50 | 13.97 | 33.55 | | 25.10 | 287 | 0.14 |
| 57 | 13.92 | 33.55 | | 287 | 75 | 11.88 | 33.35 | | 25.36 | 263 | 0.21 |
| 66 | 12.59 | 33.37 | | 274 | 100 | 10.10 | 33.36 | | 25.67 | 233 | 0.28 |
| 83 | 11.35 | 33.34 | | 255 | 150 | 8.79 | 33.73 | | 26.18 | 185 | 0.38 |
| | | | | | 200 | 8.02 | 33.95 | | 26.47 | 157 | 0.47 |
| 98 | 10.20 | 33.35 | | 235 | 250 | 7.43 | 34.04 | | 26.62 | 142 | 0.54 |
| 112 | 9.66 | 33.42 | | 221 | 300 | 6.92 | 34.12 | | 26.76 | 130 | 0.62 |
| 132 | 9.30 | 33.60 | | 202 | 400 | 6.10 | 34.18 | | 26.91 | 115 | 0.74 |
| 158 | 8.61 | 33.77 | | 179 | 500 | 5.70 | 34.24 | | 27.01 | 106 | 0.86 |
| 193 | 8.10 | 33.94 | | 159 | | | | | | | |
| 240 | 7.55 | 34.02 | | 146 | | | | | | | |
| 314 | 6.77 | 34.14 | | 126 | | | | | | | |
| 412 | 6.04 | 34.18 | | 114 | | | | | | | |
| 541 | 5.54 | 34.27 | | 101 | | | | | | | |

SIO

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **80.80** | BLACK DOUGLAS; January 21, 1958; 0105 GCT; 33°29'N, 122°32'W; sounding, 2000 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 14.98 | 33.40 | | 320 | 0 | 14.98 | 33.40 | | 24.76 | 320 | 0.00 |
| 10 | 14.99 | 33.39 | | 320 | 10 | 14.99 | 33.39 | | 24.76 | 320 | 0.03 |
| 34 | 15.00 | 33.41 | | 319 | 20 | 15.00 | 33.40 | | 24.76 | 320 | 0.06 |
| 43 | 15.00 | 33.39 | | 320 | 30 | 15.00 | 33.41 | | 24.77 | 319 | 0.10 |
| 57 | 15.00 | 33.39 | | 320 | 50 | 15.00 | 33.39 | | 24.76 | 320 | 0.16 |
| 66 | 14.98 | 33.38 | | 320 | 75 | 14.96 | 33.39 | | 24.77 | 319 | 0.24 |
| 75 | 14.96 | 33.39 | | 319 | 100 | 13.70 | 33.40 | | 25.02 | 295 | 0.32 |
| 93 | 14.30 | 33.40 | | 305 | 150 | 9.83 | 33.51 | | 25.84 | 216 | 0.44 |
| 110 | 12.60 | 33.39 | | 273 | 200 | 8.83 | 33.94 | | 26.34 | 170 | 0.54 |
| 124 | 10.95 | 33.39 | | 244 | 250 | 8.10 | 34.02 | | 26.51 | 153 | 0.63 |
| 146 | 9.92 | 33.49 | | 219 | 300 | 7.45 | 34.08 | | 26.65 | 140 | 0.70 |
| 181 | 9.12 | 33.80 | | 185 | 400 | 6.67 | 34.18 | | 26.84 | 122 | 0.84 |
| 217 | 8.64 | 33.99 | | 163 | 500 | 5.95 | 34.25 | | 26.98 | 108 | 0.96 |
| 271 | 7.78 | 34.04 | | 147 | 600 | (5.44) | (34.29) | | (27.08) | (99) | (1.07) |
| 352 | 7.02 | 34.14 | | 129 | | | | | | | |
| 458 | 6.20 | 34.22 | | 113 | | | | | | | |
| 599 | 5.46 | 34.29 | | 99 | | | | | | | |
| **82.47** | STRANGER; January 31, 1958; 1512 GCT; 34°13'N, 119°58'W; sounding, 307 fm; wind, 340°, force 2; weather, partly cloudy; sea, very rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 15.32 | 33.67 | 5.59 | 306 | 0 | 15.32 | 33.67 | 5.59 | 24.90 | 306 | 0.00 |
| 10 | 14.93 | 33.62 | 5.76 | 303 | 10 | 14.93 | 33.62 | 5.76 | 24.94 | 303 | 0.03 |
| 29 | 14.52 | 33.62 | 5.57 | 294 | 20 | 14.67 | 33.61 | 5.57 | 25.00 | 297 | 0.06 |
| 54 | 14.50 | 33.63 | 5.90 | 293 | 30 | 14.52 | 33.62 | 5.58 | 25.03 | 294 | 0.09 |
| 64 | 13.78 | 33.64 | 5.25 | 277 | 50 | 14.51 | 33.63 | 5.83 | 25.04 | 293 | 0.15 |
| 73 | 12.22 | 33.61 | 4.65 | 251 | 75 | 12.00 | 33.62 | 4.50 | 25.53 | 246 | 0.22 |
| 83 | 11.66 | 33.63 | 4.14 | 239 | 100 | 11.09 | 33.67 | 3.91 | 25.74 | 226 | 0.28 |
| 96 | 11.24 | 33.66 | 4.01 | 229 | 150 | 10.07 | 33.88 | 2.92 | 26.04 | 194 | 0.38 |
| 110 | 10.74 | 33.74 | 3.52 | 215 | 200 | 9.48 | 34.07 | 2.30 | 26.34 | 170 | 0.47 |
| 128 | 10.47 | 33.81 | 3.22 | 205 | 250 | 8.98 | 34.15 | 1.64 | 26.48 | 156 | 0.56 |
| 146 | 10.17 | 33.87 | 3.01 | 196 | 300 | 8.33 | 34.21 | 1.30 | 26.62 | 143 | 0.64 |
| 169 | 9.83 | 33.96 | 2.64 | 184 | 400 | 7.20 | 34.25 | 0.91 | 26.82 | 124 | 0.77 |
| 191 | 9.58 | 34.05 | 2.40 | 173 | 500 | 6.63 | 34.29 | 0.35 | 26.93 | 113 | 0.90 |
| 236 | 9.14 | 34.13 | 1.77 | 160 | | | | | | | |
| 309 | 8.20 | 34.22 | 1.24 | 140 | | | | | | | |
| 400 | 7.20 | 34.25 | 0.91 | 124 | | | | | | | |
| 524 | 6.53 | 34.31 | 0.23 | 111 | | | | | | | |
| **83.43** | STRANGER; January 31, 1958; 1815 GCT; 34°08'N, 119°34'W; sounding, 115 fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 15.81 | 33.69 | 5.67 | 316 | 0 | 15.81 | 33.69 | 5.67 | 24.80 | 316 | 0.00 |
| 10 | 15.84 | 33.68 | 5.73 | 317 | 10 | 15.84 | 33.68 | 5.73 | 24.79 | 317 | 0.03 |
| 29 | 15.82 | 33.69 | 5.65 | 316 | 20 | 15.83 | 33.68 | 5.70 | 24.80 | 316 | 0.06 |
| 49 | 14.62 | 33.58 | 5.28 | 299 | 30 | 15.81 | 33.69 | 5.64 | 24.80 | 316 | 0.09 |
| 73 | 11.88 | 33.60 | 4.29 | 244 | 50 | 14.49 | 33.58 | 5.23 | 25.00 | 296 | 0.16 |
| 97 | 10.90 | 33.78 | 3.29 | 214 | 75 | 11.81 | 33.60 | 4.22 | 25.56 | 244 | 0.22 |
| 120 | 10.11 | 33.88 | 2.69 | 194 | 100 | 10.76 | 33.81 | 3.15 | 25.91 | 210 | 0.28 |
| 148 | 9.78 | 33.94a) | 2.44 | 184 | 150 | (9.77) | (33.94) | (2.43) | (26.19) | (184) | (0.38) |
| **83.51** | STRANGER; January 31, 1958; 1117 GCT; 33°52'N, 120°08.5'W; sounding, 75 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 15.55 | 33.64 | 5.86 | 313 | 0 | 15.55 | 33.64 | 5.86 | 24.83 | 313 | 0.00 |
| 10 | 15.59 | 33.66 | 5.78 | 313 | 10 | 15.59 | 33.66 | 5.78 | 24.83 | 313 | 0.03 |
| 29 | 14.72 | 33.60 | 5.55 | 299 | 20 | 15.53 | 33.66 | 5.73 | 24.85 | 311 | 0.06 |
| 49 | 13.59 | 33.52 | 5.21 | 282 | 30 | 14.68 | 33.60 | 5.54 | 24.98 | 298 | 0.09 |
| 73 | 11.96 | 33.53 | 4.59 | 251 | 50 | 13.52 | 33.52 | 5.19 | 25.16 | 281 | 0.15 |
| 98 | 11.16 | 33.58 | 4.22 | 233 | 75 | 11.89 | 33.53 | 4.56 | 25.49 | 250 | 0.22 |
| | | | | | 100 | (11.10) | (33.58) | (4.20) | (25.69) | (231) | (0.29) |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; January 31, 1958; 0805 GCT; 33°44'N, 120°24.5'W; sounding, 650 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 20°. | | | | | | | | | | | 83.55 |
| 0 | 14.52 | 33.60 | 5.78 | 295 | 0 | 14.52 | 33.60 | 5.78 | 25.02 | 295 | 0.00 |
| 8 | 14.52 | 33.60 | 5.83 | 295 | 10 | 14.52 | 33.60 | 5.83 | 25.02 | 295 | 0.03 |
| 32 | 14.52 | 33.61 | 5.82 | 295 | 20 | 14.52 | 33.60 | 5.83 | 25.02 | 295 | 0.06 |
| 41 | 14.48 | 33.59 | 5.80 | 295 | 30 | 14.52 | 33.60 | 5.82 | 25.02 | 295 | 0.09 |
| 55 | 13.21 | 33.54 | 5.16 | 274 | 50 | 14.01 | 33.57 | 5.52 | 25.10 | 287 | 0.15 |
| 64 | 11.93 | 33.54 | 4.74 | 250 | 75 | 11.30 | 33.56 | 4.33 | 25.63 | 237 | 0.21 |
| 73 | 11.36 | 33.56 | 4.37 | 239 | 100 | 10.23 | 33.65 | 3.81 | 25.88 | 213 | 0.27 |
| 90 | 10.77 | 33.61 | 4.05 | 224 | 150 | 9.48 | 33.95 | 2.69 | 26.24 | 179 | 0.37 |
| 107 | 10.00 | 33.68 | 3.71 | 207 | 200 | 8.93 | 34.13 | 2.00 | 26.47 | 157 | 0.45 |
| 120 | 9.84 | 33.75 | 3.39 | 199 | 250 | 8.41 | 34.19 | 1.74 | 26.60 | 145 | 0.53 |
| 142 | 9.60 | 33.91 | 2.88 | 184 | 300 | 7.89 | 34.23 | 1.43 | 26.71 | 134 | 0.60 |
| 175 | 9.13 | 34.07 | 2.24 | 164 | 400 | 7.04 | 34.25 | 0.95 | 26.84 | 122 | 0.74 |
| 211 | 8.85 | 34.15 | 1.93 | 154 | 500 | 6.31 | 34.27 | 0.69 | 26.96 | 110 | 0.86 |
| 262 | 8.28 | 34.20 | 1.71 | 142 | 600 | (5.80) | (34.38) | | (27.11) | (96) | (0.97) |
| 340 | 7.54 | 34.25 | 1.20 | 128 | | | | | | | |
| 445 | 6.64 | 34.25 | 0.84 | 116 | | | | | | | |
| 588 | 5.82 | 34.36 | 0.47 | 98 | | | | | | | |
| STRANGER; January 31, 1958; 0420 GCT; 33°34'N, 120°45'W; sounding, 2300 fm; wind, 340°, force 6; weather, partly cloudy; sea, high; wire angle, 06°. | | | | | | | | | | | 83.60 |
| 0 | 14.38 | 33.44 | 6.02 | 304 | 0 | 14.38 | 33.44 | 6.02 | 24.92 | 304 | 0.00 |
| 10 | 14.42 | 33.45 | 5.97 | 304 | 10 | 14.42 | 33.45 | 5.97 | 24.92 | 304 | 0.03 |
| 29 | 14.41 | 33.46 | 6.06 | 303 | 20 | 14.41 | 33.46 | 6.01 | 24.93 | 303 | 0.06 |
| 58 | 13.88 | 33.45 | 5.84 | 294 | 30 | 14.40 | 33.46 | 6.05 | 24.94 | 302 | 0.09 |
| 67 | 12.12 | 33.36 | 5.34 | 267 | 50 | 14.10 | 33.46 | 5.92 | 25.00 | 297 | 0.15 |
| 76 | 11.02 | 33.33 | 5.22 | 250 | 75 | 11.10 | 33.33 | 5.24 | 25.48 | 251 | 0.22 |
| 91 | 10.02 | 33.46 | 4.60 | 224 | 100 | 9.70 | 33.53 | 4.30 | 25.88 | 213 | 0.28 |
| 105 | 9.59 | 33.55 | 4.22 | 210 | 150 | 9.04 | 33.80 | 3.21 | 26.19 | 183 | 0.38 |
| 119 | 9.39 | 33.69 | 3.72 | 196 | 200 | 8.44 | 33.98 | 2.66 | 26.43 | 161 | 0.46 |
| 138 | 9.20 | 33.76 | 3.30 | 189 | 250 | 7.79 | 34.06 | 2.29 | 26.59 | 146 | 0.54 |
| 156 | 8.98 | 33.82 | 3.18 | 181 | 300 | 7.26 | 34.13 | 1.72 | 26.72 | 133 | 0.62 |
| 183 | 8.67 | 33.94 | 2.72 | 167 | 400 | 6.48 | 34.24 | 0.94 | 26.92 | 115 | 0.74 |
| 206 | 8.38 | - | 2.66 | | 500 | 5.98 | 34.31 | 0.65 | 27.04 | 103 | 0.86 |
| 256 | 7.68 | 34.07 | 2.22 | 144 | | | | | | | |
| 333 | 6.91 | 34.17 | 1.34 | 126 | | | | | | | |
| 436 | 6.32 | 34.26 | 0.78 | 111 | | | | | | | |
| 570 | 5.62 | 34.37 | 0.57 | 95 | | | | | | | |
| STRANGER; January 30, 1958; 2345 GCT; 33°17'N, 121°21'W; sounding, 2100 fm; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 09°. | | | | | | | | | | | 83.70 |
| 0 | 14.07 | 33.49 | 5.97 | 294 | 0 | 14.07 | 33.49 | 5.97 | 25.03 | 294 | 0.00 |
| 10 | 14.08 | 33.49 | 6.12 | 294 | 10 | 14.08 | 33.49 | 6.12 | 25.03 | 294 | 0.04 |
| 29 | 13.96 | 33.49 | 5.94 | 292 | 20 | 14.04 | 33.49 | 6.00 | 25.04 | 293 | 0.07 |
| 58 | 13.86 | 33.48 | 5.89 | 290 | 30 | 13.95 | 33.49 | 5.93 | 25.05 | 292 | 0.10 |
| 68 | 13.24 | 33.49 | 5.67 | 278 | 50 | 13.93 | 33.48 | 5.90 | 25.06 | 291 | 0.16 |
| 77 | 11.16 | 33.36 | 5.01 | 250 | 75 | 11.71 | 33.39 | 5.19 | 25.42 | 257 | 0.22 |
| 92 | 10.27 | 33.40 | 4.64 | 233 | 100 | 10.28 | 33.54 | 4.17 | 25.79 | 222 | 0.29 |
| 105 | 9.85 | 33.55 | 4.03 | 214 | 150 | 8.65 | 33.82 | 3.11 | 26.27 | 176 | 0.39 |
| 119 | 9.30 | 33.58 | 3.81 | 204 | 200 | 8.00 | 33.97 | 2.37 | 26.49 | 155 | 0.47 |
| 137 | 8.80 | 33.78 | 3.28 | 181 | 250 | 7.54 | 34.05 | 1.97 | 26.62 | 144 | 0.55 |
| 155 | 8.61 | 33.84 | 3.08 | 174 | 300 | 7.03 | 34.10 | 1.50 | 26.72 | 133 | 0.62 |
| 181 | 8.22 | 33.92 | 2.68 | 162 | 400 | 6.30 | 34.17 | 0.81 | 26.89 | 118 | 0.75 |
| 204 | 7.96 | 33.98 | 2.28 | 154 | 500 | 5.77 | 34.24 | 0.50 | 27.01 | 106 | 0.86 |
| 252 | 7.54 | 34.05 | 1.96 | 143 | | | | | | | |
| 327 | 6.80 | 34.13 | 1.23 | 127 | | | | | | | |
| 428 | 6.14 | 34.19 | 0.70 | 114 | | | | | | | |
| 560 | 5.46 | 34.28 | 0.40 | 100 | | | | | | | |

87.35 STRANGER; February 1, 1958; 0014 GCT; 33°50'N, 118°37.5'W; sounding, 295 fm; wind, 320°, force 2; weather, overcast; sea, rough; wire angle, 02°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |
| 0 | 15.94 | 33.64 | 5.93 | 322 | 0 | 15.94 | 33.64 | 5.93 | 24.74 | 322 | 0.00 |
| 10 | 15.85 | 33.64 | 5.81 | 320 | 10 | 15.85 | 33.64 | 5.81 | 24.76 | 320 | 0.03 |
| 30 | 15.78 | 33.65 | 5.66 | 317 | 20 | 15.80 | 33.64 | 5.70 | 24.77 | 319 | 0.06 |
| 39 | 15.69 | 33.68 | 5.59 | 313 | 30 | 15.78 | 33.65 | 5.66 | 24.79 | 317 | 0.10 |
| 49 | 14.50 | 33.58 | 5.11 | 297 | 50 | 14.47 | 33.58 | 5.10 | 25.01 | 296 | 0.16 |
| 58 | 14.18 | 33.58 | 5.02 | 291 | 75 | 13.20 | 33.55 | 4.66 | 25.25 | 273 | 0.23 |
| 68 | 13.55 | 33.55 | 4.84 | 279 | 100 | 11.50 | 33.56 | 4.20 | 25.59 | 241 | 0.29 |
| 82 | 12.84 | 33.55 | 4.45 | 266 | 150 | 10.06 | 33.80 | 3.01 | 26.02 | 200 | 0.40 |
| 96 | 11.86 | 33.53 | 4.36 | 249 | 200 | 9.21 | 34.06 | 2.22 | 26.38 | 166 | 0.50 |
| 110 | 10.86 | 33.68 | 3.72 | 221 | 250 | 8.98 | 34.17 | 1.70 | 26.50 | 154 | 0.58 |
| 133 | 10.52 | 33.71 | 3.36 | 213 | 300 | 8.70 | 34.21 | 1.59 | 26.57 | 148 | 0.66 |
| 160 | 9.78 | 33.89 | 2.81 | 187 | 400 | 7.78 | 34.25 | 1.01 | 26.75 | 131 | 0.80 |
| 192 | 9.27 | 34.04 | 2.27 | 169 | 500 | 7.04 | 34.29 | 0.66 | 26.88 | 118 | 0.93 |
| 239 | 9.01 | 34.15 | 1.78 | 157 | | | | | | | |
| 312 | 8.62 | 34.22 | 1.57 | 146 | | | | | | | |
| 405 | 7.71 | 34.25 | 0.99 | 131 | | | | | | | |
| 529 | 6.89 | 34.30 | 0.58 | 116 | | | | | | | |

87.40 STRANGER; February 1, 1958; 0406 GCT; 33°40'N, 118°58.5'W; sounding, 485 fm; wind, calm; weather, overcast; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.94 | 33.66 | 5.75 | 321 | 0 | 15.94 | 33.66 | 5.75 | 24.75 | 321 | 0.00 |
| 10 | 15.84 | 33.62 | 5.47 | 321 | 10 | 15.84 | 33.62 | 5.47 | 24.75 | 321 | 0.03 |
| 30 | 15.63 | 33.62 | 5.50 | 317 | 20 | 15.74 | 33.62 | 5.48 | 24.77 | 319 | 0.06 |
| 39 | 15.16 | 33.59 | 5.78 | 309 | 30 | 15.63 | 33.62 | 5.50 | 24.79 | 317 | 0.10 |
| 49 | 14.50 | 33.53 | 5.64 | 300 | 50 | 14.46 | 33.53 | 5.62 | 24.98 | 299 | 0.16 |
| 58 | 13.90 | 33.51 | 5.41 | 290 | 75 | 13.41 | 33.53 | 5.09 | 25.20 | 278 | 0.23 |
| 68 | 13.62 | 33.53 | 5.29 | 282 | 100 | 11.21 | 33.54 | 4.27 | 25.63 | 237 | 0.30 |
| 82 | 12.72 | 33.45 | 5.00 | 271 | 150 | 10.01 | 33.84 | 3.03 | 26.06 | 196 | 0.40 |
| 97 | 11.38 | 33.53 | 4.36 | 241 | 200 | 9.42 | 34.08 | 2.15 | 26.36 | 168 | 0.50 |
| 111 | 10.84 | 33.60 | 3.92 | 227 | 250 | 8.98 | 34.19 | 1.60 | 26.50 | 154 | 0.58 |
| 134 | 10.22 | 33.78 | 3.31 | 204 | 300 | 8.30 | 34.22 | 1.27 | 26.64 | 140 | 0.66 |
| 162 | 9.89 | 33.86 | 2.81 | 192 | 400 | 7.29 | 34.30 | 0.84 | 26.84 | 122 | 0.79 |
| 194 | 9.47 | 34.06 | 2.20 | 170 | 500 | 6.73 | 34.31 | 0.54 | 26.94 | 113 | 0.91 |
| 240 | 9.08 | 34.18 | 1.71 | 156 | | | | | | | |
| 313 | 8.10 | 34.23 | 1.16 | 137 | | | | | | | |
| 406 | 7.23 | 34.30 | 0.81 | 121 | | | | | | | |
| 531 | 6.60 | 34.31 | 0.48 | 111 | | | | | | | |

87.45 STRANGER; February 1, 1958; 0700 GCT; 33°30'N, 119°19'W; sounding, 915 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.77 | 33.57 | 5.94 | 302 | 0 | 14.77 | 33.57 | 5.94 | 24.94 | 302 | 0.00 |
| 10 | 14.75 | 33.59 | 5.96 | 300 | 10 | 14.75 | 33.59 | 5.96 | 24.96 | 300 | 0.03 |
| 30 | 14.34 | 33.55 | 5.74 | 295 | 20 | 14.60 | 33.58 | 5.88 | 24.98 | 299 | 0.06 |
| 39 | 12.92 | 33.48 | 5.04 | 273 | 30 | 14.34 | 33.55 | 5.74 | 25.02 | 295 | 0.09 |
| 49 | 12.50 | 33.51 | 4.96 | 263 | 50 | 12.44 | 33.51 | 4.93 | 25.37 | 262 | 0.14 |
| 58 | 11.66 | 33.51 | 4.53 | 248 | 75 | 10.96 | 33.59 | 4.04 | 25.71 | 229 | 0.21 |
| 68 | 11.21 | 33.56 | 4.28 | 237 | 100 | 10.25 | 33.68 | 3.60 | 25.90 | 211 | 0.26 |
| 82 | 10.74 | 33.61 | 3.81 | 224 | 150 | 9.50 | 33.95 | 2.67 | 26.24 | 179 | 0.36 |
| 96 | 10.33 | 33.66 | 3.67 | 214 | 200 | 8.91 | 34.11 | 2.05 | 26.46 | 158 | 0.45 |
| 110 | 10.10 | 33.73 | 3.42 | 205 | 250 | 8.61 | 34.18 | 1.51 | 26.56 | 149 | 0.52 |
| 133 | 9.71 | 33.87 | 2.90 | 188 | 300 | 8.22 | 34.21 | 1.25 | 26.64 | 141 | 0.60 |
| 160 | 9.40 | 34.00 | 2.59 | 174 | 400 | 7.46 | 34.23 | 0.81 | 26.76 | 129 | 0.74 |
| 191 | 9.00 | 34.07 | 2.21 | 162 | 500 | 6.82 | 34.31 | 0.53 | 26.92 | 114 | 0.87 |
| 237 | 8.74 | 34.16 | 1.66 | 151 | | | | | | | |
| 311 | 8.16 | 34.22 | 1.20 | 138 | | | | | | | |
| 404 | 7.42 | 34.23 | 0.80 | 129 | | | | | | | |
| 529 | 6.62 | 34.33 | 0.49 | 110 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; February 1, 1958; 1315 GCT; 33°10'N, 120°00.5'W; sounding, 650 fm; wind, 340°, force 3; weather, overcast; sea, high; wire angle, 00°. 87.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.62 | 33.58 | 5.78 | 320 | 0 | 15.62 | 33.58 | 5.78 | 24.76 | 320 | 0.00 |
| 10 | 15.64 | 33.58 | 5.80 | 320 | 10 | 15.64 | 33.58 | 5.80 | 24.76 | 320 | 0.03 |
| 30 | 15.63 | 33.58 | 5.72 | 320 | 20 | 15.64 | 33.58 | 5.77 | 24.76 | 320 | 0.06 |
| 54 | 13.12 | 33.40 | 5.37 | 282 | 30 | 15.63 | 33.58 | 5.72 | 24.76 | 320 | 0.10 |
| 64 | 12.40 | 33.40 | 5.11 | 269 | 50 | 13.78 | 33.44 | 5.45 | 25.05 | 292 | 0.16 |
| 73 | 11.62 | 33.39 | 5.00 | 256 | 75 | 11.80 | 33.42 | 4.78 | 25.43 | 256 | 0.22 |
| 83 | 11.59 | 33.51 | 4.51 | 246 | 100 | 10.89 | 33.63 | 3.60 | 25.76 | 225 | 0.29 |
| 96 | 11.05 | 33.61 | 3.69 | 230 | 150 | 9.67 | 33.88 | 2.73 | 26.15 | 187 | 0.39 |
| 110 | 10.53 | 33.67 | 3.55 | 216 | 200 | 9.02 | 34.10 | 2.01 | 26.43 | 161 | 0.48 |
| 128 | 10.06 | 33.79 | 3.15 | 200 | 250 | 8.51 | 34.17 | 1.69 | 26.58 | 147 | 0.56 |
| 146 | 9.75 | 33.86 | 2.80 | 190 | 300 | 8.08 | 34.21 | 1.33 | 26.66 | 138 | 0.63 |
| 169 | 9.42 | 33.98 | 2.45 | 176 | 400 | 7.42 | 34.25 | 0.89 | 26.79 | 127 | 0.77 |
| 191 | 9.12 | 34.09 | 2.12 | 162 | 500 | 6.72 | 34.31 | 0.58 | 26.94 | 113 | 0.89 |
| 237 | 8.62 | 34.16 | 1.77 | 150 | | | | | | | |
| 311 | 8.00 | 34.22 | 1.29 | 137 | | | | | | | |
| 404 | 7.40 | 34.25 | 0.88 | 126 | | | | | | | |
| 527 | 6.48 | 34.33 | 0.52 | 108 | | | | | | | |

STRANGER; February 1, 1958; 1605 GCT; 33°00'N, 120°21.5'W; sounding, 355 fm; wind, 140°, force 4; weather, overcast; sea, high; wire angle, 05°. 87.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.51 | 33.49 | 5.83 | 303 | 0 | 14.51 | 33.49 | 5.83 | 24.94 | 303 | 0.00 |
| 10 | 14.52 | 33.46 | 5.75 | 305 | 10 | 14.52 | 33.46 | 5.75 | 24.91 | 305 | 0.03 |
| 29 | 14.52 | 33.48 | 5.72 | 304 | 20 | 14.52 | 33.48 | 5.73 | 24.92 | 304 | 0.06 |
| 53 | 14.51 | 33.48 | 5.79 | 303 | 30 | 14.52 | 33.48 | 5.72 | 24.92 | 304 | 0.09 |
| 63 | 13.80 | 33.44 | 4.19u | 293 | 50 | 14.51 | 33.48 | 5.76 | 24.92 | 304 | 0.15 |
| 73 | 12.94 | 33.39 | 5.40 | 280 | 75 | 12.80 | 33.39 | 5.30 | 25.21 | 277 | 0.22 |
| 82 | 12.03 | 33.39 | 5.07 | 263 | 100 | 10.49 | 33.44 | 4.50 | 25.68 | 232 | 0.29 |
| 96 | 10.69 | 33.42 | 4.65 | 237 | 150 | 9.25 | 33.75 | 3.25 | 26.12 | 190 | 0.40 |
| 111 | 10.07 | 33.51 | 4.14 | 221 | 200 | 8.40 | 34.03 | 2.38 | 26.47 | 157 | 0.48 |
| 129 | 9.46 | 33.60 | 3.89 | 205 | 250 | 8.05 | 34.14 | 1.73 | 26.62 | 143 | 0.56 |
| 148 | 9.26 | 33.74 | 3.28 | 191 | 300 | 7.50 | 34.17 | 1.30 | 26.71 | 134 | 0.63 |
| 170 | 8.63 | 33.86 | 2.87 | 173 | 400 | 6.55 | 34.22 | 0.71 | 26.89 | 117 | 0.76 |
| 192 | 8.46 | 34.00 | 2.48 | 160 | 500 | 5.89 | 34.26 | 0.46 | 27.01 | 106 | 0.88 |
| 238 | 8.16 | 34.14 | 1.83 | 145 | | | | | | | |
| 310 | 7.40 | 34.17 | 1.24 | 133 | | | | | | | |
| 401 | 6.55 | 34.22 | 0.71 | 117 | | | | | | | |
| 524 | 5.78 | 34.27 | 0.43 | 104 | | | | | | | |

STRANGER; February 1, 1958; 2053 GCT; 32°39.5'N, 121°02'W; sounding, 2100 fm; wind, 140°, force 4; weather, cloudy; sea, high; wire angle, 03°. 87.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.02 | 33.48 | 5.72 | 315 | 0 | 15.02 | 33.48 | 5.72 | 24.81 | 315 | 0.00 |
| 10 | 15.03 | 33.48 | 5.76 | 315 | 10 | 15.03 | 33.48 | 5.76 | 24.81 | 315 | 0.03 |
| 30 | 14.98 | 33.48 | 5.84 | 313 | 20 | 15.01 | 33.48 | 5.80 | 24.82 | 314 | 0.06 |
| 54 | 14.94 | 33.48 | 5.83 | 313 | 30 | 14.98 | 33.48 | 5.84 | 24.83 | 313 | 0.09 |
| 64 | 14.94 | 33.49 | 5.78 | 312 | 50 | 14.94 | 33.48 | 5.83 | 24.83 | 313 | 0.16 |
| 74 | 14.96 | 33.48 | 5.84 | 313 | 75 | 14.96 | 33.48 | 5.83 | 24.84 | 312 | 0.24 |
| 83 | 14.24 | 33.45 | 5.65 | 300 | 100 | 12.23 | 33.39 | 5.33 | 25.32 | 266 | 0.31 |
| 97 | 12.74 | 33.39 | 5.40 | 276 | 150 | 9.43 | 33.59 | 3.92 | 25.97 | 205 | 0.43 |
| 111 | 11.07 | 33.40 | 5.08 | 246 | 200 | 8.32 | 33.96 | 2.79 | 26.44 | 160 | 0.52 |
| 129 | 10.18 | 33.53 | 4.41 | 221 | 250 | 7.59 | 34.07 | 1.92 | 26.62 | 143 | 0.60 |
| 147 | 9.47 | 33.58 | 4.03 | 206 | 300 | 7.04 | 34.13 | 1.42 | 26.75 | 130 | 0.67 |
| 170 | 9.16 | 33.79 | 3.40 | 186 | 400 | 6.37 | 34.20 | 0.83 | 26.90 | 116 | 0.79 |
| 193 | 8.49 | 33.93 | 2.97 | 165 | 500 | 5.73 | 34.26 | 0.49 | 27.03 | 104 | 0.91 |
| 239 | 7.72 | 34.05 | 2.09 | 145 | | | | | | | |
| 311 | 6.97 | 34.14 | 1.36 | 128 | | | | | | | |
| 404 | 6.36 | 34.20 | 0.83 | 116 | | | | | | | |
| 529 | 5.58 | 34.29 | 0.39 | 100 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

87.80 STRANGER; February 2, 1958; 0135 GCT; 32°19.5'N, 121°43'W; sounding, 2250 fm; wind, 140°, force 5; weather, partly cloudy; sea, high; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.94 | 33.51 | 5.90 | 310 | 0 | 14.94 | 33.51 | 5.90 | 24.86 | 310 | 0.00 |
| 10 | 14.95 | 33.49 | 5.65 | 312 | 10 | 14.95 | 33.49 | 5.65 | 24.84 | 312 | 0.03 |
| 29 | 14.90 | 33.52 | 5.63 | 309 | 20 | 14.93 | 33.51 | 5.64 | 24.86 | 310 | 0.06 |
| 58 | 14.87 | 33.49 | 5.74 | 310 | 30 | 14.90 | 33.52 | 5.63 | 24.87 | 309 | 0.09 |
| 68 | 13.88 | 33.48 | 5.58 | 291 | 50 | 14.89 | 33.49 | 5.70 | 24.86 | 310 | 0.16 |
| 78 | 12.81 | 33.44 | 5.34 | 274 | 75 | 13.21 | 33.46 | 5.45 | 25.18 | 280 | 0.23 |
| 92 | 11.54 | 33.37 | 4.95 | 255 | 100 | 11.00 | 33.38 | 4.80 | 25.54 | 245 | 0.30 |
| 106 | 10.72 | 33.40 | 4.72 | 239 | 150 | 9.03 | 33.66 | 3.63 | 26.09 | 193 | 0.41 |
| 120 | 9.91 | 33.52 | 4.30 | 218 | 200 | 8.38 | 33.99 | 2.60 | 26.45 | 159 | 0.50 |
| 139 | 9.40 | 33.58 | 4.04 | 205 | 250 | 7.61 | 34.07 | 2.04 | 26.62 | 143 | 0.57 |
| 157 | 8.82 | 33.77 | 3.35 | 182 | 300 | 7.05 | 34.11 | 1.55 | 26.74 | 132 | 0.64 |
| 184 | 8.59 | 33.89 | 2.93 | 170 | 400 | 6.39 | 34.21 | 0.80 | 26.90 | 116 | 0.77 |
| 206 | 8.28 | 34.02 | 2.39 | 155 | 500 | 5.77 | 34.29 | 0.48 | 27.05 | 102 | 0.89 |
| 256 | 7.50 | 34.07 | 1.98 | 141 | | | | | | | |
| 333 | 6.80 | 34.14 | 1.25 | 126 | | | | | | | |
| 436 | 6.18 | 34.25 | 0.61 | 110 | | | | | | | |
| 570 | 5.32 | 34.33 | 0.39 | 94 | | | | | | | |

90.80 STRANGER; February 2, 1958; 1448 GCT; 31°45'N, 121°19'W; sounding, 2100 fm; wind, 200°, force 3; weather, partly cloudy; sea, very rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.92 | 33.54 | 5.60 | 329 | 0 | 15.92 | 33.54 | 5.60 | 24.66 | 329 | 0.00 |
| 10 | 15.92 | 33.55 | 5.71 | 328 | 10 | 15.92 | 33.55 | 5.71 | 24.67 | 328 | 0.03 |
| 29 | 15.02 | 33.49 | 5.68 | 314 | 20 | 15.88 | 33.54 | 5.70 | 24.69 | 327 | 0.06 |
| 39 | 15.00 | 33.49 | 5.80 | 313 | 30 | 15.02 | 33.49 | 5.69 | 24.82 | 314 | 0.10 |
| 49 | 15.00 | 33.50 | 5.74 | 312 | 50 | 15.00 | 33.50 | 5.74 | 24.84 | 312 | 0.16 |
| 58 | 14.96 | 33.50 | 5.76 | 311 | 75 | 14.02 | 33.46 | 5.48 | 25.02 | 295 | 0.24 |
| 67 | 14.62 | 33.46 | 5.68 | 308 | 100 | 10.48 | 33.40 | 4.60 | 25.65 | 235 | 0.30 |
| 81 | 13.54 | 33.47 | 5.27 | 285 | 150 | 8.80 | 33.79 | 3.40 | 26.23 | 180 | 0.41 |
| 95 | 10.75 | 33.40 | 4.64 | 240 | 200 | 8.21 | 33.98 | 2.48 | 26.47 | 157 | 0.49 |
| 109 | 10.01 | 33.42 | 4.52 | 227 | 250 | 7.68 | 34.06 | 1.94 | 26.61 | 144 | 0.67 |
| 131 | 9.02 | 33.66 | 3.54 | 194 | 300 | 7.05 | 34.12 | 1.63 | 26.75 | 130 | 0.64 |
| 158 | 8.72 | 33.85 | 3.36 | 174 | 400 | 6.35 | 34.21 | 0.87 | 26.91 | 115 | 0.77 |
| 190 | 8.35 | 33.96 | 2.64 | 161 | 500 | 5.65 | 34.30 | 0.50 | 27.06 | 101 | 0.88 |
| 235 | 7.82 | 34.05 | 2.01 | 147 | | | | | | | |
| 308 | 6.94 | 34.14 | 1.56 | 128 | | | | | | | |
| 398 | 6.37 | 34.20 | 0.89 | 117 | | | | | | | |
| 521 | 5.60 | 34.32 | 0.47 | 98 | | | | | | | |

90.90 STRANGER; February 2, 1958; 0948 GCT; 31°25'N, 121°59'W; sounding, 2150 fm; wind, 180°, force 3; weather, drizzle; sea, very rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.76 | 33.68 | 5.47 | 336 | 0 | 16.76 | 33.68 | 5.47 | 24.58 | 336 | 0.00 |
| 10 | 16.76 | 33.68 | 5.47 | 336 | 10 | 16.76 | 33.68 | 5.47 | 24.58 | 336 | 0.03 |
| 29 | 16.76 | 33.72a) | 5.48 | 334 | 20 | 16.76 | 33.70 | 5.47 | 24.59 | 336 | 0.07 |
| 53 | 16.76 | 33.70 | 5.42 | 336 | 30 | 16.76 | 33.71 | 5.47 | 24.61 | 334 | 0.10 |
| 63 | 16.75 | 33.70 | 5.43 | 334 | 50 | 16.76 | 33.70 | 5.45 | 24.59 | 336 | 0.17 |
| 73 | 16.78 | 33.71 | 5.48 | 335 | 75 | 16.78 | 33.70 | 5.46 | 24.59 | 336 | 0.25 |
| 82 | 16.78 | 33.70 | 5.38 | 336 | 100 | 14.02 | 33.46 | 5.67 | 25.01 | 295 | 0.33 |
| 96 | 14.56 | 33.48 | 5.73 | 304 | 150 | 10.42 | 33.44 | 4.78 | 25.69 | 231 | 0.46 |
| 109 | 13.06 | 33.45 | 5.44 | 277 | 200 | 9.00 | 33.74 | 3.47 | 26.16 | 187 | 0.57 |
| 129 | 11.92 | 33.44 | 5.32 | 256 | 250 | 8.26 | 33.94 | 2.75 | 26.43 | 161 | 0.66 |
| 147 | 10.58 | 33.43 | 4.84 | 235 | 300 | 7.55 | 34.06 | 1.95 | 26.63 | 142 | 0.74 |
| 169 | 9.69 | 33.53 | 4.47 | 213 | 400 | 6.60 | 34.16 | 1.10 | 26.82 | 122 | 0.88 |
| 192 | 9.18 | 33.67 | 3.66 | 195 | 500 | 6.15 | 34.28 | 0.60 | 26.99 | 108 | 1.00 |
| 236 | 8.44 | 33.91 | 2.97 | 166 | | | | | | | |
| 308 | 7.41 | 34.07 | 1.81 | 140 | | | | | | | |
| 398 | 6.61 | 34.16 | 1.11 | 123 | | | | | | | |
| 520 | 6.02 | 34.30 | 0.48 | 106 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_{-5}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_{-5}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |
| PAOLINA-T; January 29, 1958; 2351 GCT; 32°55'N, 117°20'W; sounding, 70 fm; wind, 270°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | 93.27 |
| 0 | 16.55 | 33.66 | 5.54 | 334 | 0 | 16.55 | 33.66 | 5.54 | 24.61 | 334 | 0.00 |
| 10 | 16.22 | 33.66 | 5.54 | 327 | 10 | 16.22 | 33.66 | 5.54 | 24.68 | 327 | 0.03 |
| 30 | 15.79 | 33.61 | 5.58 | 320 | 20 | 16.01 | 33.64 | 5.57 | 24.72 | 323 | 0.06 |
| 50 | 14.42 | 33.54 | 5.00 | 298 | 30 | 15.79 | 33.61 | 5.58 | 24.75 | 320 | 0.10 |
| 76 | 12.30 | 33.57 | 4.35 | 255 | 50 | 14.42 | 33.54 | 5.00 | 24.99 | 298 | 0.16 |
| | | | | | 75 | 12.40 | 33.57 | 4.36 | 25.42 | 257 | 0.23 |
| PAOLINA-T; January 30, 1958; 0235 GCT; 32°50'N, 117°33'W; sounding, 470 fm; wind, 290°, force 3; weather, cloudy; sea, very rough; wire angle, 05°. | | | | | | | | | | | 93.30 |
| 0 | 16.28 | 33.66 | 5.45 | 327 | 0 | 16.28 | 33.66 | 5.45 | 24.68 | 327 | 0.00 |
| 10 | 16.28 | 33.64 | 5.43 | 328 | 10 | 16.28 | 33.64 | 5.43 | 24.67 | 328 | 0.03 |
| 30 | 15.87 | 33.68 | 5.54 | 317 | 20 | 16.10 | 33.66 | 5.50 | 24.72 | 323 | 0.06 |
| 40 | 15.63 | 33.68 | 5.37 | 312 | 30 | 15.87 | 33.68 | 5.54 | 24.79 | 317 | 0.10 |
| 51 | 14.80 | 33.59 | 5.19 | 302 | 50 | 14.90 | 33.60 | 5.19 | 24.94 | 303 | 0.16 |
| 61 | 13.82 | 33.58 | 4.66 | 283 | 75 | 12.26 | 33.44 | 4.98 | 25.36 | 263 | 0.23 |
| 70 | 12.52 | 33.45 | 5.02 | 267 | 100 | 11.35 | 33.55 | 4.15 | 25.61 | 239 | 0.29 |
| 85 | 11.86 | 33.44 | 4.79 | 256 | 150 | 9.84 | 33.75 | 3.40 | 26.03 | 199 | 0.41 |
| 99 | 11.36 | 33.55 | 4.18 | 239 | 200 | 9.70 | 34.08 | 2.00 | 26.30 | 173 | 0.50 |
| 113 | 11.10 | 33.58 | 3.90 | 233 | 250 | 9.22 | 34.19 | 1.66 | 26.47 | 157 | 0.58 |
| 136 | 10.09 | 33.66 | 3.75 | 210 | 300 | 8.81 | 34.25 | 1.43 | 26.59 | 146 | 0.66 |
| 165 | 9.66 | 33.95 | 2.62 | 182 | 400 | 8.05 | 34.26 | 0.97 | 26.70 | 135 | 0.81 |
| 198 | 9.70 | 34.07 | 2.02 | 173 | 500 | 7.03 | 34.28 | 0.62 | 26.84 | 122 | 0.94 |
| 246 | 9.22 | 34.19 | 1.70 | 157 | | | | | | | |
| 322 | 8.64 | 34.27 | 1.35 | 142 | | | | | | | |
| 418 | 7.98 | 34.26 | 0.94 | 133 | | | | | | | |
| 546 | 6.86 | 34.31 | 0.57 | 114 | | | | | | | |
| PAOLINA-T; January 30, 1958; 0849 GCT; 32°31'N, 118°15'W; sounding, 800 fm; wind, 230°, force 4; weather, overcast; sea, rough; wire angle, 12°. | | | | | | | | | | | 93.40 |
| 0 | 16.41 | 33.72 | | 326 | 0 | 16.41 | 33.72 | | 24.69 | 326 | 0.00 |
| 10 | 16.43 | 33.69 | | 329 | 10 | 16.43 | 33.69 | | 24.66 | 329 | 0.03 |
| 30 | 16.42 | 33.69 | | 329 | 20 | 16.43 | 33.69 | | 24.66 | 329 | 0.06 |
| 59 | 16.26 | 33.68 | | 325 | 30 | 16.42 | 33.69 | | 24.66 | 329 | 0.10 |
| 68 | 14.06 | 33.55 | | 289 | 50 | 16.38 | 33.69 | | 24.68 | 327 | 0.16 |
| 78 | 13.57 | 33.53 | | 281 | 75 | 13.70 | 33.54 | | 25.14 | 284 | 0.24 |
| 92 | 12.62 | 33.53 | | 263 | 100 | 12.37 | 33.55 | | 25.41 | 259 | 0.31 |
| 106 | 12.14 | 33.60 | | 250 | 150 | 10.64 | 33.74 | | 25.88 | 213 | 0.43 |
| 120 | 11.53 | 33.55 | | 243 | 200 | 9.55 | 34.03 | | 26.29 | 174 | 0.53 |
| 137 | 11.02 | 33.70 | | 223 | 250 | 8.76 | 34.22 | | 26.56 | 148 | 0.61 |
| 154 | 10.54 | 33.75 | | 211 | 300 | 8.04 | 34.23 | | 26.68 | 137 | 0.68 |
| 181 | 9.82 | 33.96 | | 184 | 400 | 7.08 | 34.29 | | 26.86 | 120 | 0.82 |
| 204 | 9.49 | 34.04 | | 172 | 500 | 6.50 | 34.33 | | 26.98 | 108 | 0.94 |
| 254 | 8.72 | 34.22 | | 148 | | | | | | | |
| 332 | 7.60 | 34.23 | | 131 | | | | | | | |
| 435 | 6.92 | 34.31 | | 115 | | | | | | | |
| 572 | 5.98 | 34.35 | | 100 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

93.50 PAOLINA-T; January 30, 1958; 1502 GCT; 32°13'N, 118°55'W; sounding, 730 fm; wind, 300°, force 2; weather, drizzle; sea, very rough; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.36 | 33.64 | 5.74 | 309 | 0 | 15.36 | 33.64 | 5.74 | 24.87 | 309 | 0.00 |
| 10 | 15.36 | 33.66 | 5.71 | 308 | 10 | 15.36 | 33.66 | 5.71 | 24.88 | 308 | 0.03 |
| 30 | 15.38 | 33.60 | 5.69 | 313 | 20 | 15.36 | 33.63 | 5.70 | 24.85 | 311 | 0.06 |
| 59 | 12.60 | 33.40 | 5.21 | 273 | 30 | 15.38 | 33.60 | 5.69 | 24.83 | 313 | 0.09 |
| 67 | 11.64 | 33.43 | 4.80 | 253 | 50 | 15.20 | 33.58 | 5.61 | 24.85 | 311 | 0.16 |
| 76 | 11.00 | 33.49 | 4.44 | 238 | 75 | 11.05 | 33.49 | 4.47 | 25.61 | 239 | 0.22 |
| 90 | 10.48 | 33.51 | 4.36 | 227 | 100 | 10.28 | 33.55 | 4.23 | 25.80 | 221 | 0.28 |
| 102 | 10.22 | 33.57 | 4.15 | 219 | 150 | 9.49 | 33.93 | 2.57 | 26.23 | 180 | 0.38 |
| 118 | 9.94 | 33.78 | 3.34 | 199 | 200 | 8.79 | 34.13 | 2.11 | 26.49 | 155 | 0.47 |
| 136 | 9.60 | 33.86 | 2.89 | 187 | 250 | 8.24 | 34.21 | 1.68 | 26.64 | 141 | 0.54 |
| 154 | 9.43 | 33.96 | 2.49 | 177 | 300 | 7.80 | 34.25 | 1.25 | 26.74 | 131 | 0.61 |
| 182 | 8.92 | 34.09 | 2.24 | 160 | 400 | 7.08 | 34.29 | 0.73 | 26.87 | 119 | 0.74 |
| 204 | 8.79 | 34.13 | 2.08 | 155 | 500 | 6.46 | 34.33 | 0.48 | 26.99 | 108 | 0.86 |
| 254 | 8.20 | 34.22 | 1.64 | 140 | | | | | | | |
| 333 | 7.51 | 34.27 | 1.00 | 126 | | | | | | | |
| 437 | 6.86 | 34.30 | 0.63 | 115 | | | | | | | |
| 572 | 5.98 | 34.37 | 0.38 | 99 | | | | | | | |

93.60 PAOLINA-T; January 30, 1958; 2115 GCT; 31°53'N, 119°40'W; sounding, 1880 fm; wind, 340°, force 5; weather, cloudy; sea, very high; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.20 | 33.62 | | 329 | 0 | 16.20 | 33.62 | | 24.66 | 329 | 0.00 |
| 9 | 16.21 | 33.62 | | 329 | 10 | 16.21 | 33.62 | | 24.66 | 329 | 0.03 |
| 32 | 16.19 | 33.61 | | 329 | 20 | 16.21 | 33.62 | | 24.66 | 329 | 0.06 |
| 60 | 14.87 | 33.54a) | | 307 | 30 | 16.19 | 33.61 | | 24.66 | 329 | 0.10 |
| 69 | 14.14 | 33.48 | | 296 | 50 | 16.00 | 33.59 | | 24.69 | 326 | 0.16 |
| 92 | 11.76 | 33.39 | | 258 | 75 | 13.60 | 33.45 | | 25.09 | 288 | 0.24 |
| 111 | 10.86 | 33.50 | | 234 | 100 | 11.38 | 33.42 | | 25.50 | 249 | 0.31 |
| 124 | 10.22 | 33.55 | | 220 | 150 | 9.06 | 33.73 | | 26.13 | 189 | 0.42 |
| 141 | 9.34 | 33.65 | | 199 | 200 | 8.75 | 34.01 | | 26.41 | 163 | 0.51 |
| 162 | 8.86 | 33.82 | | 179 | 250 | 8.74 | 34.21 | | 26.56 | 148 | 0.59 |
| 191 | 8.70 | 34.00 | | 163 | 300 | 7.95 | 34.24 | | 26.71 | 134 | 0.66 |
| 216 | 8.84 | 34.09 | | 159 | 400 | 6.94 | 34.30 | | 26.90 | 116 | 0.79 |
| 270 | 8.32 | 34.22 | | 142 | 500 | 6.20 | 34.36 | | 27.04 | 103 | 0.91 |
| 352 | 7.38 | 34.27 | | 124 | 600 | 5.58 | 34.40 | | 27.16 | 92 | 1.01 |
| 458 | 6.52 | 34.33 | | 109 | | | | | | | |
| 600 | 5.58 | 34.40 | | 92 | | | | | | | |

93.70 PAOLINA-T; January 31, 1958; 0304 GCT; 31°32'N, 120°16'W; sounding, 2200 fm; wind, 300°, force 5; weather, cloudy; sea, very rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.72 | 33.59 | | 320 | 0 | 15.72 | 33.59 | | 24.76 | 320 | 0.00 |
| 10 | 15.74 | 33.60 | | 321 | 10 | 15.74 | 33.60 | | 24.75 | 321 | 0.03 |
| 30 | 15.71 | 33.58 | | 321 | 20 | 15.72 | 33.59 | | 24.75 | 321 | 0.06 |
| 60 | 15.42 | 33.57 | | 317 | 30 | 15.71 | 33.58 | | 24.75 | 321 | 0.10 |
| 71 | 13.16 | 33.45 | | 280 | 50 | 15.58 | 33.57 | | 24.77 | 319 | 0.16 |
| 79 | 12.30 | 33.40 | | 267 | 75 | 12.70 | 33.42 | | 25.25 | 273 | 0.23 |
| 95 | 10.77 | 33.45 | | 237 | 100 | 10.65 | 33.46 | | 25.66 | 234 | 0.30 |
| 109 | 10.52 | 33.48 | | 230 | 150 | 9.39 | 33.81 | | 26.15 | 187 | 0.41 |
| 123 | 10.14 | 33.54 | | 220 | 200 | 8.72 | 34.03 | | 26.43 | 161 | 0.50 |
| 142 | 9.46 | 33.71 | | 196 | 250 | 8.01 | 34.11 | | 26.60 | 145 | 0.57 |
| 161 | 9.32 | 33.86 | | 183 | 300 | 7.69 | 34.24 | | 26.75 | 131 | 0.64 |
| 189 | 9.07 | 34.02 | | 167 | 400 | 6.81 | 34.31 | | 26.93 | 114 | 0.77 |
| 211 | 8.28 | 34.04 | | 154 | 500 | 5.96 | 34.35 | | 27.07 | 100 | 0.88 |
| 263 | 7.99 | 34.18 | | 139 | 600 | (5.25) | 34.38 | | (27.17) | (90) | (0.98) |
| 343 | 7.34 | 34.29 | | 123 | | | | | | | |
| 448 | 6.39 | 34.33 | | 107 | | | | | | | |
| 586 | 5.38 | 34.38 | | 91 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

PAOLINA-T; January 31, 1958; 0923 GCT; 31°04'N, 120°50'W; sounding, 2100 fm; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 02°. 93.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.05 | 33.57 | 5.60 | 329 | 0 | 16.05 | 33.57 | 5.60 | 24.66 | 329 | 0.00 |
| 10 | 16.05 | 33.54 | 5.65 | 331 | 10 | 16.05 | 33.54 | 5.65 | 24.64 | 331 | 0.03 |
| 30 | 16.05 | 33.55 | 5.67 | 330 | 20 | 16.05 | 33.54 | 5.66 | 24.64 | 331 | 0.06 |
| 60 | 15.78 | 33.49 | 5.64 | 329 | 30 | 16.05 | 33.55 | 5.67 | 24.65 | 330 | 0.10 |
| 71 | 15.30 | 33.48 | 5.67 | 320 | 50 | 15.95 | 33.53 | 5.67 | 24.66 | 329 | 0.16 |
| 81 | 14.40 | 33.44 | 5.68 | 304 | 75 | 15.00 | 33.47 | 5.68 | 24.82 | 314 | 0.24 |
| 95 | 12.62 | 33.39 | 5.52 | 274 | 100 | 12.08 | 33.39 | 5.39 | 25.35 | 264 | 0.32 |
| 110 | 11.24 | 33.40 | 5.09 | 249 | 150 | 11.02 | 33.88 | 1.73 | 25.92 | 209 | 0.44 |
| 124 | 10.86 | 33.49 | 2.24 | 235 | 200 | 10.32 | 34.06 | 2.07 | 26.19 | 184 | 0.54 |
| 143 | 11.05 | 33.85 | 1.83 | 212 | 250 | 9.12 | 34.12 | 1.20 | 26.44 | 160 | 0.63 |
| 162 | 10.96 | 33.93 | 1.64 | 205 | 300 | 8.52 | 34.20 | 0.85 | 26.59 | 146 | 0.71 |
| 191 | 10.54 | 34.04 | 2.14 | 189 | 400 | 7.50 | 34.26 | 0.45 | 26.79 | 127 | 0.85 |
| 214 | 9.84 | 34.09 | 1.67 | 174 | 500 | 6.40 | 34.27 | 0.34 | 26.95 | 112 | 0.97 |
| 267 | 8.83 | 34.14 | 1.05 | 155 | 600 | (5.82) | (34.32) | (0.36) | (27.06) | (101) | (1.09) |
| 348 | 8.14 | 34.26a) | 0.65 | 136 | | | | | | | |
| 454 | 6.78 | 34.25 | 0.34 | 118 | | | | | | | |
| 591 | 5.88 | 34.31 | 0.36 | 102 | | | | | | | |

PAOLINA-T; February 1, 1958; 2330 GCT; 32°15'N, 117°08'W; sounding, 28 fm; wind, 120°, force 1; weather, partly cloudy; sea, rough; wire angle, 00°. 97.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.74 | 33.66 | | 338 | 0 | 16.74 | 33.66 | | 24.56 | 338 | 0.00 |
| 20 | 16.22 | 33.68 | | 325 | 10 | 16.45 | 33.68 | | 24.68 | 327 | 0.03 |
| 40 | 15.38 | 33.65 | | 308 | 20 | 16.22 | 33.68 | | 24.70 | 325 | 0.06 |
| | | | | | 30 | 16.18 | 33.68 | | 24.71 | 324 | 0.10 |

PAOLINA-T; February 1, 1958; 2150 GCT; 32°11.5'N, 117°17'W; sounding, 710 fm; wind, 230°, force 2; weather, partly cloudy; sea, rough; wire angle, 08°. 97.32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.08 | 33.71 | | 341 | 0 | 17.08 | 33.71 | | 24.53 | 341 | 0.00 |
| 10 | 16.42 | 33.68 | | 330 | 10 | 16.42 | 33.68 | | 24.65 | 330 | 0.03 |
| 30 | 16.26 | 33.68 | | 325 | 20 | 16.32 | 33.68 | | 24.68 | 327 | 0.07 |
| 55 | 14.23 | 33.55 | | 293 | 30 | 16.26 | 33.68 | | 24.70 | 325 | 0.10 |
| 65 | 13.10 | 33.47 | | 275 | 50 | 15.32 | 33.65 | | 24.88 | 308 | 0.16 |
| 74 | 12.56 | 33.48 | | 266 | 75 | 12.46 | 33.48 | | 25.34 | 264 | 0.23 |
| 84 | 11.62 | 33.46 | | 251 | 100 | 11.05 | 33.56 | | 25.66 | 234 | 0.30 |
| 99 | 11.09 | 33.55 | | 235 | 150 | 9.85 | 34.01 | | 26.22 | 180 | 0.40 |
| 133p | 10.16 | 33.93 | | 191 | 200 | 9.73 | 34.08 | | 26.31 | 173 | 0.49 |
| 197p | 9.74 | 34.16 | | 175 | 250 | 9.39 | 34.22 | | 26.47 | 157 | 0.57 |
| 278p | 9.18 | 34.31 | | 147 | 300 | 9.00 | 34.33 | | 26.61 | 144 | 0.65 |
| 393p | 8.26 | 34.34 | | 131 | | | | | | | |

PAOLINA-T; February 1, 1958; 1813 GCT; 32°00'N, 117°40'W; sounding, 850 fm; wind, calm; weather, cloudy; sea, very rough; wire angle, 00°. 97.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.63 | 33.68 | 5.25 | 334 | 0 | 16.63 | 33.68 | 5.25 | 24.61 | 334 | 0.00 |
| 10 | 16.45 | 33.68 | 5.50 | 330 | 10 | 16.45 | 33.68 | 5.50 | 24.65 | 330 | 0.03 |
| 30 | 16.43 | 33.64 | 5.39 | 333 | 20 | 16.43 | 33.67 | 5.44 | 24.64 | 331 | 0.07 |
| 41 | 16.40 | 33.64 | 5.39 | 332 | 30 | 16.43 | 33.64 | 5.39 | 24.62 | 333 | 0.10 |
| 51 | 16.38 | 33.68 | 4.97 | 328 | 50 | 16.38 | 33.68 | 4.98 | 24.66 | 329 | 0.16 |
| 60 | 16.37 | 33.68 | 5.02 | 328 | 75 | 14.59 | 33.47 | 4.50 | 24.90 | 306 | 0.24 |
| 69 | 15.54 | 33.53 | 4.56 | 321 | 100 | 11.93 | 33.44 | 4.12 | 25.42 | 257 | 0.32 |
| 84 | 13.32 | 33.43 | 4.46 | 284 | 150 | 10.04 | 33.52 | 2.86 | 25.81 | 220 | 0.44 |
| 99 | 11.96 | 33.44 | 4.13 | 258 | 200 | 9.40 | 33.96 | 2.10 | 26.26 | 177 | 0.54 |
| 113 | 11.36 | 33.42 | 3.42 | 249 | 250 | 8.36 | 34.03 | 1.49 | 26.48 | 156 | 0.62 |
| 137 | 10.46 | 33.45 | 3.14 | 231 | 300 | 8.17 | 34.17 | 1.27 | 26.62 | 143 | 0.70 |
| 165 | 9.69 | 33.64 | 2.46 | 206 | 400 | 7.27 | 34.28 | 0.66 | 26.84 | 122 | 0.84 |
| 199 | 9.41 | 33.95 | 2.22 | 178 | 500 | 6.50 | 34.34 | 0.50 | 26.99 | 108 | 0.96 |
| 247 | 8.40 | 34.02 | 1.53 | 157 | | | | | | | |
| 324 | 8.11 | 34.20 | 1.22 | 140 | | | | | | | |
| 421 | 7.07 | 34.30 | 0.59 | 118 | | | | | | | |
| 550 | 6.24 | 34.36 | 0.48 | 103 | | | | | | | |

a) Possible evaporation; value falls on property curve.

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **97.50** | PAOLINA-T; February 1, 1958; 1147, 1212 GCT; 31°37'N, 118°27'W; sounding, 770 fm; wind, 090°, force 2; weather, cloudy; sea, moderate; wire angle, 03°, 03°. | | | | | | | | | | |
| 0 | 16.36 | 33.62a) | | 332 | 0 | 16.36 | 33.62 | | 24.63 | 332 | 0.00 |
| 10 | 16.38 | 33.58 | | 336 | 10 | 16.38 | 33.58 | | 24.59 | 336 | 0.03 |
| 30 | 16.44 | 33.70 | | 328 | 20 | 16.41 | 33.61 | | 24.61 | 334 | 0.07 |
| 56 | 15.78 | 33.68 | | 315 | 30 | 16.44 | 33.70 | | 24.67 | 328 | 0.10 |
| 65 | 14.74 | 33.62 | | 298 | 50 | 16.30 | 33.70 | | 24.70 | 325 | 0.16 |
| 75 | 14.24 | 33.62 | | 287 | 75 | 14.24 | 33.62 | | 25.10 | 287 | 0.24 |
| 85 | 13.72 | 33.60 | | 280 | 100 | 12.70 | 33.71 | | 25.47 | 252 | 0.31 |
| 99 | 12.72 | 33.71 | | 253 | 150 | 10.06 | 33.68 | | 25.93 | 208 | 0.43 |
| 114 | 11.87 | 33.71 | | 237 | 200 | 9.01 | 33.98 | | 26.33 | 170 | 0.52 |
| 133 | 10.66 | 33.64 | | 221 | 250 | 8.27 | 34.11 | | 26.56 | 149 | 0.60 |
| 157 | 10.06 | 33.69 | | 207 | 300 | 7.85 | 34.17 | | 26.67 | 138 | 0.68 |
| 176 | 9.51 | 33.80 | | 191 | 400 | 6.94 | 34.27 | | 26.87 | 119 | 0.81 |
| 200 | 9.01 | 33.98 | | 170 | 500 | 6.30 | 34.28 | | 26.97 | 110 | 0.93 |
| 248 | 8.30 | 34.11 | | 149 | | | | | | | |
| 322 | 7.62 | 34.20 | | 133 | | | | | | | |
| 420 | 6.76 | 34.27 | | 116 | | | | | | | |
| 551 | 6.02 | 34.28 | | 107 | | | | | | | |
| **97.60** | PAOLINA-T; February 1, 1958; 0503 GCT; 31°08'N, 119°07'W; sounding, 1800 fm; wind, 320°, force 2; weather, cloudy; sea, high; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.31 | 33.68 | | 327 | 0 | 16.31 | 33.68 | | 24.68 | 327 | 0.00 |
| 10 | 16.31 | 33.58 | | 334 | 10 | 16.31 | 33.58 | | 24.61 | 334 | 0.03 |
| 30 | 15.67 | 33.57 | | 321 | 20 | 16.02 | 33.57 | | 24.67 | 328 | 0.07 |
| 55 | 15.36 | 33.55 | | 316 | 30 | 15.67 | 33.57 | | 24.75 | 321 | 0.10 |
| 64 | 14.82 | 33.50 | | 309 | 50 | 15.42 | 33.55 | | 24.79 | 317 | 0.16 |
| 74 | 13.32 | 33.46 | | 281 | 75 | 13.28 | 33.46 | | 25.17 | 281 | 0.24 |
| 83 | 12.35 | 33.43 | | 266 | 100 | 10.98 | 33.40 | | 25.56 | 244 | 0.30 |
| 98 | 11.02 | 33.40 | | 245 | 150 | 9.22 | 33.69 | | 26.08 | 194 | 0.41 |
| 113 | 10.48 | 33.51 | | 227 | 200 | 8.29 | 33.95 | | 26.43 | 161 | 0.50 |
| 132 | 9.60 | 33.58 | | 208 | 250 | 7.75 | 34.03 | | 26.57 | 147 | 0.58 |
| 150 | 9.22 | 33.69 | | 194 | 300 | 7.29 | 34.10 | | 26.70 | 136 | 0.66 |
| 174 | 8.24 | 33.92 | | 170 | 400 | 6.46 | 34.21 | | 26.89 | 117 | 0.79 |
| 198 | 8.32 | 33.95 | | 162 | 500 | 5.82 | 34.30 | | 27.04 | 103 | 0.90 |
| 245 | 7.80 | 34.02 | | 149 | | | | | | | |
| 321 | 7.10 | 34.13 | | 131 | | | | | | | |
| 417 | 6.30 | 34.23 | | 113 | | | | | | | |
| 544 | 5.62 | 34.33 | | 98 | | | | | | | |
| **97.70** | PAOLINA-T; January 31, 1958; 2208 GCT; 30°39'N, 119°48'W; sounding, 2180 fm; wind, 360°, force 3; weather, cloudy; sea, high; wire angle, 04°. | | | | | | | | | | |
| 0 | 15.60 | 33.58 | 5.51 | 319 | 0 | 15.60 | 33.58 | 5.51 | 24.77 | 319 | 0.00 |
| 10 | 15.38 | 33.57 | 5.70 | 315 | 10 | 15.38 | 33.57 | 5.70 | 24.81 | 315 | 0.03 |
| 30 | 15.42 | 33.55 | 5.72 | 317 | 20 | 15.41 | 33.56 | 5.71 | 24.79 | 317 | 0.06 |
| 55 | 15.00 | 33.55 | 5.45 | 309 | 30 | 15.42 | 33.55 | 5.72 | 24.79 | 317 | 0.09 |
| 65 | 12.18 | 33.40 | 5.07 | 265 | 50 | 15.39 | 33.55 | 5.67 | 24.79 | 317 | 0.16 |
| 74 | 11.63 | 33.40 | 4.90 | 255 | 75 | 11.63 | 33.40 | 4.87 | 25.44 | 255 | 0.23 |
| 84 | 11.16 | 33.46 | 4.50 | 242 | 100 | 10.30 | 33.50 | 4.25 | 25.75 | 225 | 0.29 |
| 98 | 10.40 | 33.49 | 4.30 | 227 | 150 | 9.20 | 33.80 | 3.04 | 26.17 | 185 | 0.40 |
| 113 | 9.85 | 33.55 | 4.00 | 214 | 200 | 8.40 | 34.02 | 2.22 | 26.46 | 158 | 0.48 |
| 133 | 9.52 | 33.68 | 3.43 | 200 | 250 | 7.59 | 34.05 | 1.82 | 26.62 | 144 | 0.56 |
| 153 | 9.18 | 33.82 | 2.98 | 184 | 300 | 7.12 | 34.12 | 1.33 | 26.72 | 133 | 0.63 |
| 177 | 8.87 | 33.95 | 2.48 | 169 | 400 | 6.30 | 34.19 | 0.86 | 26.89 | 117 | 0.76 |
| 201 | 8.38 | 34.02 | 2.17 | 157 | 500 | 5.61 | 34.27 | 0.53 | 27.05 | 102 | 0.87 |
| 249 | 7.60 | 34.05 | 1.83 | 144 | | | | | | | |
| 326 | 6.98 | 34.14 | 1.16 | 129 | | | | | | | |
| 424 | 6.10 | 34.20 | 0.77 | 114 | | | | | | | |
| 552 | 5.36 | 34.32 | 0.41 | 95 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| PAOLINA-T; January 31, 1958; 1543 GCT; 30°17'N, 120°25'W; sounding, 2070 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 10°. | | | | | | | | | | | 97.80 |
| 0 | 15.44 | 33.49 | 5.52 | 322 | 0 | 15.44 | 33.49 | 5.52 | 24.74 | 322 | 0.00 |
| 10 | 15.44 | 33.50 | 5.58 | 321 | 10 | 15.44 | 33.50 | 5.58 | 24.75 | 321 | 0.03 |
| 30 | 15.47 | 33.51 | 5.54 | 321 | 20 | 15.46 | 33.50 | 5.56 | 24.75 | 321 | 0.06 |
| 54 | 14.94 | 33.48 | 5.84 | 313 | 30 | 15.47 | 33.51 | 5.54 | 24.75 | 321 | 0.10 |
| 65 | 14.24 | 33.43 | 5.67 | 301 | 50 | 15.30 | 33.50 | 5.65 | 24.78 | 318 | 0.16 |
| 74 | 13.55 | 33.51 | 5.85 | 284 | 75 | 13.45 | 33.49 | 5.85 | 25.16 | 282 | 0.24 |
| 82 | 12.48 | 33.40 | 5.47 | 270 | 100 | 10.93 | 33.46 | 4.86 | 25.61 | 238 | 0.30 |
| 97 | 11.16 | 33.46 | 4.94 | 243 | 150 | 9.34 | 33.71 | 3.53 | 26.08 | 194 | 0.41 |
| 111 | 10.34 | 33.48 | 4.41 | 228 | 200 | 8.42 | 33.93 | 2.64 | 26.40 | 164 | 0.50 |
| 130 | 9.76 | 33.57 | 4.13 | 211 | 250 | 8.04 | 34.10 | 1.96 | 26.59 | 146 | 0.58 |
| 148 | 9.34 | 33.68 | 3.55 | 197 | 300 | 7.45 | 34.16 | 1.47 | 26.71 | 134 | 0.66 |
| 171 | 9.14 | 33.86 | 2.93 | 181 | 400 | 6.70 | 34.30 | 0.69 | 26.93 | 114 | 0.78 |
| 194 | 8.50 | 33.91 | 2.73 | 167 | 500 | 5.99 | 34.35 | 0.47 | 27.06 | 101 | 0.90 |
| 239 | 8.14 | 34.09 | 2.09 | 148 | | | | | | | |
| 314 | 7.33 | 34.17 | 1.32 | 132 | | | | | | | |
| 408 | 6.68 | 34.31 | 0.67 | 112 | | | | | | | |
| 534 | 5.70 | 34.36 | 0.41 | 96 | | | | | | | |
| PAOLINA-T; January 14, 1958; 0540 GCT; 31°41'N, 116°46.5'W; sounding, 210 fm; wind, 320°, force 4; weather, missing; sea, rough; wire angle, 03°. | | | | | | | | | | | 100.30 |
| 0 | 16.38 | 33.68 | | 328 | 0 | 16.38 | 33.68 | | 24.67 | 328 | 0.00 |
| 10 | 16.38 | 33.71 | | 326 | 10 | 16.38 | 33.71 | | 24.69 | 326 | 0.03 |
| 30 | 15.88 | 33.68 | | 318 | 20 | 16.35 | 33.71 | | 24.69 | 326 | 0.06 |
| 51 | 14.43 | 33.59 | | 294 | 30 | 15.88 | 33.68 | | 24.78 | 318 | 0.10 |
| 76 | 13.20 | 33.59 | | 270 | 50 | 14.45 | 33.59 | | 25.02 | 294 | 0.16 |
| 101 | 11.93 | 33.68 | | 240 | 75 | 13.24 | 33.59 | | 25.28 | 270 | 0.23 |
| 125 | 10.71 | 33.85 | | 206 | 100 | 11.97 | 33.68 | | 25.59 | 240 | 0.29 |
| 164 | 10.03 | 34.04 | | 182 | 150 | 10.22 | 33.98 | | 26.14 | 188 | 0.40 |
| 203 | 9.61 | 34.29 | | 156 | 200 | 9.66 | 34.28 | | 26.47 | 157 | 0.49 |
| 252 | 9.14 | 34.25 | | 151 | 250 | 9.18 | 34.25 | | 26.53 | 152 | 0.57 |
| 299 | 8.61 | 34.29 | | 141 | 300 | (8.61) | (34.29) | | (26.65) | (140) | (0.64) |
| PAOLINA-T; January 14, 1958; 0755 GCT; 31°37'N, 116°54.5'W; sounding, missing; wind, 320°, force 4; weather, missing; sea, rough; wire angle, 20°. | | | | | | | | | | | 100.32 |
| 1 | 16.10 | 33.69 | 6.09a) | 321 | 0 | (16.10) | (33.69) | (6.10) | (24.75) | (321) | (0.00) |
| 10 | 16.14 | 33.68 | 5.65 | 323 | 10 | 16.14 | 33.68 | 5.65 | 24.72 | 323 | 0.03 |
| 29 | 16.07 | 33.66 | 5.69 | 323 | 20 | 16.11 | 33.67 | 5.68 | 24.73 | 323 | 0.06 |
| 47 | 14.29 | 33.54 | 5.06 | 294 | 30 | 16.06 | 33.66 | 5.68 | 24.73 | 323 | 0.10 |
| 68 | 12.78 | 33.58 | 4.78 | 262 | 50 | 14.04 | 33.54 | 5.00 | 25.06 | 290 | 0.16 |
| 88 | 11.82 | 33.62 | 4.12 | 243 | 75 | 12.42 | 33.59 | 4.60 | 25.43 | 255 | 0.23 |
| 106 | 11.29 | 33.71 | 3.74 | 226 | 100 | 11.45 | 33.67 | 3.89 | 25.68 | 232 | 0.29 |
| 130 | 10.80 | 33.81 | - | 211 | 150 | 10.52 | 33.91 | 2.71 | 26.03 | 199 | 0.40 |
| 150 | 10.52 | 33.91 | 2.71 | 199 | | | | | | | |

a) All oxygen values doubtful.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

100.40 PAOLINA-T; January 14, 1958; 1355 GCT; 31°21'N, 117°27'W; sounding, 1320 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.65 | 33.75 | 5.69a) | 329 | 0 | 16.65 | 33.75 | 5.69 | 26.66 | 329 | 0.00 |
| 10 | 16.68 | 33.71 | 5.45 | 333 | 10 | 16.68 | 33.71 | 5.45 | 26.62 | 333 | 0.03 |
| 30 | 16.68 | 33.73b) | 5.38 | 332 | 20 | 16.68 | 33.72 | 5.41 | 26.63 | 332 | 0.07 |
| 45 | 16.67 | 33.73 | 5.55 | 331 | 30 | 16.68 | 33.73 | 5.38 | 26.63 | 332 | 0.10 |
| 56 | 16.67 | 33.73 | 5.53 | 331 | 50 | 16.67 | 33.73 | 5.54 | 26.64 | 331 | 0.17 |
| 65 | 15.46 | 33.64 | 5.33 | 311 | 75 | 13.83 | 33.54 | 5.30 | 25.12 | 286 | 0.24 |
| 74 | 13.89 | 33.55 | 5.30 | 286 | 100 | 11.65 | 33.46 | 5.38 | 25.48 | 251 | 0.31 |
| 95 | 11.98 | 33.46 | 5.38 | 256 | 150 | 10.00 | 33.92 | 3.93 | 26.13 | 190 | 0.43 |
| 109 | 11.28 | 33.48 | 5.36 | 243 | 200 | 9.61 | 34.13 | 1.94 | 26.36 | 168 | 0.52 |
| 123 | 10.83 | 33.50 | 4.95 | 234 | 250 | 8.63 | 34.17 | 1.96 | 26.55 | 150 | 0.60 |
| 147 | 10.04 | 33.90 | 4.00 | 192 | 300 | 8.10 | 34.27 | 1.65 | 26.70 | 135 | 0.67 |
| 176 | 10.20 | 34.08 | 1.74 | 181 | 400 | 7.28 | 34.36 | 0.63 | 26.90 | 117 | 0.80 |
| 215 | 9.20 | 34.14 | 2.09 | 161 | 500 | 6.36 | 34.37 | 0.41 | 27.03 | 104 | 0.92 |
| 268 | 8.39 | 34.20 | 1.89 | 144 | 600 | (5.81) | (34.40) | (0.29) | (27.13) | (94) | (1.02) |
| 350 | 7.78 | 34.36 | 0.81 | 123 | | | | | | | |
| 453 | 6.74 | 34.35 | 0.49 | 110 | | | | | | | |
| 594 | 5.84 | 34.40 | 0.30 | 95 | | | | | | | |

100.50 PAOLINA-T; January 14, 1958; 2025 GCT; 31°01'N, 118°07.5'W; sounding, 935 fm; wind, 340°, force 3; weather, clear; sea, very rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.59 | 33.64 | - | 336 | 0 | 16.59 | 33.64 | | 24.59 | 336 | 0.00 |
| 11 | 16.48 | 33.67 | 5.63 | 332 | 10 | 16.49 | 33.66 | | 24.63 | 332 | 0.03 |
| 30 | 16.43 | 33.64 | 5.77 | 332 | 20 | 16.46 | 33.65 | 5.70 | 24.63 | 332 | 0.07 |
| 55 | 16.41 | 33.66 | 5.68 | 331 | 30 | 16.43 | 33.64 | 5.77 | 24.63 | 332 | 0.10 |
| 66 | 14.80 | 33.51b) | 5.91 | 307 | 50 | 16.42 | 33.66 | 5.73 | 24.64 | 331 | 0.17 |
| 75 | 13.45 | 33.42 | 5.77 | 287 | 75 | 13.45 | 33.42 | 5.77 | 25.10 | 287 | 0.24 |
| 85 | 13.01 | 33.44 | 5.80 | 278 | 100 | 11.89 | 33.44 | 5.44 | 25.42 | 257 | 0.31 |
| 99 | 11.90 | 33.44 | 5.45 | 257 | 150 | 9.95 | 33.69 | 4.47 | 25.96 | 206 | 0.43 |
| 114 | 11.36 | 33.44 | 5.34 | 247 | 200 | 9.07 | 33.97 | 2.86 | 26.32 | 171 | 0.53 |
| 132 | 10.72 | 33.46 | 5.10 | 235 | 250 | 8.29 | 34.12 | 2.34 | 26.56 | 149 | 0.61 |
| 151 | 9.90 | - | 4.44 | | 300 | 7.85 | 34.21 | 1.55 | 26.70 | 136 | 0.68 |
| 175 | 9.59 | 33.83 | 3.27 | 189 | 400 | 7.00 | 34.28 | 0.84 | 26.88 | 118 | 0.82 |
| 197 | 9.14 | 33.96 | 2.87 | 173 | 500 | 6.24 | 34.33 | 0.61 | 27.01 | 106 | 0.93 |
| 244 | 8.39 | 34.10 | 2.42 | 151 | | | | | | | |
| 321 | 7.68 | 34.24 | 1.30 | 131 | | | | | | | |
| 417 | 6.89 | 34.29 | 0.79 | 117 | | | | | | | |
| 545 | 5.98 | 34.35 | 0.53 | 101 | | | | | | | |

100.60 PAOLINA-T; January 15, 1958; 0350 GCT; 30°41'N, 118°47'W; sounding, 1640 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.22 | 33.52 | 5.79 | 337 | 0 | 16.22 | 33.52 | 5.79 | 24.58 | 337 | 0.00 |
| 11 | 16.22 | 33.52b) | 5.56 | 337 | 10 | 16.22 | 33.52 | 5.58 | 24.58 | 337 | 0.03 |
| 30 | 16.19 | 33.50 | 5.69 | 337 | 20 | 16.21 | 33.51 | 5.60 | 24.58 | 337 | 0.07 |
| 55 | 16.16 | 33.53 | 5.62 | 334 | 30 | 16.19 | 33.50 | 5.69 | 24.58 | 337 | 0.10 |
| 65 | 16.14 | 33.53 | 5.40 | 334 | 50 | 16.16 | 33.52 | 5.64 | 24.60 | 335 | 0.17 |
| 76 | 15.83 | 33.69u | 5.74 | | 75 | 15.86 | 33.53 | 5.70 | 24.67 | 328 | 0.25 |
| 86 | 15.34 | 33.53 | 5.42 | 317 | 100 | 13.54 | 33.42 | 5.74 | 25.09 | 288 | 0.33 |
| 101 | 13.41 | 33.42 | 5.76 | 286 | 150 | 9.44 | 33.61 | 4.25 | 25.98 | 204 | 0.45 |
| 115 | 12.28 | 33.48 | 4.70 | 265 | 200 | 8.72 | 33.88 | 3.29 | 26.31 | 173 | 0.55 |
| 134 | 10.10 | 33.49 | 4.81 | 223 | 250 | 8.05 | 34.04 | 2.43 | 26.54 | 151 | 0.63 |
| 154 | 9.28 | 33.66 | 4.08 | 197 | 300 | 7.45 | 34.09 | 1.83 | 26.66 | 139 | 0.71 |
| 176 | 8.91 | 33.82 | 3.68 | 180 | 400 | 6.60 | 34.23 | 0.92 | 26.89 | 117 | 0.84 |
| 200 | 8.72 | 33.88 | 3.29 | 173 | 500 | 5.99 | 34.32 | 0.49 | 27.04 | 103 | 0.96 |
| 249 | 8.06 | 34.04 | 2.43 | 151 | | | | | | | |
| 325 | 7.20 | 34.11 | 1.57 | 134 | | | | | | | |
| 421 | 6.44 | 34.26 | 0.74 | 113 | | | | | | | |
| 550 | 5.74 | 34.34 | 0.38 | 99 | | | | | | | |

a) Oxygen values somewhat unreliable owing to titration difficulties.
b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

PAOLINA-T; January 15, 1958; 1130 GCT; 30°20'N, 119°26'W; sounding, 2000 fm; wind, 320°, force 3; weather, clear; sea, very rough; wire angle, 13°. 100.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.36 | 33.52 | 6.01 | 339 | 0 | 16.36 | 33.52 | 6.01 | 24.55 | 339 | 0.00 |
| 11 | 16.36 | 33.55 | 5.47 | 338 | 10 | 16.36 | 33.55 | 5.50 | 24.57 | 338 | 0.03 |
| 30 | 16.36 | 33.57 | 5.61 | 336 | 20 | 16.36 | 33.56 | 5.52 | 24.58 | 337 | 0.07 |
| 54 | 16.36 | - | 5.57 | | 30 | 16.36 | 33.57 | 5.61 | 24.59 | 336 | 0.10 |
| 63 | 16.28 | 33.55 | 5.63 | 335 | 50 | 16.36 | 33.57 | 5.57 | 24.59 | 336 | 0.17 |
| 74 | 15.06 | 33.49 | 5.32 | 314 | 75 | 15.04 | 33.49 | 5.36 | 24.82 | 314 | 0.25 |
| 84 | 14.34 | 33.46 | 5.43 | 302 | 100 | 12.70 | 33.42 | 5.75 | 25.26 | 272 | 0.32 |
| 98 | 12.85 | 33.42 | 5.75 | 275 | 150 | 9.70 | 33.66 | 3.88 | 25.98 | 204 | 0.44 |
| 112 | 11.48 | 33.43 | 5.32 | 250 | 200 | 8.41 | 33.94 | 3.14 | 26.40 | 164 | 0.54 |
| 131 | 11.03 | 33.72 | 3.57 | 221 | 250 | 7.62 | 34.04 | 2.75 | 26.60 | 145 | 0.62 |
| 150 | 9.70 | 33.66 | 3.88 | 204 | 300 | 7.22 | 34.11 | 1.89 | 26.71 | 134 | 0.69 |
| 172 | 9.03 | 33.81 | 3.38 | 183 | 400 | 6.40 | 34.22 | 0.91 | 26.91 | 115 | 0.82 |
| 195 | 8.50 | 33.93 | 3.18 | 165 | 500 | 5.80 | 34.32 | 0.50 | 27.07 | 100 | 0.93 |
| 240 | 7.75 | 34.02 | 2.80 | 148 | | | | | | | |
| 314 | 7.04 | 34.13 | 1.63 | 131 | | | | | | | |
| 407 | 6.36 | 34.23 | 0.80 | 114 | | | | | | | |
| 532 | 5.66 | 34.34 | 0.43 | 97 | | | | | | | |

PAOLINA-T; January 15, 1958; 1845 GCT; 29°58.5'N, 120°05.5'W; sounding, 1940 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°. 100.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.31 | 33.51 | 5.67a) | 339 | 0 | 16.31 | 33.51 | 5.67 | 24.56 | 339 | 0.00 |
| 10 | 16.31 | 33.51 | 5.62 | 339 | 10 | 16.31 | 33.51 | 5.62 | 24.56 | 339 | 0.03 |
| 31 | 16.30 | 33.53 | 5.74 | 338 | 20 | 16.31 | 33.52 | 5.67 | 24.56 | 339 | 0.07 |
| 56 | 16.20 | 33.53 | 5.42 | 335 | 30 | 16.31 | 33.53 | 5.73 | 24.57 | 338 | 0.10 |
| 65 | 16.08 | 33.51 | 5.37 | 334 | 50 | 16.25 | 33.53 | 5.58 | 24.58 | 336 | 0.17 |
| 74 | 15.86 | 33.53 | 5.86 | 328 | 75 | 15.86 | 33.53 | 5.86 | 24.67 | 328 | 0.25 |
| 84 | 15.68 | 33.54 | 6.05 | 324 | 100 | 13.75 | 33.49 | 5.90 | 25.10 | 287 | 0.33 |
| 98 | 13.84 | 33.49 | 5.91 | 290 | 150 | 10.53 | 33.57 | 5.04 | 25.76 | 225 | 0.46 |
| 113 | 13.02 | 33.57 | 5.54 | 268 | 200 | 8.84 | 33.82 | 3.75 | 26.24 | 179 | 0.56 |
| 132 | 11.60 | 33.51 | 5.45 | 246 | 250 | 8.07 | 33.98 | 2.86 | 26.48 | 156 | 0.65 |
| 151 | 10.44 | 33.57 | 5.00 | 222 | 300 | 7.37 | 34.05 | 2.25 | 26.64 | 141 | 0.72 |
| 174 | 9.59 | 33.62 | 4.39 | 205 | 400 | 6.39 | 34.21 | 0.99 | 26.91 | 116 | 0.86 |
| 198 | 8.88 | 33.82 | 3.80 | 179 | 500 | 5.76 | 34.29 | 0.53 | 27.05 | 102 | 0.97 |
| 246 | 8.11 | 33.98b) | 2.88 | 156 | | | | | | | |
| 322 | 7.05 | 34.08 | 2.04 | 134 | | | | | | | |
| 418 | 6.28 | 34.22 | 0.77 | 114 | | | | | | | |
| 544 | 5.51 | 34.32 | 0.43 | 97 | | | | | | | |

PAOLINA-T; January 16, 1958; 0122 GCT; 29°39'N, 120°43'W; sounding, 2130 fm; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 15°. 100.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.65 | 33.87 | 5.30 | 343 | 0 | 17.65 | 33.87 | 5.30 | 24.51 | 343 | 0.00 |
| 10 | 17.66 | 33.86 | 5.53 | 344 | 10 | 17.66 | 33.86 | 5.53 | 24.50 | 344 | 0.03 |
| 31 | 17.65 | 33.86 | 5.50 | 344 | 20 | 17.65 | 33.86 | 5.52 | 24.50 | 344 | 0.07 |
| 54 | 17.66 | 33.86 | 5.51 | 344 | 30 | 17.65 | 33.86 | 5.50 | 24.50 | 344 | 0.10 |
| 63 | 17.66 | 33.86 | 5.51 | 344 | 50 | 17.65 | 33.86 | 5.51 | 24.50 | 344 | 0.17 |
| 72 | 17.66 | 33.87b) | 5.51 | 344 | 75 | 17.66 | 33.86 | 5.50 | 24.50 | 344 | 0.26 |
| 80 | 17.66 | 33.86 | 5.49 | 344 | 100 | 17.54 | 33.87 | 5.48 | 24.53 | 341 | 0.35 |
| 95 | 17.65 | 33.87 | 5.48 | 343 | 150 | 13.26 | 33.70 | 5.31 | 25.36 | 263 | 0.50 |
| 109 | 16.01 | 33.75 | 5.84 | 316 | 200 | 10.21 | 33.70 | 4.52 | 25.92 | 209 | 0.62 |
| 126 | 14.90 | 33.71 | 5.64 | 295 | 250 | 8.59 | 33.93 | 3.15 | 26.37 | 167 | 0.71 |
| 145 | 13.65 | 33.71 | 5.38 | 270 | 300 | 7.83 | 34.11 | 2.47 | 26.62 | 143 | 0.80 |
| 167 | 11.84 | 33.64 | 5.12 | 241 | 400 | 6.92 | 34.20 | 1.17 | 26.83 | 123 | 0.93 |
| 190 | 10.65 | 33.66 | 4.77 | 219 | 500 | 5.97 | 34.28 | 0.53 | 27.00 | 106 | 1.05 |
| 234 | 8.89 | 33.86 | 3.40 | 176 | | | | | | | |
| 307 | 7.72 | 34.13 | 2.04 | 140 | | | | | | | |
| 400 | 6.92 | 34.20 | 1.17 | 123 | | | | | | | |
| 526 | 5.76 | 34.29 | 0.45 | 102 | | | | | | | |

a) All oxygen values doubtful.
b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ $cm^3/g$ | m | °C | ‰ | ml/L | g/L | $10^{-5}$ $cm^3/g$ | dyn. m |
| **103.30** | PAOLINA-T; January 17, 1958; 1625 GCT; 31°05'N, 116°25'W; sounding, 38 fm; wind, 090°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.41 | 33.58 | 5.60 | 337 | 0 | 16.41 | 33.58 | 5.60 | 24.58 | 337 | 0.00 |
| 10 | 16.40 | 33.68 | 5.66 | 329 | 10 | 16.40 | 33.68 | 5.66 | 24.66 | 329 | 0.03 |
| 30 | 16.41 | 33.66 | 5.71 | 331 | 20 | 16.41 | 33.67 | 5.68 | 24.65 | 330 | 0.07 |
| 50 | 15.69 | 33.60 | 5.71 | 319 | 30 | 16.41 | 33.66 | 5.71 | 24.64 | 331 | 0.10 |
| | | | | | 50 | 15.69 | 33.60 | 5.71 | 24.77 | 319 | 0.16 |
| **103.35** | PAOLINA-T; January 17, 1958; 1357 GCT; 31°00.5'N, 116°39.5'W; sounding, 830 fm; wind, 040°, force 1; weather, missing; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.56 | 33.64 | 5.55 | 335 | 0 | 16.56 | 33.64 | 5.55 | 24.60 | 335 | 0.00 |
| 10 | 16.56 | 33.64 | 5.60 | 335 | 10 | 16.56 | 33.64 | 5.60 | 24.60 | 335 | 0.03 |
| 30 | 16.40 | 33.65 | 5.65 | 331 | 20 | 16.49 | 33.65 | 5.64 | 24.62 | 333 | 0.07 |
| 55 | 15.84 | 33.58 | 5.63 | 324 | 30 | 16.40 | 33.65 | 5.65 | 24.64 | 331 | 0.10 |
| 65 | 13.09 | 33.42 | 5.55 | 280 | 50 | 16.18 | 33.63 | 5.65 | 24.67 | 328 | 0.17 |
| 74 | 12.42 | 33.40 | 5.35 | 270 | 75 | 12.39 | 33.40 | 5.31 | 25.29 | 269 | 0.24 |
| 84 | 11.65 | 33.47 | 4.89 | 251 | 100 | 11.08 | 33.48 | 4.70 | 25.60 | 240 | 0.31 |
| 98 | 11.12 | 33.48 | 4.71 | 240 | 150 | 10.60 | 33.93 | 2.79 | 26.03 | 198 | 0.42 |
| 112 | 10.60 | 33.52 | 4.53 | 229 | 200 | 9.70 | 34.17 | 1.67 | 26.38 | 166 | 0.51 |
| 131 | 10.59 | 33.78 | 3.75 | 209 | 250 | 9.26 | 34.30 | 1.22 | 26.55 | 150 | 0.59 |
| 150 | 10.60 | 33.93 | 2.79 | 198 | 300 | 8.87 | 34.34 | 1.01 | 26.64 | 141 | 0.66 |
| 174 | 9.86 | 34.05 | 2.33 | 178 | 400 | 7.76 | 34.34 | 0.69 | 26.82 | 124 | 0.80 |
| 197 | 9.71 | 34.17 | 1.77 | 166 | 500 | 6.69 | 34.35 | 0.48 | 26.97 | 110 | 0.92 |
| 246 | 9.32 | 34.30 | 1.27 | 150 | | | | | | | |
| 322 | 8.70 | 34.35 | 0.93 | 138 | | | | | | | |
| 420 | 7.50 | 34.34 | 0.66 | 121 | | | | | | | |
| 549 | 6.34 | 34.36 | 0.41 | 104 | | | | | | | |
| **103.40** | PAOLINA-T; January 17, 1958; 1001 GCT; 30°48'N, 117°01.5'W; sounding, 1030 fm; wind, 020°, force 1; weather, missing; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.47 | 33.62 | 5.53 | 335 | 0 | 16.47 | 33.62 | 5.53 | 24.60 | 335 | 0.00 |
| 10 | 16.46 | 33.64 | 5.62 | 334 | 10 | 16.46 | 33.64 | 5.62 | 24.61 | 334 | 0.03 |
| 30 | 16.37 | 33.61 | 5.64 | 333 | 20 | 16.40 | 33.62 | 5.63 | 24.62 | 333 | 0.07 |
| 55 | 14.87 | 33.51a) | 5.80 | 309 | 30 | 16.37 | 33.61 | 5.64 | 24.62 | 333 | 0.10 |
| 65 | 12.72 | 33.38 | 5.59 | 276 | 50 | 16.16 | 33.59 | 5.67 | 24.66 | 329 | 0.17 |
| 75 | 12.22 | - | 4.99 | | 75 | 12.22 | 33.41 | 4.99 | 25.34 | 265 | 0.24 |
| 85 | 11.54 | 33.51b) | 4.64 | 245 | 100 | 11.02 | 33.60 | 4.00 | 25.70 | 230 | 0.30 |
| 100 | 11.02 | 33.60 | 4.00 | 230 | 150 | 9.74 | 33.84 | 3.20 | 26.12 | 191 | 0.41 |
| 114 | 10.74 | 33.65 | 3.67 | 222 | 200 | 8.65 | 34.02 | 2.57 | 26.43 | 161 | 0.50 |
| 134 | 10.21 | 33.65 | 3.67 | 213 | 250 | 7.95 | 34.12 | 2.21 | 26.62 | 144 | 0.58 |
| 152 | 9.70 | 33.86 | 3.18 | 189 | 300 | 7.66 | 34.28 | 1.63 | 26.78 | 128 | 0.65 |
| 177 | 9.36 | 34.04 | 2.54 | 170 | 400 | 6.79 | 34.24 | 0.91 | 26.87 | 119 | 0.78 |
| 200 | 8.65 | 34.02 | 2.57 | 161 | 500 | 6.03 | 34.29 | 0.53 | 27.01 | 106 | 0.90 |
| 248 | 7.98 | 34.11 | 2.23 | 145 | | | | | | | |
| 324 | 7.59 | 34.31 | 1.38 | 124 | | | | | | | |
| 420 | 6.54 | 34.22 | 0.80 | 117 | | | | | | | |
| 549 | 5.88 | 34.34 | 0.47 | 100 | | | | | | | |

a) Cracked bottle; value falls on property curve.
b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; January 17, 1958; 0325 GCT; 30°24'N, 117°42.5'W; sounding, 1140 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 06°. 103.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.46 | - | 5.71 | | 0 | 16.46 | (33.62) | 5.71 | (24.60) | (335) | (0.00) |
| 10 | 16.42 | 33.62 | 5.63 | 334 | 10 | 16.42 | 33.62 | 5.63 | 24.61 | 334 | 0.03 |
| 30 | 16.39 | 33.60 | 5.71 | 334 | 20 | 16.40 | 33.61 | 5.69 | 24.61 | 334 | 0.07 |
| 55 | 15.98 | 33.55 | 5.62 | 329 | 30 | 16.39 | 33.60 | 5.71 | 24.61 | 334 | 0.10 |
| 66 | 14.78 | 33.44 | 5.89 | 312 | 50 | 16.18 | 33.57 | 5.65 | 24.63 | 332 | 0.17 |
| 75 | 13.56 | 33.43 | 5.88 | 288 | 75 | 13.56 | 33.43 | 5.88 | 25.09 | 288 | 0.24 |
| 85 | 12.16 | 33.40 | 5.50 | 265 | 100 | 11.10 | 33.48 | 5.26 | 25.59 | 240 | 0.31 |
| 99 | 11.14 | 33.48 | 5.28 | 241 | 150 | 9.52 | 33.79 | 3.47 | 26.11 | 191 | 0.42 |
| 113 | 10.49 | 33.44 | 5.04 | 233 | 200 | 8.66 | 33.99 | 2.71 | 26.40 | 164 | 0.51 |
| 131 | 9.78 | 33.60 | 4.14 | 210 | 250 | 7.91 | 34.10 | 2.12 | 26.60 | 144 | 0.59 |
| 150 | 9.52 | 33.79 | 3.47 | 191 | 300 | 7.90 | 34.13 | 1.74 | 26.64 | 141 | 0.66 |
| 174 | 9.31 | 33.87 | 3.03 | 182 | 400 | 7.23 | 34.29 | 0.86 | 26.85 | 121 | 0.80 |
| 197 | 8.73 | 33.98 | 2.76 | 165 | 500 | 6.31 | 34.37 | 0.49 | 27.04 | 103 | 0.92 |
| 244 | 7.99 | 34.07 | 2.32 | 148 | | | | | | | |
| 320 | 7.88 | 34.14 | 1.69 | 141 | | | | | | | |
| 415 | 7.06 | 34.32 | 0.73 | 117 | | | | | | | |
| 542 | 5.99 | 34.38 | 0.40 | 98 | | | | | | | |

PAOLINA-T; January 16, 1958; 2118 GCT; 30°07.5'N, 118°21'W; sounding, 1890 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 12°. 103.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.77 | 33.64 | 5.73 | 340 | 0 | 16.77 | 34.64 | 5.73 | 24.55 | 340 | 0.00 |
| 10 | 16.64 | 33.61a) | 5.68 | 340 | 10 | 16.64 | 33.61 | 5.68 | 24.55 | 340 | 0.03 |
| 30 | 16.63 | 33.64 | 5.89 | 337 | 20 | 16.63 | 33.63 | 5.83 | 24.57 | 338 | 0.07 |
| 55 | 16.58 | 33.65 | 5.69 | 335 | 30 | 16.63 | 33.64 | 5.89 | 24.58 | 337 | 0.10 |
| 64 | 16.45 | 33.62 | 5.67 | 334 | 50 | 16.59 | 33.65 | 5.74 | 24.60 | 335 | 0.17 |
| 73 | 15.12 | 33.51 | 5.90 | 314 | 75 | 14.81 | 33.49 | 5.90 | 24.87 | 309 | 0.25 |
| 83 | 14.00 | 33.47 | 5.90 | 294 | 100 | 12.33 | 33.43 | 5.62 | 25.33 | 265 | 0.32 |
| 97 | 12.54 | 33.43 | 5.63 | 269 | 150 | 9.98 | 33.57 | 4.73 | 25.86 | 215 | 0.44 |
| 111 | 11.73 | 33.44 | 5.57 | 254 | 200 | 9.04 | 34.02 | 2.83 | 26.36 | 167 | 0.54 |
| 131 | 10.52 | 33.44 | 5.06 | 233 | 250 | 8.76 | 34.21 | 1.78 | 26.56 | 148 | 0.62 |
| 149 | 10.01 | 33.54 | 4.77 | 218 | 300 | 7.83 | 34.19 | 1.67 | 26.69 | 136 | 0.70 |
| 172 | 9.39 | - | 3.50 | | 400 | 6.85 | 34.22 | 0.95 | 26.85 | 121 | 0.83 |
| 195 | 9.02 | 33.93 | 2.99 | 174 | 500 | 6.22 | | 0.68 | | | |
| 243 | 8.88 | 34.21 | 1.87 | 151 | | | | | | | |
| 318 | 7.44 | 34.19 | 1.63 | 131 | | | | | | | |
| 413 | 6.80 | 34.23 | 0.90 | 120 | | | | | | | |
| 538 | 5.95 | - | 0.61 | | | | | | | | |

PAOLINA-T; January 16, 1958; 1446 GCT; 29°46.5'N, 119°04.5'W; sounding, 1830 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 03°. 103.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.73 | 33.73 | 5.43 | 332 | 0 | 16.73 | 33.73 | 5.43 | 24.63 | 332 | 0.00 |
| 10 | 16.75 | 33.66 | 5.59 | 338 | 10 | 16.75 | 33.66 | 5.59 | 24.57 | 338 | 0.03 |
| 30 | 16.76 | 33.66 | 5.65 | 338 | 20 | 16.76 | 33.66 | 5.62 | 24.57 | 338 | 0.07 |
| 56 | 16.64 | 33.61 | 5.55 | 340 | 30 | 16.76 | 33.66 | 5.65 | 24.57 | 338 | 0.10 |
| 66 | 16.62 | 33.62 | 5.24 | 338 | 50 | 16.65 | 33.62 | 5.58 | 24.55 | 340 | 0.17 |
| 76 | 16.18 | 33.57 | 5.57 | 332 | 75 | 16.22 | 33.57 | 5.57 | 24.62 | 333 | 0.25 |
| 86 | 15.34 | 33.58 | 5.63 | 313 | 100 | 14.50 | 33.51 | 5.80 | 24.96 | 301 | 0.33 |
| 100 | 14.50 | 33.51 | 5.80 | 301 | 150 | 10.34 | 33.43 | 5.24 | 25.69 | 231 | 0.47 |
| 114 | 12.88 | 33.43 | 5.62 | 276 | 200 | 8.83 | 33.86 | 3.24 | 26.28 | 175 | 0.57 |
| 133 | 11.16 | 33.41 | 5.25 | 246 | 250 | 8.13 | 34.07 | 2.49 | 26.55 | 150 | 0.65 |
| 152 | 10.25 | 33.44 | 5.24 | 229 | 300 | 7.47 | 34.12 | 2.04 | 26.68 | 137 | 0.73 |
| 176 | 9.31 | 33.68a) | 3.96 | 196 | 400 | 6.61 | 34.19 | 1.02 | 26.86 | 120 | 0.86 |
| 199 | 8.83 | 33.86 | 3.27 | 176 | 500 | 5.99 | 34.26 | 0.61 | 26.99 | 108 | 0.98 |
| 248 | 8.13 | 34.06 | 2.50 | 150 | | | | | | | |
| 324 | 7.20 | 34.14 | 1.81 | 132 | | | | | | | |
| 420 | 6.46 | 34.20 | 0.92 | 118 | | | | | | | |
| 548 | 5.68 | 34.30 | 0.49 | 101 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

107.32 PAOLINA-T; January 17, 1958; 2238 GCT; 30°23.5'N, 116°10.5'W; sounding, 320 fm; wind, 040°, force 2; weather, cloudy; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.77 | 33.69 | 5.63 | 336 | 0 | 16.77 | 33.69 | 5.63 | 24.59 | 336 | 0.00 |
| 10 | 16.74 | 33.69 | 5.57 | 336 | 10 | 16.74 | 33.69 | 5.57 | 24.59 | 336 | 0.03 |
| 30 | 16.66 | 33.68 | 5.61 | 334 | 20 | 16.70 | 33.69 | 5.59 | 24.59 | 336 | 0.07 |
| 50 | 16.08 | 33.67 | 5.68 | 322 | 30 | 16.66 | 33.68 | 5.61 | 24.61 | 334 | 0.10 |
| 74 | 14.58 | 33.70 | 4.29 | 289 | 50 | 16.08 | 33.67 | 5.68 | 24.74 | 322 | 0.17 |
| 98 | 12.80 | 33.71 | 4.02 | 254 | 75 | 14.51 | 33.70 | 4.25 | 25.09 | 288 | 0.24 |
| 122 | 12.12 | 33.73 | 3.74 | 239 | 100 | 12.73 | 33.71 | 4.02 | 25.47 | 252 | 0.31 |
| 161 | 10.44 | 33.95 | 2.65 | 195 | 150 | 10.90 | 33.88 | 2.98 | 25.94 | 207 | 0.43 |
| 198 | 9.86 | 34.13 | 2.07 | 172 | 200 | 9.86 | 34.14 | 1.99 | 26.31 | 171 | 0.53 |
| 245 | 9.44 | 34.31 | 1.31 | 152 | 250 | 9.42 | 34.31 | 1.30 | 26.54 | 151 | 0.61 |
| 293 | 9.15 | 34.36 | 1.05 | 143 | 300 | 9.11 | 34.36 | 1.02 | 26.62 | 143 | 0.68 |
| 393 | 8.30 | 34.42 | 0.71 | 126 | 400 | (8.21) | (34.42) | (0.69) | (26.81) | (125) | (0.82) |

107.35 PAOLINA-T; January 18, 1958; 0135 GCT; 30°20'N, 116°23'W; sounding, 950 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.18 | 33.79a) | 5.59 | 338 | 0 | 17.18 | 33.79 | 5.59 | 24.57 | 338 | 0.00 |
| 10 | 17.18 | 33.76 | 5.58 | 340 | 10 | 17.18 | 33.76 | 5.58 | 24.55 | 340 | 0.03 |
| 30 | 17.19 | 33.75 | 5.62 | 341 | 20 | 17.18 | 33.75 | 5.60 | 24.54 | 341 | 0.07 |
| 55 | 17.14 | 33.77 | 5.60 | 338 | 30 | 17.19 | 33.75 | 5.62 | 24.54 | 341 | 0.10 |
| 65 | 16.65 | 33.65 | 5.67 | 336 | 50 | 17.18 | 33.76 | 5.61 | 24.56 | 339 | 0.17 |
| 75 | 14.93 | 33.48 | 5.92 | 313 | 75 | 14.93 | 33.48 | 5.92 | 24.83 | 313 | 0.25 |
| 83 | 13.95 | 33.78b) | 5.47 | | 100 | 12.23 | 33.51 | 5.28 | 25.39 | 259 | 0.32 |
| 98 | 12.38 | 33.51 | 5.30 | 260 | 150 | 9.78 | 33.73 | 3.92 | 26.02 | 200 | 0.44 |
| 113 | 11.12 | 33.45 | 5.17 | 243 | 200 | 9.61 | 34.06 | 2.44 | 26.30 | 173 | 0.53 |
| 131 | 10.11 | 33.62 | 4.31 | 213 | 250 | 8.56 | 34.14 | 2.08 | 26.55 | 150 | 0.62 |
| 150 | 9.78 | 33.73 | 3.92 | 200 | 300 | 8.56 | 34.28 | 1.39 | 26.65 | 140 | 0.69 |
| 173 | 9.28 | 33.86 | 3.28 | 185 | 400 | 7.65 | 34.36 | 0.72 | 26.84 | 122 | 0.83 |
| 197 | 9.64 | 34.05 | 2.45 | 174 | 500 | 6.73 | 34.35 | 0.60 | 26.97 | 110 | 0.95 |
| 244 | 8.56 | 34.13 | 2.16 | 151 | | | | | | | |
| 321 | 8.57 | 34.34 | 1.10 | 136 | | | | | | | |
| 417 | 7.45 | 34.36 | 0.68 | 119 | | | | | | | |
| 544 | 6.39 | 34.34 | 0.57 | 106 | | | | | | | |

107.40 PAOLINA-T; January 18, 1958; 0555 GCT; 30°10'N, 116°43'W; sounding, 1550 fm; wind, 040°, force 3; weather, missing; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.52 | 33.60 | 5.98 | 337 | 0 | 16.52 | 33.60 | 5.98 | 24.58 | 337 | 0.00 |
| 11 | 16.50 | 33.58 | 5.72 | 338 | 10 | 16.50 | 33.58 | 5.74 | 24.57 | 338 | 0.03 |
| 31 | 16.46 | 33.58 | 5.64 | 337 | 20 | 16.48 | 33.58 | 5.67 | 24.57 | 338 | 0.07 |
| 56 | 16.38 | 33.58 | 5.65 | 334 | 30 | 16.46 | 33.58 | 5.66 | 24.58 | 337 | 0.10 |
| 66 | 15.84 | 33.58 | 5.65 | 324 | 50 | 16.43 | 33.58 | 5.64 | 24.58 | 337 | 0.17 |
| 75 | 14.70 | 33.49 | 5.56 | 307 | 75 | 14.70 | 33.49 | 5.56 | 24.89 | 307 | 0.25 |
| 84 | 13.52 | 33.44 | 5.74 | 287 | 100 | 12.39 | 33.42 | 5.56 | 25.31 | 267 | 0.32 |
| 98 | 12.50 | 33.42 | 5.56 | 270 | 150 | 9.87 | 33.52 | 4.76 | 25.84 | 217 | 0.44 |
| 112 | 11.60 | 33.45 | 5.50 | 251 | 200 | 8.84 | 33.87 | 3.14 | 26.28 | 175 | 0.54 |
| 130 | 10.66 | 34.44 | 5.26 | 235 | 250 | 8.45 | 34.10 | 2.21 | 26.52 | 153 | 0.63 |
| 149 | 9.90 | 33.51 | 4.81 | 217 | 300 | 7.82 | 34.15 | 1.77 | 26.65 | 140 | 0.70 |
| 173 | 9.42 | 33.71 | 3.89 | 196 | 400 | 6.76 | 34.22 | 1.06 | 26.86 | 120 | 0.84 |
| 195 | 8.92 | 33.84 | 3.29 | 179 | 500 | 6.00 | 34.27 | 0.74 | 27.00 | 107 | 0.96 |
| 242 | 8.56 | 34.09 | 2.33 | 154 | | | | | | | |
| 319 | 7.52 | 34.16 | 1.62 | 135 | | | | | | | |
| 416 | 6.66 | 34.23 | 0.98 | 118 | | | | | | | |
| 543 | 5.74 | 34.29 | 0.65 | 102 | | | | | | | |

a) Loose bottle cap; value falls on property curve.
b) Possible evaporation; value does not fall on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| PAOLINA-T; January 18, 1958; 1235 GCT; 29°50'N, 117°23.5'W; sounding, 1470 fm; wind, 270°, force 1; weather, clear; sea, very rough; wire angle, 06°. | | | | | | | | | | | 107.50 |
| 0 | 17.02 | 33.69 | 5.58 | 342 | 0 | 17.02 | 33.69 | 5.58 | 24.52 | 342 | 0.00 |
| 10 | 17.04 | 33.70 | 5.57 | 342 | 10 | 17.04 | 33.70 | 5.57 | 24.52 | 342 | 0.03 |
| 31 | 17.16 | 33.73 | 5.45 | 342 | 20 | 17.10 | 33.71 | 5.57 | 24.52 | 342 | 0.07 |
| 55 | 17.01 | 33.72 | 5.57 | 340 | 30 | 17.16 | 33.73 | 5.45 | 24.52 | 342 | 0.10 |
| 65 | 17.01 | 33.73 | 5.59 | 339 | 50 | 17.04 | 33.72 | 5.55 | 24.54 | 340 | 0.17 |
| 75 | 15.89 | 33.72a) | 5.45 | 315 | 75 | 15.89 | 33.72 | 5.45 | 24.81 | 315 | 0.25 |
| 84 | 15.04 | 33.63 | 5.25 | 304 | 100 | 13.32 | 33.60 | 4.94 | 25.27 | 271 | 0.33 |
| 99 | 13.40 | 33.60 | 4.96 | 273 | 150 | 10.74 | 33.77 | 3.48 | 25.88 | 213 | 0.45 |
| 113 | 12.42 | 33.65 | 4.34 | 251 | 200 | 9.35 | 33.97 | 2.84 | 26.27 | 176 | 0.55 |
| 133 | 11.23 | 33.64 | 4.07 | 230 | 250 | 8.74 | 34.13 | 2.30 | 26.50 | 154 | 0.63 |
| 152 | 10.70 | 33.79 | 3.40 | 210 | 300 | 8.74 | 34.31 | 1.30 | 26.65 | 140 | 0.71 |
| 176 | 9.80 | 33.90 | 3.21 | 188 | 400 | 7.90 | 34.41 | 0.47 | 26.85 | 121 | 0.84 |
| 201 | 9.33 | 33.97 | 2.84 | 175 | 500 | 6.84 | 34.41 | 0.36 | 27.00 | 107 | 0.96 |
| 249 | 8.74 | 34.13 | 2.33 | 154 | | | | | | | |
| 327 | 8.72 | 34.39 | 0.77 | 134 | | | | | | | |
| 426 | 7.56 | 34.41 | 0.40 | 116 | | | | | | | |
| 554 | 6.42 | 34.40 | 0.35 | 100 | | | | | | | |
| PAOLINA-T; January 18, 1958; 1853 GCT; 29°32'N, 118°01.5'W; sounding, 1850 fm; wind, 270°, force 2; weather, fog; sea, very rough; wire angle, 08°. | | | | | | | | | | | 107.60 |
| 0 | 17.42 | 33.86 | 5.66 | 339 | 0 | 17.42 | 33.86 | 5.66 | 24.56 | 339 | 0.00 |
| 10 | 17.36 | 33.85 | 5.56 | 338 | 10 | 17.36 | 33.85 | 5.56 | 24.57 | 338 | 0.03 |
| 30 | 17.38 | 33.84 | 5.61 | 339 | 20 | 17.36 | 33.84 | 5.57 | 24.57 | 338 | 0.07 |
| 50 | 18.01 | 34.12 | 5.57 | 333 | 30 | 17.38 | 33.84 | 5.61 | 24.56 | 339 | 0.10 |
| 60 | 18.52 | 34.34 | 5.39 | 329 | 50 | 18.01 | 34.12 | 5.57 | 24.62 | 333 | 0.17 |
| 70 | 18.53 | 34.33 | 5.32 | 330 | 75 | 18.52 | 34.34 | 5.33 | 24.66 | 329 | 0.25 |
| 80 | 18.48 | 34.34 | 5.34 | 328 | 100 | 15.05 | 33.87 | 4.16 | 25.11 | 286 | 0.33 |
| 89 | 17.46 | 34.22 | 5.17 | 313 | 150 | 11.05 | 33.78 | 3.68 | 25.84 | 217 | 0.46 |
| 99 | 15.24 | 33.89 | 4.16 | 289 | 200 | 10.05 | 34.07 | 2.39 | 26.24 | 179 | 0.56 |
| 112 | 13.12 | 33.73 | 4.26 | 258 | 250 | 9.86 | 34.34 | 1.34 | 26.48 | 156 | 0.64 |
| 132 | 11.72 | 33.68 | 4.05 | 236 | 300 | 9.16 | 34.34 | 1.25 | 26.60 | 145 | 0.72 |
| 151 | 11.02 | 33.79 | 3.67 | 216 | 400 | 7.85 | 34.34 | 0.79 | 26.80 | 126 | 0.86 |
| 198 | 10.06 | 34.04 | 2.46 | 182 | 500 | 6.81 | 34.34 | 0.43 | 26.95 | 112 | 0.98 |
| 246 | 9.91 | 34.34 | 1.38 | 157 | | | | | | | |
| 347 | 8.47 | 34.34 | 1.11 | 135 | | | | | | | |
| 444 | 7.39 | 34.34 | 0.60 | 119 | | | | | | | |
| 548 | 6.32 | 34.36 | 0.31 | 104 | | | | | | | |
| PAOLINA-T; January 19, 1958; 0245 GCT; 29°10'N, 118°42'W; sounding, 1640 fm; wind, 270°, force 3; weather, partly cloudy; sea, high; wire angle, 11°. | | | | | | | | | | | 107.70 |
| 0 | 17.37 | 33.75 | 5.42 | 345 | 0 | 17.37 | 33.75 | 5.42 | 24.49 | 345 | 0.00 |
| 10 | 17.38 | 33.77 | 5.51 | 344 | 10 | 17.38 | 33.77 | 5.51 | 24.50 | 344 | 0.03 |
| 30 | 17.32 | 33.75 | 5.32 | 343 | 20 | 17.35 | 33.76 | 5.40 | 24.50 | 344 | 0.07 |
| 54 | 17.30 | 33.77 | 5.44 | 342 | 30 | 17.32 | 33.75 | 5.32 | 24.51 | 343 | 0.10 |
| 63 | 17.31 | 33.75 | 5.46 | 343 | 50 | 17.30 | 33.76 | 5.43 | 24.52 | 342 | 0.17 |
| 74 | 17.33 | 33.75 | 5.73 | 343 | 75 | 17.33 | 33.75 | 5.72 | 24.51 | 343 | 0.26 |
| 84 | 17.08 | 33.75 | 5.63 | 339 | 100 | 14.82 | 33.60 | 5.90 | 24.96 | 301 | 0.34 |
| 99 | 14.89 | 33.60 | 5.91 | 303 | 150 | 11.30 | 33.45 | 5.19 | 25.53 | 246 | 0.48 |
| 113 | 14.08 | 33.58 | 5.70 | 288 | 200 | 9.55 | 33.73 | 3.90 | 26.07 | 195 | 0.59 |
| 131 | 12.86 | 33.53a) | 5.60 | 268 | 250 | 8.26 | 33.99 | 2.82 | 26.46 | 158 | 0.68 |
| 151 | 11.20 | 33.45 | 5.16 | 244 | 300 | 7.55 | 34.09 | 2.15 | 26.65 | 140 | 0.76 |
| 175 | 10.06 | 33.49 | 4.77 | 222 | 400 | 6.58 | 34.18 | 1.08 | 26.85 | 121 | 0.90 |
| 199 | 9.59 | 33.72 | 3.91 | 197 | 500 | 5.82 | 34.25 | 0.63 | 27.00 | 107 | 1.01 |
| 245 | 8.36 | 33.98 | 2.88 | 160 | | | | | | | |
| 322 | 7.26 | 34.11 | 1.86 | 134 | | | | | | | |
| 418 | 6.46 | 34.19 | 0.95 | 119 | | | | | | | |
| 544 | 5.50 | 34.28 | 0.50 | 101 | | | | | | | |

a) Possible evaporation; value falls on property curve.

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

110.33 PAOLINA-T; January 21, 1958; 2020 GCT; 29°50'N, 115°52'W; sounding, 57 fm; wind, 300°, force 5; weather, cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.56 | 33.88 | 5.46 | 317 | 0 | 16.56 | 33.88 | 5.46 | 24.79 | 317 | 0.00 |
| 10 | 16.78 | 33.98 | 5.43 | 315 | 10 | 16.78 | 33.98 | 5.43 | 24.81 | 315 | 0.03 |
| 30 | 17.00 | 34.09 | 5.38 | 312 | 20 | 16.90 | 34.04 | 5.40 | 24.83 | 313 | 0.06 |
| 50 | 17.20 | 34.18 | 5.10 | 310 | 30 | 17.00 | 34.09 | 5.38 | 24.84 | 312 | 0.09 |
| 75 | 17.10 | 34.16 | 5.13 | 309 | 50 | 17.20 | 34.18 | 5.10 | 24.86 | 310 | 0.16 |
| | | | | | 75 | 17.10 | 34.16 | 5.13 | 24.87 | 309 | 0.24 |

110.35 PAOLINA-T; January 21, 1958; 1838 GCT; 29°46.5'N, 115°59'W; sounding, 740 fm; wind, 250°, force 4; weather, partly cloudy; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.21 | 34.14 | 5.18 | 313 | 0 | 17.21 | 34.14 | 5.18 | 24.83 | 313 | 0.00 |
| 10 | 17.20 | 34.16 | 5.18 | 312 | 10 | 17.20 | 34.16 | 5.18 | 24.84 | 312 | 0.03 |
| 30 | 17.20 | 34.14 | 5.28 | 313 | 20 | 17.20 | 34.15 | 5.24 | 24.84 | 312 | 0.06 |
| 40 | 17.16 | 34.14 | 5.20 | 312 | 30 | 17.20 | 34.14 | 5.28 | 24.83 | 313 | 0.09 |
| 50 | 17.00 | 34.13 | 5.03 | 309 | 50 | 17.00 | 34.13 | 5.03 | 24.87 | 309 | 0.16 |
| 59 | 15.52 | 33.99 | 3.69 | 288 | 75 | 14.76 | 33.89 | 3.17 | 25.18 | 279 | 0.23 |
| 69 | 15.02 | 33.90 | 3.36 | 284 | 100 | 13.42 | 33.87 | 3.20 | 25.46 | 253 | 0.30 |
| 84 | 14.37 | 33.88 | 3.02 | 271 | 150 | 11.40 | 33.87 | 3.03 | 25.84 | 216 | 0.42 |
| 98 | 13.46 | 33.87 | 3.20 | 254 | 200 | 10.62 | 34.22 | 1.67 | 26.26 | 177 | 0.52 |
| 112 | 13.00 | 33.90 | 2.87 | 243 | 250 | 9.84 | 34.31 | 1.41 | 26.46 | 158 | 0.60 |
| 136 | 11.78 | 33.80 | 3.39 | 228 | 300 | 9.36 | 34.37 | 1.02 | 26.58 | 146 | 0.68 |
| 165 | 11.10 | 34.02 | 2.65 | 200 | 400 | 8.29 | 34.45 | 0.68 | 26.82 | 124 | 0.82 |
| 198 | 10.63 | 34.22 | 1.70 | 178 | 500 | 7.15 | 34.39 | 0.50 | 26.94 | 113 | 0.94 |
| 246 | 9.86 | 34.31 | 1.41 | 158 | | | | | | | |
| 323 | 9.17 | 34.39 | 0.86 | 141 | | | | | | | |
| 421 | 8.03 | 34.46 | 0.64 | 120 | | | | | | | |
| 548 | 6.65 | 34.33 | 0.42 | 110 | | | | | | | |

110.40 PAOLINA-T; January 21, 1958; 1605 GCT; 29°42.5'N, 116°19'W; sounding, 1250 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.70 | 33.74 | 5.37 | 332 | 0 | 16.70 | 33.74 | 5.37 | 24.63 | 332 | 0.00 |
| 10 | 16.72 | 33.72 | 5.47 | 333 | 10 | 16.72 | 33.72 | 5.47 | 24.62 | 333 | 0.03 |
| 30 | 16.65 | 33.74 | 5.32 | 330 | 20 | 16.71 | 33.72 | 5.44 | 24.62 | 333 | 0.07 |
| 55 | 16.12 | 33.66 | 5.51 | 324 | 30 | 16.65 | 33.74 | 5.32 | 24.65 | 330 | 0.10 |
| 65 | 15.50 | 33.70 | 5.44 | 308 | 50 | 16.25 | 33.68 | 5.48 | 24.69 | 326 | 0.16 |
| 74 | 14.46 | 33.49 | 5.38 | 302 | 75 | 14.44 | 33.49 | 5.36 | 24.96 | 301 | 0.24 |
| 84 | 13.94 | 33.56 | 5.16 | 287 | 100 | 12.83 | 33.53 | 5.10 | 25.31 | 267 | 0.32 |
| 99 | 12.93 | 33.54 | 5.10 | 269 | 150 | 10.56 | 33.80 | 3.02 | 25.94 | 208 | 0.44 |
| 113 | 11.65 | 33.43 | 5.08 | 252 | 200 | 9.62 | 34.04 | 2.40 | 26.29 | 174 | 0.53 |
| 132 | 10.60 | 33.57 | 4.32 | 225 | 250 | 8.71 | 34.11 | 2.34 | 26.49 | 155 | 0.62 |
| 152 | 10.56 | 33.82 | 3.01 | 206 | 300 | 8.62 | 34.20 | 1.64 | 26.58 | 147 | 0.69 |
| 176 | 9.60 | 33.84 | 3.05 | 189 | 400 | 7.39 | 34.23 | 1.17 | 26.79 | 127 | 0.84 |
| 199 | 9.65 | 34.04 | 2.42 | 175 | 500 | 6.51 | 34.26 | 0.75 | 26.93 | 114 | 0.96 |
| 248 | 8.72 | 34.09 | 2.36 | 157 | | | | | | | |
| 325 | 8.55 | 34.27 | 1.30 | 141 | | | | | | | |
| 422 | 7.03 | 34.23 | 1.13 | 123 | | | | | | | |
| 551 | 6.28 | 34.29 | 0.52 | 108 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; January 21, 1958; 0922 GCT; 29°19'N, 117°00'W; sounding, 1950 fm; wind, 330°, force 3; weather, partly cloudy; sea, slight; wire angle, 05°. 110.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.27 | 33.88 | 5.47 | 334 | 0 | 17.27 | 33.88 | 5.47 | 24.61 | 334 | 0.00 |
| 10 | 17.28 | 33.82 | 5.46 | 338 | 10 | 17.28 | 33.82 | 5.46 | 24.57 | 338 | 0.03 |
| 30 | 17.33 | 33.85 | 5.36 | 337 | 20 | 17.30 | 33.83 | 5.41 | 24.57 | 338 | 0.07 |
| 50 | 17.70 | 34.01 | 5.42 | 334 | 30 | 17.33 | 33.85 | 5.36 | 24.58 | 337 | 0.10 |
| 65 | 18.14 | 34.17 | 5.38 | 333 | 50 | 17.70 | 34.01 | 5.42 | 24.61 | 334 | 0.17 |
| 75 | 18.24 | 34.23 | 5.14 | 331 | 75 | 18.24 | 34.23 | 5.14 | 24.64 | 331 | 0.25 |
| 85 | 18.10 | 34.20 | 5.16 | 330 | 100 | 14.28 | 33.63 | 4.87 | 25.10 | 288 | 0.33 |
| 100 | 14.28 | 33.63 | 4.87 | 288 | 150 | 10.73 | 33.71 | 3.62 | 25.84 | 217 | 0.46 |
| 113 | 12.47 | 33.58 | 4.80 | 257 | 200 | 10.13 | 34.06 | 2.18 | 26.22 | 181 | 0.56 |
| 133 | 11.46 | 33.55 | 4.61 | 241 | 250 | 9.46 | 34.29 | 1.52 | 26.50 | 154 | 0.64 |
| 152 | 10.70 | 33.73 | 3.50 | 215 | 300 | 9.22 | 34.39 | 1.01 | 26.62 | 143 | 0.72 |
| 175 | 10.60 | 33.89 | 2.77 | 201 | 400 | 8.20 | 34.39 | 0.56 | 26.79 | 127 | 0.86 |
| 199 | 10.17 | 34.05 | 2.20 | 182 | 500 | 7.23 | 34.39 | 0.32 | 26.92 | 114 | 0.99 |
| 246 | 9.52 | 34.27 | 1.65 | 156 | | | | | | | |
| 322 | 9.09 | 34.40 | 0.82 | 140 | | | | | | | |
| 419 | 8.00 | 34.39 | 0.52 | 124 | | | | | | | |
| 546 | 6.82 | 34.39 | 0.25 | 108 | | | | | | | |

PAOLINA-T; January 21, 1958; 0241 GCT; 28°57'N, 117°40'W; sounding, 1920 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. 110.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.08 | 34.21 | 5.30 | 329 | 0 | 18.08 | 34.21 | 5.30 | 24.66 | 329 | 0.00 |
| 10 | 17.94 | 34.16 | 5.46 | 329 | 10 | 17.94 | 34.16 | 5.46 | 24.66 | 329 | 0.03 |
| 30 | 17.90 | 34.22 | 5.33 | 323 | 20 | 17.92 | 34.20 | 5.40 | 24.70 | 325 | 0.06 |
| 55 | 17.99 | 34.18 | 5.20 | 328 | 30 | 17.90 | 34.22 | 5.33 | 24.72 | 323 | 0.10 |
| 66 | 18.15 | 34.23 | 5.15 | 329 | 50 | 17.96 | 34.20 | 5.23 | 24.69 | 326 | 0.16 |
| 75 | 18.12 | 34.24 | 5.06 | 327 | 75 | 18.12 | 34.24 | 5.06 | 24.68 | 327 | 0.24 |
| 85 | 15.77 | 34.07 | 3.67 | 287 | 100 | 13.98 | 33.91 | 3.21 | 25.37 | 261 | 0.32 |
| 100 | 13.98 | 33.91 | 3.21 | 261 | 150 | 10.88 | 33.91 | | 25.97 | 205 | 0.44 |
| 114 | 13.45 | 33.96 | 2.86 | 248 | 200 | 10.40 | 34.29 | 1.57 | 26.35 | 169 | 0.53 |
| 134 | 12.11 | 33.96 | 2.56 | 222 | 250 | 10.32 | 34.42 | 0.87 | 26.47 | 157 | 0.62 |
| 153 | 10.85 | 33.93 | 2.65 | 203 | 300 | 9.41 | 34.40 | 0.80 | 26.61 | 144 | 0.69 |
| 177 | 10.60 | 34.14 | 1.92 | 183 | 400 | 8.02 | 34.39 | 0.55 | 26.81 | 125 | 0.84 |
| 201 | 10.40 | 34.29 | 1.57 | 168 | 500 | 7.13 | 34.39 | 0.36 | 26.94 | 112 | 0.96 |
| 250 | 10.32 | 34.42 | 0.87 | 157 | | | | | | | |
| 328 | 8.86 | 34.39 | 0.73 | 137 | | | | | | | |
| 426 | 7.80 | 34.39 | 0.50 | 121 | | | | | | | |
| 554 | 6.66 | 34.39 | 0.26 | 106 | | | | | | | |

PAOLINA-T; January 20, 1958; 0329 GCT; 28°38'N, 118°18'W; sounding, 1750 fm; wind, 020°, force 4; weather, partly cloudy; sea, rough; wire angle, 02°. 110.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.54 | 33.97a) | 5.47 | 333 | 0 | 17.54 | 33.97 | 5.47 | 24.62 | 333 | 0.00 |
| 10 | 17.53 | 33.90 | 5.44 | 338 | 10 | 17.53 | 33.90 | 5.44 | 24.57 | 338 | 0.03 |
| 30 | 17.43 | 33.88 | 5.41 | 338 | 20 | 17.50 | 33.89 | 5.43 | 24.57 | 338 | 0.07 |
| 55 | 17.49 | 33.96a) | 5.40 | 332 | 30 | 17.43 | 33.88 | 5.41 | 24.57 | 338 | 0.10 |
| 66 | 17.62 | - | 5.33 | | 50 | 17.48 | 33.94 | 5.40 | 24.62 | 333 | 0.17 |
| 75 | 17.72 | - | 5.16 | | 75 | 17.72 | 34.20 | 5.16 | 24.75 | 321 | 0.25 |
| 85 | 16.42 | 33.94 | 4.93 | 311 | 100 | 13.45 | 33.69 | 4.23 | 25.31 | 267 | 0.32 |
| 98 | 13.80 | 33.73 | 4.19 | 271 | 150 | 11.02 | 33.85 | 3.13 | 25.89 | 212 | 0.45 |
| 114 | 12.28 | 33.58b) | 4.42 | 253 | 200 | 10.28 | 34.16 | 2.06 | 26.27 | 176 | 0.55 |
| 133 | 11.85 | 33.80 | 3.46 | 229 | 250 | 9.83 | 34.38 | 1.27 | 26.52 | 153 | 0.63 |
| 153 | 10.94 | - | 3.07 | | 300 | 8.78 | 34.33 | 1.15 | 26.65 | 140 | 0.71 |
| 177 | 10.98 | - | 2.06 | | 400 | 7.57 | 34.32 | 0.70 | 26.83 | 123 | 0.84 |
| 201 | 10.24 | 34.16 | 2.06 | 176 | 500 | 6.30 | 34.28 | 0.61 | 26.97 | 109 | 0.97 |
| 249 | 9.84 | 34.38 | 1.27 | 153 | | | | | | | |
| 320p | 8.36 | 34.31 | 1.12 | 135 | | | | | | | |
| 401p | 7.54 | 34.32 | 0.68 | 123 | | | | | | | |
| 511p | 6.12 | 34.28 | 0.61 | 107 | | | | | | | |

a) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **110.80** | PAOLINA-T; January 19, 1958; 2123 GCT; 28°19'N, 118°55.5'W; sounding, 2030 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 18.14 | 34.02 | 5.28 | 344 | 0 | 18.14 | 34.02 | 5.28 | 24.51 | 344 | 0.00 |
| 10 | 18.08 | 34.02 | 5.53 | 342 | 10 | 18.08 | 34.02 | 5.53 | 24.53 | 342 | 0.03 |
| 30 | 18.05 | 34.02 | 5.49 | 341 | 20 | 18.06 | 34.02 | 5.51 | 24.53 | 342 | 0.07 |
| 55 | 18.05 | 34.04 | 5.44 | 340 | 30 | 18.05 | 34.02 | 5.49 | 24.53 | 341 | 0.10 |
| 65 | 18.04 | 34.02 | 5.40 | 340 | 50 | 18.05 | 34.02 | 5.45 | 24.54 | 340 | 0.17 |
| 75 | 18.05 | - | 5.40 | | 75 | 18.05 | 34.02 | 5.40 | 24.54 | 340 | 0.26 |
| 84 | 17.32 | - | 5.34 | | 100 | 14.10 | 33.77 | 4.84 | 25.24 | 274 | 0.34 |
| 99 | 14.19 | 33.78 | 4.88 | 275 | 150 | 11.90 | 33.96 | 2.52 | 25.82 | 218 | 0.46 |
| 113 | 13.16 | 33.61 | 4.31 | 267 | 200 | 10.23 | 34.15 | 1.88 | 26.27 | 176 | 0.56 |
| 132 | 11.87 | 33.68 | 3.89 | 239 | 250 | 8.92 | 34.20 | 1.83 | 26.53 | 152 | 0.64 |
| 151 | 11.90 | - | 2.48 | | 300 | 8.89 | 34.39 | 1.15 | 26.68 | 137 | 0.72 |
| 174 | 10.31 | 33.93 | 2.69 | 194 | 400 | 7.81 | 34.42 | 0.48 | 26.86 | 120 | 0.85 |
| 199 | 10.26 | 34.15 | 1.88 | 177 | 500 | 6.82 | | 0.45 | | | |
| 246 | 8.93 | 34.20 | 1.86 | 152 | | | | | | | |
| 322 | 8.85 | 34.47 | 0.72 | 131 | | | | | | | |
| 418 | 7.54 | 34.40 | 0.47 | 117 | | | | | | | |
| 545 | 6.45 | - | 0.45 | | | | | | | | |
| **110.90** | PAOLINA-T; January 19, 1958; 1450 GCT; 27°55.5'N, 119°32.5'W; sounding, 2180 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 17°. | | | | | | | | | | |
| 0 | 17.45 | 33.88 | 5.56 | 338 | 0 | 17.45 | 33.88 | 5.56 | 24.57 | 338 | 0.00 |
| 10 | 17.43 | 33.87 | 5.56 | 338 | 10 | 17.43 | 33.87 | 5.56 | 24.57 | 338 | 0.03 |
| 29 | 17.46 | 33.87 | 5.51 | 338 | 20 | 17.43 | 33.87 | 5.54 | 24.57 | 338 | 0.07 |
| 58 | 17.48 | 33.89 | 5.56 | 338 | 30 | 17.46 | 33.87 | 5.51 | 24.57 | 338 | 0.10 |
| 67 | 17.50 | 33.89 | 5.52 | 338 | 50 | 17.46 | 33.88 | 5.53 | 24.57 | 338 | 0.17 |
| 76 | 17.49 | 33.93 | 5.37 | 325 | 75 | 17.49 | 33.92 | 5.40 | 24.60 | 335 | 0.25 |
| 90 | 15.12 | 33.73 | 5.18 | 298 | 100 | 13.28 | 33.63 | 4.73 | 25.30 | 268 | 0.33 |
| 104 | 12.76 | 33.62 | 4.55 | 259 | 150 | 10.78 | 33.92 | 2.85 | 26.00 | 202 | 0.45 |
| 117 | 11.96 | 33.72 | 3.87 | 237 | 200 | 9.46 | 34.11 | 2.42 | 26.36 | 167 | 0.54 |
| 136 | 10.96 | 33.84 | 3.40 | 211 | 250 | 8.34 | 34.13 | 2.38 | 26.56 | 148 | 0.62 |
| 153 | 10.74 | 33.94 | 2.78 | 200 | 300 | 7.98 | 34.23 | 1.73 | 26.70 | 135 | 0.70 |
| 180 | 10.04 | 34.04 | 2.56 | 181 | 400 | 6.90 | 34.25 | 1.00 | 26.86 | 120 | 0.83 |
| 203 | 9.40 | 34.12 | 2.40 | 165 | 500 | 6.00 | 34.30 | 0.54 | 27.03 | 104 | 0.94 |
| 254 | 8.27 | 34.13 | 2.37 | 148 | | | | | | | |
| 333 | 7.86 | 34.25 | 1.34 | 133 | | | | | | | |
| 436 | 6.36 | 34.25 | 0.87 | 113 | | | | | | | |
| 571 | 5.84 | 34.38 | 0.33 | 97 | | | | | | | |
| **113.30** | PAOLINA-T; January 22, 1958; 0203 GCT; 29°23'N, 115°17.5'W; sounding, 30 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 17.68 | 34.21 | 5.29 | 319 | 0 | 17.68 | 34.21 | 5.29 | 24.77 | 319 | 0.00 |
| 10 | 17.69 | 34.20 | 5.20 | 320 | 10 | 17.69 | 34.20 | 5.20 | 24.76 | 320 | 0.03 |
| 30 | 17.67 | 34.19 | 5.23 | 320 | 20 | 17.68 | 34.19 | 5.22 | 24.76 | 320 | 0.06 |
| 40 | 17.66 | 34.20 | 5.24 | 319 | 30 | 17.67 | 34.19 | 5.23 | 24.76 | 320 | 0.09 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| PAOLINA-T; January 22, 1958; 0558 GCT; 29°12.5'N, 115°41'W; sounding, 530 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 25°. | | | | | | | | | | | 113.35 |
| 0 | 17.38 | 34.06 | | 323 | 0 | 17.38 | 34.06 | | 24.73 | 323 | 0.00 |
| 9 | 17.38 | 34.08 | | 322 | 10 | 17.38 | 34.08 | | 24.74 | 322 | 0.03 |
| 32 | 17.38 | 34.07 | | 322 | 20 | 17.38 | 34.08 | | 24.74 | 322 | 0.06 |
| 60 | 16.76 | 33.94 | | 318 | 30 | 17.38 | 34.07 | | 24.74 | 322 | 0.10 |
| 69 | 16.66 | 33.96 | | 315 | 50 | 17.10 | 34.00 | | 24.75 | 320 | 0.16 |
| 82 | 15.89 | 33.94 | | 298 | 75 | 16.38 | 33.95 | | 24.87 | 309 | 0.24 |
| 91 | 14.45 | 33.84 | | 276 | 100 | 13.64 | 33.80 | | 25.36 | 263 | 0.31 |
| 108 | 13.08 | 33.78 | | 253 | 150 | 11.87 | 34.07 | | 25.91 | 210 | 0.43 |
| 121 | 12.64 | 33.86a) | | 239 | 200 | 10.68 | 34.27 | | 26.29 | 174 | 0.53 |
| 139 | 12.16 | 34.02a) | | 219 | 250 | 10.03 | 34.44 | | 26.53 | 152 | 0.61 |
| 187 | 10.94 | 34.19 | | 185 | 300 | 9.38 | 34.43 | | 26.63 | 142 | 0.69 |
| 213 | 10.51 | 34.32b) | | 169 | 400 | 8.19 | 34.39 | | 26.79 | 127 | 0.83 |
| 266 | 9.84 | 34.47 | | 146 | 500 | 7.29 | 34.39 | | 26.92 | 115 | 0.96 |
| 347 | 8.78 | 34.36 | | 137 | 600 | (6.43) | (34.32) | | (26.99) | (108) | (1.07) |
| 453 | 7.71 | 34.41 | | 119 | | | | | | | |
| 597 | 6.44 | 34.33 | | 108 | | | | | | | |
| PAOLINA-T; January 22, 1958; 1225 GCT; 29°03'N, 116°04'W; sounding, 450 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 16°. | | | | | | | | | | | 113.40 |
| 0 | 17.07 | 33.91 | | 328 | 0 | 17.07 | 33.91 | | 24.67 | 328 | 0.00 |
| 10 | 17.08 | 33.91 | | 328 | 10 | 17.08 | 33.91 | | 24.67 | 328 | 0.03 |
| 33 | 17.09 | 33.88 | | 329 | 20 | 17.08 | 33.90 | | 24.67 | 328 | 0.06 |
| 63 | 17.08 | 33.93 | | 325 | 30 | 17.08 | 33.88 | | 24.66 | 329 | 0.10 |
| 72 | 14.78 | 33.57c) | | 302 | 50 | 17.08 | 33.90 | | 24.68 | 327 | 0.16 |
| 87 | 13.33 | 33.51 | | 278 | 75 | 14.30 | 33.55 | | 25.03 | 294 | 0.24 |
| 97 | 14.02 | 33.84 | | 267 | 100 | 13.86 | 33.84 | | 25.35 | 264 | 0.31 |
| 116 | 12.53 | 33.82 | | 240 | 150 | 11.00 | 33.84 | | 25.89 | 212 | 0.43 |
| 129 | 11.90 | 33.86 | | 226 | 200 | 9.52 | 34.04 | | 26.30 | 173 | 0.53 |
| 149 | 11.10 | 33.84 | | 213 | 250 | 9.05 | 34.24 | | 26.54 | 151 | 0.61 |
| 172 | 10.06 | 34.02 | | 184 | 300 | 8.74 | 34.29 | | 26.63 | 142 | 0.69 |
| 200 | 9.52 | 34.04 | | 173 | 400 | 7.82 | 34.35 | | 26.81 | 125 | 0.83 |
| 229 | 9.20 | 34.20 | | 156 | 500 | 6.62 | 34.37 | | 27.00 | 107 | 0.95 |
| 285 | 8.86 | 34.28 | | 145 | 600 | 5.91 | 34.39 | | 27.10 | 97 | 1.06 |
| 371 | 8.16 | 34.34 | | 130 | | | | | | | |
| 481 | 6.80 | 34.37 | | 110 | | | | | | | |
| 627 | 5.80 | 34.39 | | 96 | | | | | | | |
| PAOLINA-T; January 22, 1958; 1847 GCT; 28°41'N, 116°30'W; sounding, 2200 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 12°. | | | | | | | | | | | 113.50 |
| 0 | 17.34 | 33.91 | 5.42 | 333 | 0 | 17.34 | 33.91 | 5.42 | 24.62 | 333 | 0.00 |
| 10 | 17.34 | 33.91 | 5.34 | 333 | 10 | 17.34 | 33.91 | 5.34 | 24.62 | 333 | 0.03 |
| 29 | 17.38 | 33.91 | 5.39 | 334 | 20 | 17.36 | 33.91 | 5.36 | 24.62 | 333 | 0.07 |
| 58 | 17.96 | 34.23 | 5.24 | 324 | 30 | 17.38 | 33.91 | 5.38 | 24.61 | 334 | 0.10 |
| 68 | 17.99 | 34.19 | 5.28 | 327 | 50 | 17.93 | 34.20 | 5.27 | 24.70 | 325 | 0.16 |
| 77 | 17.92 | 34.22 | 4.93 | 324 | 75 | 17.94 | 34.20 | 5.00 | 24.69 | 326 | 0.25 |
| 91 | 15.37 | 33.93 | 4.19 | 288 | 100 | 14.02 | 33.81 | 3.88 | 25.28 | 270 | 0.32 |
| 105 | 13.44 | 33.78 | 3.75 | 261 | 150 | 10.21 | 33.73 | 3.66 | 25.94 | 207 | 0.44 |
| 118 | 12.26 | 33.77 | 3.48 | 239 | 200 | 9.48 | 34.05 | 2.44 | 26.32 | 171 | 0.54 |
| 136 | 10.84 | 33.66 | 4.05 | 223 | 250 | 9.48 | 34.34 | 1.56 | 26.55 | 150 | 0.62 |
| 153 | 10.11 | 33.75 | 3.57 | 203 | 300 | 9.10 | 34.38 | 0.90 | 26.65 | 140 | 0.70 |
| 181 | 9.50 | 33.93 | 3.00 | 181 | 400 | 8.02 | 34.41 | 0.80 | 26.83 | 123 | 0.83 |
| 203 | 9.48 | 34.07 | 2.38 | 170 | 500 | 7.12 | 34.43 | 0.52 | 26.98 | 109 | 0.95 |
| 253 | 9.40 | 34.34b) | 1.34 | 149 | | | | | | | |
| 331 | 8.88 | 34.39 | 0.81 | 137 | | | | | | | |
| 433 | 7.62 | 34.42 | 0.78 | 117 | | | | | | | |
| 568 | 6.58 | 34.43 | 0.32 | 102 | | | | | | | |

a) Possible evaporation; value falls on property curve.
b) Loose bottle cap; value falls on property curve.
c) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **113.60** | PAOLINA-T; January 23, 1958; 0135 GCT; 28°20.5'N, 117°20.5'W; sounding, 2000+ fm; wind, 300°, force 5; weather, partly cloudy; sea, high; wire angle, 06°. | | | | | | | | | | |
| 0 | 17.66 | 34.05 | 5.16 | 330 | 0 | 17.66 | 34.05 | 5.16 | 24.65 | 330 | 0.00 |
| 10 | 17.91 | 34.11 | 5.40 | 331 | 10 | 17.91 | 34.11 | 5.40 | 24.64 | 331 | 0.03 |
| 30 | 18.42 | 34.31a) | 5.06 | 329 | 20 | 18.00 | 34.15 | 5.33 | 24.64 | 331 | 0.07 |
| 60 | 18.33 | 34.29 | 5.15 | 328 | 30 | 18.42 | 34.31 | 5.06 | 24.66 | 329 | 0.10 |
| 70 | 18.29 | 34.27 | 5.20 | 329 | 50 | 18.36 | 34.30 | 5.10 | 24.67 | 328 | 0.16 |
| 80 | 17.84 | 34.16 | 5.12 | 326 | 75 | 18.17 | 34.24 | 5.18 | 24.67 | 328 | 0.25 |
| 96 | 15.33 | 33.93 | 3.93 | 287 | 100 | 14.78 | 33.91 | 3.70 | 25.20 | 278 | 0.32 |
| 111 | 13.90 | 33.92 | 3.20 | 259 | 150 | 12.69 | 34.09 | 2.27 | 25.77 | 224 | 0.45 |
| 125 | 13.38 | 34.04 | 2.45 | 240 | 200 | 9.50 | 33.96 | 3.10 | 26.25 | 178 | 0.55 |
| 145 | 12.99 | 34.10 | 2.24 | 228 | 250 | 9.03 | 34.20 | 2.19 | 26.50 | 154 | 0.64 |
| 164 | 10.84 | 33.91 | 2.82 | 204 | 300 | 8.55 | 34.26 | 1.52 | 26.63 | 142 | 0.71 |
| 194 | 9.54 | 33.89 | 3.29 | 185 | 400 | 7.76 | 34.34 | 0.62 | 26.82 | 124 | 0.85 |
| 218 | 9.40 | 34.09 | 2.50 | 167 | 500 | 7.01 | 34.39 | 0.39 | 26.96 | 111 | 0.97 |
| 271 | 8.82 | 34.23 | 1.95 | 148 | 600 | (6.10) | (34.41) | (0.37) | (27.09) | (98) | (1.08) |
| 352 | 8.10 | 34.30 | 0.90 | 132 | | | | | | | |
| 459 | 7.37 | 34.38 | 0.42 | 116 | | | | | | | |
| 599 | 6.14 | 34.41 | 0.37 | 98 | | | | | | | |
| **113.70** | PAOLINA-T; January 23, 1958; 0705 GCT; 28°04.5'N, 117°51'W; sounding, 1840 fm; wind, 300°, force 3; weather, clear; sea, very rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 18.12 | 33.99 | 5.28 | 345 | 0 | 18.12 | 33.99 | 5.28 | 24.49 | 345 | 0.00 |
| 10 | 18.13 | 34.00 | 5.38 | 345 | 10 | 18.13 | 34.00 | 5.38 | 24.49 | 345 | 0.03 |
| 30 | 18.12 | 34.01 | 5.20 | 344 | 20 | 18.12 | 34.00 | 5.28 | 24.49 | 345 | 0.07 |
| 54 | 17.77 | 33.98 | 5.38 | 338 | 30 | 18.12 | 34.01 | 5.20 | 24.50 | 344 | 0.10 |
| 63 | 17.72 | 34.03 | 5.35 | 332 | 50 | 17.81 | 33.98 | 5.36 | 24.56 | 339 | 0.17 |
| 74 | 17.81 | 34.09 | 5.33 | 331 | 75 | 17.78 | 34.09 | 5.33 | 24.65 | 331 | 0.26 |
| 82 | 15.84 | 33.78 | 5.34 | 310 | 100 | 13.62 | 33.79 | 4.13 | 25.36 | 263 | 0.33 |
| 97 | 13.94 | 33.79 | 4.23 | 270 | 150 | 10.30 | 33.79 | 3.78 | 25.98 | 203 | 0.45 |
| 112 | 12.72 | 33.77 | 3.81 | 247 | 200 | 9.23 | 33.98 | 2.81 | 26.30 | 173 | 0.55 |
| 131 | 12.07 | 33.84 | 3.42 | 231 | 250 | 8.63 | 34.21 | 2.22 | 26.58 | 147 | 0.63 |
| 150 | 10.30 | 33.79 | 3.78 | 203 | 300 | 8.37 | 34.31 | 1.12 | 26.70 | 135 | 0.70 |
| 174 | 9.60 | 33.86 | 3.21 | 187 | 400 | 7.83 | 34.40 | 0.55 | 26.85 | 121 | 0.84 |
| 198 | 9.24 | 33.97 | 2.83 | 174 | 500 | 6.92 | 34.41 | 0.38 | 26.98 | 108 | 0.95 |
| 247 | 8.66 | 34.20 | 2.26 | 148 | | | | | | | |
| 324 | 8.30 | 34.34 | 0.94 | 132 | | | | | | | |
| 422 | 7.62 | 34.42 | 0.48 | 117 | | | | | | | |
| 550 | 6.44 | 34.40 | 0.35 | 103 | | | | | | | |
| **117.26** | PAOLINA-T; January 25, 1958; 1240 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 17.21 | 34.16 | 5.38 | 312 | 0 | 17.21 | 34.16 | 5.38 | 24.84 | 312 | 0.00 |
| 10 | 17.23 | 34.18 | 5.40 | 311 | 10 | 17.23 | 34.18 | 5.40 | 24.85 | 311 | 0.03 |
| 30 | 17.25 | 34.20 | 5.34 | 310 | 20 | 17.24 | 34.19 | 5.36 | 24.86 | 310 | 0.06 |
| 51 | 17.20 | 34.17 | 5.28 | 311 | 30 | 17.25 | 34.20 | 5.34 | 24.86 | 310 | 0.09 |
| | | | | | 50 | 17.20 | 34.17 | 5.28 | 24.85 | 311 | 0.16 |
| **117.30** | PAOLINA-T; January 25, 1958; 0945 GCT; 28°48'N, 114°56'W; sounding, 50 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 18.00 | 34.33 | 5.26 | 318 | 0 | 18.00 | 34.33 | 5.26 | 24.78 | 318 | 0.00 |
| 10 | 18.03 | 34.34 | 5.28 | 318 | 10 | 18.03 | 34.34 | 5.28 | 24.78 | 318 | 0.03 |
| 30 | 18.03 | 34.36 | 5.24 | 316 | 20 | 18.03 | 34.35 | 5.26 | 24.79 | 317 | 0.06 |
| 49 | 17.72 | 34.29 | 5.41 | 314 | 30 | 18.03 | 34.36 | 5.24 | 24.80 | 316 | 0.10 |
| 74 | 17.22 | 34.16 | 5.15 | 312 | 50 | 17.72 | 34.28 | 5.41 | 24.82 | 314 | 0.16 |
| | | | | | 75 | (17.20) | (34.15) | (5.12) | (24.84) | (312) | (0.24) |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| PAOLINA-T; January 25, 1958; 0650 GCT; 28°38'N, 115°16'W; sounding, 100 fm; wind, 330°, force 5; weather, clear; sea, very rough; wire angle, 10°. | | | | | | | | | | | | 117.35 |
| 0 | 18.22 | 34.35 | 5.24 | 322 | 0 | 18.22 | 34.35 | 5.24 | 24.74 | 332 | 0.00 | |
| 10 | 18.26 | 34.37 | 5.33 | 320 | 10 | 18.26 | 34.37 | 5.33 | 24.76 | 320 | 0.03 | |
| 30 | 18.18 | 34.36 | 5.30 | 320 | 20 | 18.20 | 34.37 | 5.30 | 24.76 | 320 | 0.06 | |
| 49 | 18.08 | 34.32 | 5.26 | 320 | 30 | 18.18 | 34.36 | 5.30 | 24.76 | 320 | 0.10 | |
| 74 | 17.88 | 34.30a) | 5.09 | 317 | 50 | 18.07 | 34.32 | 5.24 | 24.76 | 320 | 0.16 | |
| 99 | 16.94 | 34.16 | 4.19 | 306 | 75 | 17.85 | 34.30 | 5.05 | 24.80 | 316 | 0.24 | |
| 123 | 13.59 | 33.87 | 3.22 | 256 | 100 | 16.84 | 34.14 | 4.14 | 24.92 | 305 | 0.32 | |
| PAOLINA-T; January 24, 1958; 0708 GCT; 28°27'N, 115°35'W; sounding, 450 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 08°. | | | | | | | | | | | | 117.40 |
| 0 | 19.19 | 34.54 | 5.18 | 330 | 0 | 19.19 | 34.54 | 5.18 | 24.65 | 330 | 0.00 | |
| 10 | 19.20 | 34.56 | 5.13 | 330 | 10 | 19.20 | 34.56 | 5.13 | 24.65 | 330 | 0.03 | |
| 30 | 19.21 | 34.56 | 5.21 | 330 | 20 | 19.21 | 34.56 | 5.19 | 24.65 | 330 | 0.07 | |
| 40 | 19.01 | 34.51 | 5.08 | 329 | 30 | 19.21 | 34.56 | 5.21 | 24.65 | 330 | 0.10 | |
| 50 | 17.97 | 34.31 | 4.31 | 317 | 50 | 17.97 | 34.31 | 4.31 | 24.79 | 317 | 0.16 | |
| 59 | 17.37 | 34.27 | 4.06 | 308 | 75 | 15.95 | 34.18 | 3.41 | 25.15 | 282 | 0.24 | |
| 69 | 16.53 | 34.22 | 3.63 | 293 | 100 | 14.46 | 34.08 | 2.85 | 25.40 | 259 | 0.31 | |
| 83 | 15.22 | 34.13 | 3.12 | 271 | 150 | 12.32 | 34.18 | 1.83 | 25.91 | 210 | 0.43 | |
| 97 | 14.58 | 34.08 | 2.89 | 261 | 200 | 11.09 | 34.36 | 1.23 | 26.28 | 175 | 0.52 | |
| 112 | 13.90 | 34.10 | 2.44 | 246 | 250 | 10.46 | 34.41 | 1.06 | 26.44 | 160 | 0.61 | |
| 135 | 12.82 | 34.14 | 1.95 | 223 | 300 | 10.10 | 34.47 | 0.79 | 26.55 | 150 | 0.69 | |
| 163 | 11.93 | 34.23 | 1.71 | 198 | 400 | 8.73 | 34.44 | 0.59 | 26.75 | 131 | 0.84 | |
| 197 | 11.15 | 34.36 | 1.26 | 176 | 500 | 7.62 | 34.39 | 0.46 | 26.87 | 119 | 0.97 | |
| 244 | 10.52 | 34.41 | 1.09 | 161 | | | | | | | | |
| 321 | 9.96 | 34.49 | 0.67 | 146 | | | | | | | | |
| 417 | 8.48 | 34.43 | 0.58 | 128 | | | | | | | | |
| 545 | 7.32 | 34.38 | 0.41 | 116 | | | | | | | | |
| PAOLINA-T; January 24, 1958; 0107 GCT; 28°06.5'N, 116°13.5'W; sounding, 2450 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 10°. | | | | | | | | | | | | 117.50 |
| 1 | 17.72 | 34.00 | 5.47 | 335 | 0 | (17.72) | (34.00) | (5.47) | (24.60) | (335) | (0.00) | |
| 10 | 17.46 | 33.98 | 5.54 | 330 | 10 | 17.46 | 33.98 | 5.54 | 24.65 | 330 | 0.03 | |
| 30 | 17.48 | 34.01 | 5.43 | 329 | 20 | 17.46 | 33.99 | 5.50 | 24.66 | 329 | 0.07 | |
| 55 | 18.08 | 34.24 | 5.20 | 326 | 30 | 17.48 | 34.01 | 5.43 | 24.66 | 329 | 0.10 | |
| 63 | 17.61 | 34.16 | 4.77 | 321 | 50 | 18.12 | 34.23 | 5.22 | 24.68 | 327 | 0.16 | |
| 73 | 16.17 | 33.92 | 4.46 | 306 | 75 | 15.83 | 33.87 | 4.47 | 24.94 | 303 | 0.24 | |
| 84 | 14.45 | 33.73 | 4.47 | 284 | 100 | 13.47 | 33.78 | 3.66 | 25.38 | 261 | 0.32 | |
| 99 | 13.51 | 33.78 | 3.71 | 262 | 150 | 11.20 | 34.00 | 2.24 | 25.99 | 203 | 0.43 | |
| 113 | 12.98 | 33.89 | 2.87 | 243 | 200 | 10.86 | 34.36 | 1.15 | 26.32 | 171 | 0.53 | |
| 132 | 12.17 | 34.00 | 2.42 | 220 | 250 | 9.80 | 34.36 | 1.08 | 26.51 | 153 | 0.61 | |
| 150 | 11.20 | 34.00 | 2.24 | 203 | 300 | 9.29 | 34.41 | 0.76 | 26.63 | 142 | 0.69 | |
| 174 | 11.16 | 34.17 | 1.73 | 190 | 400 | 8.18 | 34.40 | 0.53 | 26.80 | 126 | 0.82 | |
| 197 | 10.93 | 34.36 | 1.18 | 172 | 500 | 7.06 | 34.38 | 0.38 | 26.94 | 113 | 0.95 | |
| 243 | 9.90 | 34.36 | 1.11 | 155 | | | | | | | | |
| 318 | 9.12 | 34.42 | 0.67 | 139 | | | | | | | | |
| 412 | 8.04 | 34.40 | 0.52 | 124 | | | | | | | | |
| 537 | 6.69 | 34.37 | 0.33 | 108 | | | | | | | | |

a) Possible evaporation; value falls on property curve.

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **117.60** | PAOLINA-T; January 23, 1958; 1943 GCT; 27°49'N, 116°50'W; sounding, 2000 fm; wind, 040°, force 3; weather, clear; sea, slight; wire angle, 04°. | | | | | | | | | | |
| 0 | 17.45 | 33.96 | 5.50 | 332 | 0 | 17.45 | 33.96 | 5.50 | 24.63 | 332 | 0.00 |
| 10 | 17.30 | 33.99 | 5.47 | 326 | 10 | 17.30 | 33.99 | 5.47 | 24.69 | 326 | 0.03 |
| 30 | 17.29 | 33.91 | 5.57 | 332 | 20 | 17.29 | 33.95 | 5.51 | 24.66 | 329 | 0.06 |
| 55 | 17.26 | 33.96 | 5.44 | 327 | 30 | 17.29 | 33.91 | 5.57 | 24.63 | 332 | 0.10 |
| 65 | 17.61 | 34.13 | 5.33 | 323 | 50 | 17.26 | 33.95 | 5.47 | 24.67 | 328 | 0.16 |
| 74 | 16.92 | 34.00 | 5.05 | 317 | 75 | 16.75 | 33.97 | 5.01 | 24.81 | 315 | 0.24 |
| 84 | 14.57 | 33.68 | 4.64 | 290 | 100 | 13.02 | 33.68 | 3.87 | 25.39 | 260 | 0.32 |
| 98 | 13.11 | 33.68 | 3.95 | 262 | 150 | 11.60 | 34.14 | 1.98 | 26.02 | 200 | 0.43 |
| 114 | 12.54 | 33.86 | 3.09 | 238 | 200 | 10.39 | 34.28 | 1.48 | 26.35 | 169 | 0.53 |
| 133 | 12.25 | 34.04 | 2.24 | 219 | 250 | 9.81 | 34.42 | 0.85 | 26.56 | 149 | 0.61 |
| 152 | 11.54 | 34.15 | 1.96 | 198 | 300 | 9.22 | 34.42 | 0.73 | 26.64 | 141 | 0.68 |
| 175 | 10.86 | 34.22 | 1.64 | 182 | 400 | 8.08 | 34.40 | 0.48 | 26.81 | 125 | 0.82 |
| 200 | 10.39 | 34.28 | 1.48 | 169 | 500 | 7.15 | 34.40 | 0.36 | 26.95 | 111 | 0.95 |
| 248 | 9.82 | 34.42 | 0.85 | 149 | | | | | | | |
| 325 | 8.95 | 34.41 | 0.58 | 137 | | | | | | | |
| 422 | 7.90 | 34.40 | 0.44 | 122 | | | | | | | |
| 550 | 6.70 | 34.41 | 0.32 | 105 | | | | | | | |
| **117.70** | PAOLINA-T; January 23, 1958; 1323 GCT; 27°32.5'N, 117°33'W; sounding, 2000 fm; wind, 040°, force 3; weather, missing; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 17.98 | - | 5.21 | | 0 | 17.98 | (34.01) | 5.21 | (24.54) | (341) | (0.00) |
| 10 | 18.00 | 34.01 | 5.29 | 341 | 10 | 18.00 | 34.01 | 5.29 | 24.54 | 341 | (0.03) |
| 30 | 17.99 | - | 5.45 | | 20 | 17.99 | (34.01) | 5.37 | (24.54) | (341) | (0.07) |
| 55 | 17.98 | - | 5.38 | | 30 | 17.99 | (34.01) | 5.45 | (24.54) | (341) | (0.10) |
| 65 | 17.99 | - | 5.41 | | 50 | 17.98 | (34.01) | 5.38 | (24.54) | (341) | (0.17) |
| 75 | 17.99 | 34.04a) | 5.41 | | 75 | 17.99 | (34.01) | 5.41 | (24.54) | (341) | (0.26) |
| 85 | 17.99 | 33.96 | 5.42 | 344 | 100 | 15.49 | 33.73 | 5.44 | 24.91 | 305 | (0.34) |
| 99 | 15.60 | 33.73 | 5.48 | 308 | 150 | 11.98 | 33.82 | 3.55 | 25.69 | 231 | (0.47) |
| 115 | 14.32 | 33.86b) | 3.86 | 272 | 200 | 9.57 | 33.90 | 3.16 | 26.19 | 184 | (0.58) |
| 133 | 13.46 | 33.98 | 3.03 | 246 | 250 | 8.49 | 34.09 | 2.65 | 26.50 | 154 | (0.66) |
| 154 | 11.63 | 33.78 | 3.69 | 227 | 300 | 8.03 | 34.18 | 1.87 | 26.65 | 140 | (0.74) |
| 176 | 9.93 | 33.68c) | 4.21 | 206 | 400 | 7.05 | 34.27 | 0.96 | 26.86 | 120 | (0.88) |
| 201 | 9.54 | 33.93 | 3.12 | 181 | 500 | 6.31 | | 0.52 | | | |
| 248 | 8.52 | 34.07 | 2.70 | 156 | | | | | | | |
| 325 | 7.85 | 34.22c) | 1.47 | 134 | | | | | | | |
| 423 | 6.85 | 34.29 | 0.87 | 116 | | | | | | | |
| 550 | 6.08 | - | 0.35 | | | | | | | | |
| **118.39** | PAOLINA-T; January 25, 1958; 0250 GCT; 28°18.5'N, 115°24.5'W; sounding, 163 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 18.99 | 34.52 | 5.62 | 327 | 0 | 18.99 | 34.52 | 5.62 | 24.68 | 327 | 0.00 |
| 10 | 19.00 | 34.48 | 5.07 | 331 | 10 | 19.00 | 34.48 | 5.07 | 24.64 | 331 | 0.03 |
| 30 | 17.18 | 34.09 | 5.31 | 316 | 20 | 17.61 | 34.17 | 5.29 | 24.76 | 320 | 0.06 |
| 50 | 17.12 | 34.04u | 5.15 | | 30 | 17.18 | 34.09 | 5.31 | 24.80 | 316 | 0.10 |
| 75 | 16.37 | 34.07 | 4.18 | 300 | 50 | 17.12 | 34.13 | 5.15 | 24.84 | 312 | 0.16 |
| 99 | 14.04 | 33.94 | 3.17 | 260 | 75 | 16.37 | 34.07 | 4.18 | 24.97 | 300 | 0.24 |
| 124 | 13.38 | 34.01 | 2.71 | 242 | 100 | 14.00 | 33.94 | 3.14 | 25.39 | 260 | 0.31 |
| 163 | 11.47 | 34.19 | 1.82 | 194 | 150 | 12.18 | 34.13 | 2.13 | 25.90 | 211 | 0.43 |
| 201 | 10.34 | 34.31 | 1.27 | 166 | 200 | 10.39 | 34.31 | 1.31 | 26.37 | 167 | 0.52 |

a) Possible evaporation; value does not fall on property curve.
b) Loose bottle cap; value falls on property curve.
c) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |

STRANGER; January 27, 1958; 1020 GCT; 28°19'N, 114°53'W; sounding, 60 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 03°. 119.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.64 | 34.21 | 5.26 | 318 | 0 | 17.64 | 34.21 | 5.26 | 24.78 | 318 | 0.00 |
| 10 | 17.66 | 34.22 | 5.27 | 318 | 10 | 17.66 | 34.22 | 5.27 | 24.78 | 318 | 0.03 |
| 29 | 17.66 | 34.21 | 5.27 | 319 | 20 | 17.66 | 34.22 | 5.27 | 24.78 | 318 | 0.06 |
| 49 | 17.66 | 34.20 | 5.29 | 320 | 30 | 17.66 | 34.21 | 5.27 | 24.77 | 319 | 0.10 |
| 74 | 17.65 | 34.19 | 5.30 | 320 | 50 | 17.66 | 34.20 | 5.29 | 24.76 | 320 | 0.17 |
| 99 | 17.66 | 34.20 | 5.26 | 320 | 75 | 17.65 | 34.20 | 5.30 | 24.76 | 320 | 0.25 |
| | | | | | 100 | (17.66) | (34.20) | | (27.76) | (320) | (0.33) |

STRANGER; January 27, 1958; 0802 GCT; 28°03'N, 114°54'W; sounding, 45 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 00°. 120.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.74 | 34.26 | 5.18 | 317 | 0 | 17.74 | 34.26 | 5.18 | 24.79 | 317 | 0.00 |
| 10 | 17.76 | 34.25 | 5.17 | 318 | 10 | 17.76 | 34.25 | 5.17 | 24.78 | 318 | 0.03 |
| 29 | 17.75 | 34.25 | 5.23 | 317 | 20 | 17.76 | 34.25 | 5.20 | 24.78 | 318 | 0.06 |
| 49 | 17.52 | 34.22 | 5.20 | 314 | 30 | 17.75 | 34.25 | 5.23 | 24.79 | 317 | 0.10 |
| 73 | 17.44 | 34.21 | 5.12 | 313 | 50 | 17.51 | 34.22 | 5.19 | 24.82 | 314 | 0.16 |
| | | | | | 75 | (17.44) | (34.21) | (5.11) | (24.83) | (313) | (0.24) |

STRANGER; January 26, 1958; 0348 GCT; 27°40'N, 115°28'W; sounding, 1150 fm; wind, 040°, force 5; weather, cloudy; sea, moderate; wire angle, 06°. 120.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.95 | 34.53 | 4.97 | 351 | 0 | 19.95 | 34.53 | 4.97 | 24.43 | 351 | 0.00 |
| 10 | 19.98 | 34.54 | 5.11 | 350 | 10 | 19.98 | 34.54 | 5.11 | 24.44 | 350 | 0.04 |
| 29 | 19.96 | 34.53 | 4.96 | 351 | 20 | 19.97 | 34.54 | 5.03 | 24.44 | 350 | 0.07 |
| 53 | 19.30 | 34.51 | 4.97 | 336 | 30 | 19.96 | 34.53 | 4.96 | 24.43 | 351 | 0.10 |
| 63 | 18.90 | 34.44 | 4.74 | 331 | 50 | 19.60 | 34.52 | 4.96 | 24.52 | 342 | 0.17 |
| 73 | 17.88a) | 34.51 | 3.87 | 302 | 75 | 17.60 | 34.46 | 3.68 | 24.98 | 299 | 0.25 |
| 82 | 16.42 | 34.18 | 3.14 | 293 | 100 | 13.63 | 33.96 | 3.02 | 25.48 | 251 | 0.32 |
| 95 | 14.24 | 33.92 | 3.30 | 266 | 150 | 11.74 | 34.26 | 1.48 | 26.09 | 193 | 0.44 |
| 110 | 12.98 | 34.04 | 2.53 | 232 | 200 | 10.89 | 34.48 | 0.88 | 26.41 | 163 | 0.53 |
| 128 | 12.44 | 34.13 | 2.02 | 216 | 250 | 10.71 | 34.59 | 0.39 | 26.53 | 151 | 0.61 |
| 147 | 11.84 | 34.25 | 1.51 | 196 | 300 | 10.02 | 34.55 | 0.38 | 26.61 | 144 | 0.68 |
| 170 | 11.29 | 34.34 | 1.13 | 180 | 400 | 8.88 | 34.50 | 0.30 | 26.76 | 129 | 0.82 |
| 192 | 10.95 | 34.43 | 0.98 | 167 | 500 | 7.68 | 34.43 | 0.38 | 26.89 | 117 | 0.95 |
| 237 | 10.82 | 34.59 | 0.45 | 154 | | | | | | | |
| 310 | 9.90 | 34.54 | 0.37 | 142 | | | | | | | |
| 401 | 8.87 | 34.50 | 0.29 | 129 | | | | | | | |
| 530 | 7.28 | 34.40 | 0.41 | 114 | | | | | | | |

STRANGER; January 26, 1958; 0002 GCT; 27°30'N, 115°49'W; sounding, 2200 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 14°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.24 | 34.19 | 5.18 | 334 | 0 | 18.24 | 34.19 | 5.18 | 24.61 | 334 | 0.00 |
| 10 | 18.26 | 34.20 | 5.23 | 334 | 10 | 18.26 | 34.20 | 5.23 | 24.61 | 334 | 0.03 |
| 28 | 18.36 | 34.27 | 5.16 | 331 | 20 | 18.31 | 34.23 | 5.19 | 24.63 | 332 | 0.07 |
| 57 | 18.71 | 34.41 | 5.05 | 329 | 30 | 18.37 | 34.28 | 5.15 | 24.64 | 331 | 0.10 |
| 66 | 18.82 | 34.51 | 5.07 | 324 | 50 | 18.60 | 34.36 | 5.06 | 24.66 | 329 | 0.16 |
| 75 | 18.83 | 34.51 | 5.03 | 324 | 75 | 18.83 | 34.51 | 5.03 | 24.71 | 324 | 0.25 |
| 89 | 17.14 | 34.24 | 3.86 | 304 | 100 | 14.90 | 34.11 | 2.75 | 25.33 | 266 | 0.32 |
| 102 | 14.60 | 34.09 | 2.64 | 261 | 150 | 12.67 | 34.40 | 0.89 | 26.01 | 201 | 0.44 |
| 115 | 13.49 | 34.05 | 2.38 | 242 | 200 | 11.90 | 34.60 | 0.45 | 26.32 | 171 | 0.53 |
| 133 | 12.91 | 34.27 | 1.47 | 215 | 250 | 11.01 | 34.61 | 0.35 | 26.49 | 155 | 0.62 |
| 149 | 12.68 | 34.40 | 0.95 | 201 | 300 | 10.15 | 34.55 | 0.36 | 26.60 | 145 | 0.69 |
| 176 | 12.26 | 34.52 | 0.60 | 184 | 400 | 8.75 | 34.46 | 0.31 | 26.76 | 129 | 0.84 |
| 196 | 11.99 | 34.60 | 0.49 | 173 | 500 | 7.50 | 34.41 | 0.30 | 26.91 | 116 | 0.96 |
| 244 | 11.11 | 34.61 | 0.35 | 157 | | | | | | | |
| 319 | 9.82 | 34.53 | 0.36 | 141 | | | | | | | |
| 418 | 8.53 | 34.45 | 0.30 | 127 | | | | | | | |
| 551 | 6.83 | 34.39 | 0.28 | 108 | | | | | | | |

a) Mean value of 17.82 and 17.94°C.

SIO

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

120.60 STRANGER; January 25, 1958; 1910 GCT; 27°13'N, 116°31'W; sounding, 2050 fm; wind, 360°, force 3; weather, cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.00 | 33.97 | 5.18 | 344 | 0 | 18.00 | 33.97 | 5.18 | 24.50 | 344 | 0.00 |
| 9 | 18.02 | 33.95 | 5.24 | 346 | 10 | 18.02 | 33.95 | 5.24 | 24.48 | 346 | 0.03 |
| 28 | 17.98 | 33.99 | 5.37 | 342 | 20 | 18.00 | 33.98 | 5.31 | 24.51 | 343 | 0.07 |
| 51 | 18.00 | 34.13 | 5.30 | 332 | 30 | 17.98 | 34.00 | 5.37 | 24.53 | 341 | 0.10 |
| 60 | 18.00 | 34.13 | 5.38 | 332 | 50 | 18.00 | 34.12 | 5.31 | 24.62 | 333 | 0.17 |
| 69 | 17.98 | 34.12 | 5.28 | 332 | 75 | 17.69 | 34.08 | 5.21 | 24.66 | 329 | 0.25 |
| 78 | 16.98 | 33.97 | 5.20 | 320 | 100 | 14.90 | 33.84 | 4.70 | 25.12 | 285 | 0.33 |
| 91 | 14.98 | 33.76 | 4.74 | 293 | 150 | 10.70 | 33.88 | 2.95 | 25.97 | 204 | 0.45 |
| 104 | 13.32 | 33.66 | 4.30 | 267 | 200 | 9.12 | 34.09 | 2.73 | 26.39 | 164 | 0.55 |
| 120 | 12.17 | 33.74 | 3.44 | 240 | 250 | 8.77 | 34.17 | 2.10 | 26.53 | 152 | 0.63 |
| 136 | 11.34 | 33.86 | 2.98 | 216 | 300 | 8.14 | 34.24 | 1.51 | 26.66 | 139 | 0.70 |
| 156 | 10.47 | 33.89 | 2.95 | 199 | 400 | 7.32 | 34.32 | 0.65 | 26.86 | 120 | 0.84 |
| 177 | 9.56 | 34.04 | 3.02 | 173 | 500 | (6.62) | (34.40) | (0.33) | (27.03) | (104) | (0.96) |
| 220 | 9.04 | 33.89r | 2.51 | | | | | | | | |
| 288 | 8.38 | 34.23 | 1.66 | 141 | | | | | | | |
| 375 | 7.54 | 34.30 | 0.79 | 124 | | | | | | | |
| 496 | 6.63 | 34.40 | 0.34 | 105 | | | | | | | |

120.70 STRANGER; January 25, 1958; 1349 GCT; 26°52.5'N, 117°10'W; sounding, 2150 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.68 | 34.25 | 5.14 | 339 | 0 | 18.68 | 34.25 | 5.14 | 24.56 | 339 | 0.00 |
| 10 | 18.70 | 34.24 | 5.16 | 341 | 10 | 18.70 | 34.24 | 5.16 | 24.53 | 341 | 0.03 |
| 30 | 18.69 | 34.25 | 5.09 | 340 | 20 | 18.70 | 34.24 | 5.13 | 24.54 | 340 | 0.07 |
| 54 | 18.70 | 34.25 | 5.15 | 340 | 30 | 18.69 | 34.25 | 5.09 | 24.54 | 340 | 0.09 |
| 64 | 18.71 | 34.25 | 5.12 | 341 | 50 | 18.70 | 34.25 | 5.13 | 24.54 | 340 | 0.16 |
| 73 | 18.71 | 34.25 | 5.11 | 341 | 75 | 18.67 | 34.24 | 5.08 | 24.54 | 340 | 0.24 |
| 83 | 16.34 | 34.01 | 4.73 | 303 | 100 | 14.10 | 33.88 | 5.10 | 25.32 | 266 | 0.32 |
| 97 | 14.40 | 33.86 | 5.13 | 273 | 150 | 11.63 | 34.14 | 2.13 | 26.02 | 200 | 0.44 |
| 112 | 13.34 | 33.99 | 4.78 | 243 | 200 | 11.39 | 34.51 | 0.44 | 26.34 | 169 | 0.53 |
| 129 | 12.40 | 34.04 | 3.90 | 222 | 250 | 10.23 | 34.50 | 0.52 | 26.54 | 150 | 0.62 |
| 148 | 11.70 | 34.14 | 2.21 | 202 | 300 | 9.60 | 34.47 | 0.43 | 26.63 | 142 | 0.69 |
| 170 | 11.63 | 34.33 | 0.89 | 187 | 400 | 8.28 | 34.47 | 0.36 | 26.84 | 122 | 0.83 |
| 193 | 11.54 | 34.50 | 0.44 | 172 | 500 | 6.92 | 34.40 | 0.28 | 26.98 | 109 | 0.95 |
| 237 | 10.45 | 34.51 | 0.54 | 153 | | | | | | | |
| 310 | 9.46 | 34.47 | 0.41 | 140 | | | | | | | |
| 403 | 8.21 | 34.47 | 0.35 | 121 | | | | | | | |
| 526 | 6.61 | 34.38 | 0.25 | 106 | | | | | | | |

120.80 STRANGER; January 25, 1958; 0902 GCT; 26°32.5'N, 117°48.5'W; sounding, 2150 fm; wind, 320°, force 3; weather, missing; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.76 | 34.47 | 4.92 | 325 | 0 | 18.76 | 34.47 | 4.92 | 24.70 | 325 | 0.00 |
| 10 | 18.76 | 34.29 | 5.26 | 338 | 10 | 18.76 | 34.29 | 5.26 | 24.57 | 338 | 0.03 |
| 30 | 18.77 | 34.27 | 5.12 | 340 | 20 | 18.76 | 34.28 | 5.17 | 24.56 | 339 | 0.07 |
| 54 | 18.78 | 34.28 | 5.17 | 339 | 30 | 18.77 | 34.27 | 5.12 | 24.55 | 340 | 0.10 |
| 63 | 18.77 | 34.27 | 5.27 | 340 | 50 | 18.78 | 34.28 | 5.15 | 24.56 | 339 | 0.17 |
| 73 | 17.71 | 34.09 | 5.29 | 328 | 75 | 17.35 | 34.05 | 5.30 | 24.72 | 323 | 0.25 |
| 83 | 15.18 | 33.81 | 5.30 | 293 | 100 | 13.00 | 33.64 | 5.20 | 25.36 | 262 | 0.33 |
| 112 | 11.86 | 33.58 | 4.82 | 246 | 150 | 11.80 | 34.09 | 1.60 | 25.94 | 207 | 0.44 |
| 131 | 10.94 | 33.69 | 3.92 | 222 | 200 | 11.67 | 34.54 | | 26.31 | 172 | 0.54 |
| 149 | 11.74 | 34.06 | 1.69 | 208 | 250 | 10.60 | 34.56 | 0.75 | 26.52 | 152 | 0.62 |
| 172 | 12.12 | 34.47 | 0.92 | 185 | 300 | 9.87 | 34.57 | 0.60 | 26.66 | 139 | 0.70 |
| 196 | 12.14 | 34.63 | 0.70 | 174 | 400 | 8.39 | 34.43 | 0.36 | 26.80 | 126 | 0.83 |
| 240 | 10.86 | 34.56 | 0.78 | 156 | 500 | 7.30 | 34.47 | 0.30 | 26.98 | 109 | 0.95 |
| 312 | 9.72 | 34.57 | 0.55 | 137 | | | | | | | |
| 404 | 8.32 | 34.43 | 0.34 | 126 | | | | | | | |
| 527 | 7.03 | 34.48 | 0.29 | 105 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; January 24, 1958; 0919 GCT; 27°24'N, 114°40'W; sounding, 39 fm; wind, 020°, force 3; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | 123.37 |
| 0 | 20.08 | 34.57a) | 4.84 | 351 | 0 | 20.08 | 34.57 | 4.84 | 24.43 | 351 | 0.00 |
| 10 | 20.11 | 34.60 | 5.00 | 349 | 10 | 20.11 | 34.60 | 5.00 | 24.45 | 349 | 0.04 |
| 30 | 19.74 | 34.52 | 4.98 | 346 | 20 | 19.98 | 34.57 | 4.99 | 24.46 | 348 | 0.07 |
| 49 | 18.99 | 34.42 | 4.86 | 334 | 30 | 19.74 | 34.52 | 4.98 | 24.48 | 346 | 0.10 |
| | | | | | 50 | (18.94) | (34.42) | | (24.62) | (333) | (0.16) |
| STRANGER; January 24, 1958; 1205 GCT; 27°16'N, 114°59'W; sounding, 1000 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 06°. | | | | | | | | | | | 123.42 |
| 0 | 20.12 | 34.67 | 5.02 | 344 | 0 | 20.12 | 34.67 | 5.02 | 24.50 | 344 | 0.00 |
| 10 | 20.13 | 34.58 | 4.91 | 351 | 10 | 20.13 | 34.58 | 4.91 | 24.43 | 351 | 0.03 |
| 29 | 20.14 | 34.56 | 4.92 | 353 | 20 | 20.13 | 34.57 | 4.92 | 24.42 | 352 | 0.07 |
| 58 | 20.06 | 34.54 | 5.01 | 353 | 30 | 20.14 | 34.56 | 4.92 | 24.41 | 353 | 0.10 |
| 68 | 17.10 | 34.08 | 4.41 | 315 | 50 | 20.11 | 34.56 | 4.96 | 24.41 | 353 | 0.18 |
| 78 | 15.05 | 33.95 | 3.63 | 282 | 75 | 15.60 | 33.97 | 3.85 | 25.07 | 290 | 0.26 |
| 92 | 13.60 | 33.91 | 3.40 | 254 | 100 | 13.25 | 33.96 | 3.10 | 25.56 | 244 | 0.32 |
| 105 | 13.10 | 34.00 | 2.74 | 238 | 150 | 11.80 | 34.19 | 1.78 | 26.03 | 199 | 0.44 |
| 120 | 12.94 | 34.16 | 2.00 | 223 | 200 | 11.19 | 34.44 | 0.95 | 26.32 | 171 | 0.53 |
| 138 | 12.09 | 34.15 | 1.93 | 208 | 250 | 10.52 | 34.52 | 0.63 | 26.50 | 154 | 0.61 |
| 156 | 11.64 | 34.22 | 1.68 | 195 | 300 | 10.02 | 34.55 | 0.47 | 26.61 | 144 | 0.69 |
| 183 | 11.28 | 34.37 | 1.20 | 177 | 400 | 8.80 | 34.52 | 0.34 | 26.80 | 126 | 0.83 |
| 206 | 11.14 | 34.47 | 0.89 | 167 | 500 | 7.60 | 34.46 | 0.30 | 26.94 | 113 | 0.96 |
| 255 | 10.46 | 34.52 | 0.62 | 152 | | | | | | | |
| 333 | 9.68 | 34.56 | 0.36 | 137 | | | | | | | |
| 435 | 8.31 | 34.49 | 0.34 | 121 | | | | | | | |
| 568 | 6.94 | 34.45 | 0.24 | 105 | | | | | | | |
| STRANGER; January 24, 1958; 1628, 1702 GCT; 27°00'N, 115°32'W; sounding, 2050 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 00°, 08°. | | | | | | | | | | | 123.50 |
| 0 | 19.15 | 34.56 | 4.89 | 328 | 0 | 19.15 | 34.56 | 4.89 | 24.67 | 328 | 0.00 |
| 10 | 19.30 | 34.59 | 4.91 | 330 | 10 | 19.30 | 34.59 | 4.91 | 24.65 | 330 | 0.03 |
| 30 | 19.06 | 34.57 | 5.08 | 326 | 20 | 19.20 | 34.58 | 5.00 | 24.67 | 328 | 0.06 |
| 59 | 16.43 | 34.09 | 3.82 | 300 | 30 | 19.06 | 34.57 | 5.08 | 24.69 | 326 | 0.10 |
| 69 | 15.56 | 34.11 | 3.09 | 279 | 50 | 19.00 | 34.55 | 5.07 | 24.70 | 325 | 0.16 |
| 78 | 14.68b) | 34.02 | 3.05 | 267 | 75 | 15.03 | 34.06 | 3.05 | 25.26 | 272 | 0.24 |
| 92 | 13.42 | 34.02 | 2.75 | 244 | 100 | 13.39 | 34.11 | 2.74 | 25.65 | 235 | 0.30 |
| 107 | 12.82 | 34.13 | 2.06 | 223 | 150 | 11.57 | 34.28 | 1.40 | 26.14 | 189 | 0.41 |
| 121 | 12.24 | 34.22 | 1.72 | 206 | 200 | 10.78 | 34.44 | 1.05 | 26.40 | 164 | 0.50 |
| 140 | 11.74 | 34.25 | 1.47 | 194 | 250 | 10.20 | 34.55 | 0.67 | 26.59 | 146 | 0.58 |
| 158 | 11.40 | 34.31 | 1.34 | 184 | 300 | 9.60 | 34.54 | 0.55 | 26.68 | 137 | 0.65 |
| 186 | 10.90 | 34.38 | 1.06 | 170 | 400 | 8.50 | 34.52 | 0.39 | 26.84 | 122 | 0.78 |
| 208 | 10.70 | 34.49 | 1.03 | 159 | 500 | 7.42 | 34.52 | 0.32 | 27.00 | 107 | 0.90 |
| 256 | 10.14 | 34.55 | 0.64 | 145 | | | | | | | |
| 335 | 9.20 | 34.52 | 0.51 | 132 | | | | | | | |
| 436 | 8.12 | 34.52 | 0.35 | 117 | | | | | | | |
| 571 | 6.76 | 34.51 | 0.29 | 98 | | | | | | | |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

b) Alternate value, 14.46°C, not used in interpolation.

SIO

CCOFI
5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| 123.60 | STRANGER; January 24, 1958; 2159, 2225 GCT; 26°42'N, 116°10'W; sounding, 2100 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 09°, 10°. | | | | | | | | | | |
| 0 | 18.70 | 34.43 | 5.25 | 327 | 0 | 18.70 | 34.43 | 5.25 | 24.68 | 327 | 0.00 |
| 10 | 18.70 | 34.43 | 5.26 | 327 | 10 | 18.70 | 34.43 | 5.26 | 24.68 | 327 | 0.03 |
| 29 | 18.56 | 34.41 | 5.23 | 325 | 20 | 18.62 | 34.42 | 5.25 | 24.69 | 326 | 0.06 |
| 53 | 18.56 | 34.41 | 5.17 | 325 | 30 | 18.56 | 34.41 | 5.23 | 24.70 | 325 | 0.10 |
| 62 | 18.54 | 34.42 | 5.24 | 322 | 50 | 18.56 | 34.41 | 5.20 | 24.70 | 325 | 0.16 |
| 72 | 18.54 | 34.40 | 5.24 | 326 | 75 | 18.53 | 34.40 | 5.24 | 24.70 | 325 | 0.24 |
| 82 | 18.52 | 34.40 | 5.25 | 325 | 100 | 14.87 | 33.94 | 3.90 | 25.21 | 277 | 0.32 |
| 96 | 14.89 | 33.86 | 4.52 | 284 | 150 | 12.10 | 34.10 | 2.13 | 25.90 | 212 | 0.56 |
| 110 | 14.82 | 34.16 | 2.50 | 260 | 200 | 11.41 | 34.47 | 0.85 | 26.31 | 172 | 0.66 |
| 130 | 12.90 | 34.03 | 2.51 | 232 | 250 | 10.74 | 34.55 | 0.60 | 26.49 | 155 | 0.75 |
| 148 | 12.18 | 34.09 | 2.18 | 214 | 300 | 9.86 | 34.52 | 0.47 | 26.63 | 142 | 0.83 |
| 171 | 12.22 | 34.37 | 1.13 | 194 | 400 | 8.32 | 34.43 | 0.40 | 26.80 | 126 | 0.96 |
| | | | | | 500 | 7.23 | 34.41 | 0.26 | 26.94 | 112 | 1.09 |
| 188 | 11.86 | 34.49 | 0.79 | 179 | | | | | | | |
| 234 | 11.12 | 34.56 | 0.64 | 161 | | | | | | | |
| 307 | 9.77 | 34.52 | 0.47 | 141 | | | | | | | |
| 400 | 8.32 | 34.43 | 0.40 | 125 | | | | | | | |
| 524 | 7.00 | 34.41 | 0.22 | 109 | | | | | | | |
| 123.70 | STRANGER; January 25, 1958; 0312 GCT; 26°18.5'N, 116°54'W; sounding, 2050 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 09°. | | | | | | | | | | |
| 0 | 18.38 | 34.07 | 5.22 | 345 | 0 | 18.38 | 34.07 | 5.22 | 24.49 | 345 | 0.00 |
| 10 | 18.38 | 34.05 | 5.15 | 347 | 10 | 18.38 | 34.05 | 5.15 | 24.47 | 347 | 0.03 |
| 29 | 18.28 | 34.06 | 5.17 | 344 | 20 | 18.32 | 34.06 | 5.16 | 24.49 | 345 | 0.07 |
| 58 | 18.34 | 34.04 | 5.28 | 347 | 30 | 18.29 | 34.06 | 5.18 | 24.50 | 344 | 0.10 |
| 68 | 18.35 | 34.05 | 5.18 | 346 | 50 | 18.33 | 34.04 | 5.25 | 24.48 | 346 | 0.17 |
| 78 | 18.39 | 34.06 | 4.51 | 346 | 75 | 18.37 | 34.06 | 4.65 | 24.48 | 346 | 0.26 |
| 92 | 18.45 | 34.09 | 4.21 | 346 | 100 | 17.74 | 34.00 | 3.99 | 24.59 | 336 | 0.35 |
| 106 | 15.78 | 33.78 | 3.65 | 308 | 150 | 12.63 | 34.18 | 1.90 | 25.85 | 216 | 0.59 |
| 120 | 13.68 | 33.66 | 2.76 | 274 | 200 | 11.98 | 34.50 | 0.87 | 26.22 | 181 | 0.69 |
| 139 | 12.22 | 33.73 | 2.37 | 242 | 250 | 10.50 | 34.46 | 0.89 | 26.46 | 158 | 0.78 |
| 156 | 12.54 | 34.23 | 1.87 | 210 | 300 | 9.63 | 34.45 | 0.70 | 26.60 | 144 | 0.86 |
| 184 | 12.18 | 34.42 | 1.20 | 189 | 400 | 8.42 | 34.47 | 0.40 | 26.81 | 124 | 1.00 |
| 206 | 11.92 | 34.51 | 0.84 | 178 | 500 | 7.30 | 34.45 | 0.34 | 26.96 | 110 | 1.13 |
| 255 | 10.38 | 34.45 | 0.90 | 156 | | | | | | | |
| 331 | 9.22 | 34.45 | 0.60 | 138 | | | | | | | |
| 433 | 8.04 | 34.47 | 0.33 | 119 | | | | | | | |
| 564 | 6.57 | 34.41 | 0.34 | 103 | | | | | | | |
| 127.34 | STRANGER; January 24, 1958; 0500 GCT; 26°58'N, 114°10'W; sounding, 50 fm; wind, 020°, force 5; weather, clear; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 19.99 | 34.55 | 5.10 | 350 | 0 | 19.99 | 34.55 | 5.10 | 24.44 | 350 | 0.00 |
| 10 | 20.02 | 34.54 | 5.07 | 352 | 10 | 20.02 | 34.54 | 5.07 | 24.42 | 352 | 0.04 |
| 28 | 19.96 | 34.56 | 5.06 | 348 | 20 | 20.00 | 34.55 | 5.07 | 24.44 | 350 | 0.07 |
| 49 | 19.80 | 34.53 | 5.03 | 346 | 30 | 19.94 | 34.56 | 5.06 | 24.46 | 348 | 0.10 |
| 73 | 18.05 | 34.26 | 4.76 | 324 | 50 | 19.77 | 34.53 | 5.03 | 24.48 | 346 | 0.17 |
| | | | | | 75 | (17.40) | (34.16) | (4.66) | (24.80) | (316) | (0.26) |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

STRANGER; January 24, 1958; 0135 GCT; 26°45'N, 114°34'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 17°. 127.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.06 | 34.60 | 4.95 | 374 | 0 | 21.06 | 34.60 | 4.95 | 24.19 | 374 | 0.00 |
| 10 | 21.07 | 34.60 | 5.03 | 374 | 10 | 21.07 | 34.60 | 5.03 | 24.19 | 374 | 0.04 |
| 28 | 20.68 | 34.60 | 5.01 | 364 | 20 | 21.04 | 34.60 | 5.03 | 24.20 | 373 | 0.07 |
| 56 | 20.24 | 34.60 | 5.07 | 353 | 30 | 20.65 | 34.60 | 5.01 | 24.30 | 363 | 0.11 |
| 66 | 20.23 | 34.60 | 5.15 | 352 | 50 | 20.32 | 34.60 | 5.03 | 24.39 | 354 | 0.18 |
| 75 | 20.20 | 34.60 | 5.03 | 351 | 75 | 20.20 | 34.60 | 5.03 | 24.43 | 351 | 0.27 |
| 89 | 18.92 | 34.32 | 4.85 | 340 | 100 | 16.44 | 33.95 | 4.73 | 24.86 | 310 | 0.36 |
| 102 | 15.84 | 33.88 | 4.72 | 302 | 150 | 11.75 | 34.11 | 2.08 | 25.96 | 205 | 0.48 |
| 116 | 14.22 | 34.05 | 2.90 | 356 | 200 | 11.28 | 34.43 | 0.90 | 26.30 | 173 | 0.58 |
| 133 | 12.56 | 33.98 | 2.73 | 229 | 250 | 10.43 | 34.48 | 0.74 | 26.49 | 155 | 0.66 |
| 150 | 11.75 | 34.11 | 2.08 | 205 | 300 | 9.97 | 34.53 | 0.49 | 26.61 | 144 | 0.74 |
| 176 | 11.36 | 34.25 | 1.51 | 187 | 400 | 8.70 | 34.46 | 0.33 | 26.77 | 129 | 0.88 |
| 197 | 11.30 | 34.42 | 0.92 | 174 | 500 | 7.53 | 34.42 | 0.30 | 26.91 | 115 | 1.01 |
| 246 | 10.50 | 34.47 | 0.75 | 157 | | | | | | | |
| 321 | 9.80 | 34.53 | 0.39 | 141 | | | | | | | |
| 422 | 8.33 | 34.44 | 0.33 | 125 | | | | | | | |
| 553 | 7.01 | 34.42 | 0.28 | 109 | | | | | | | |

STRANGER; January 23, 1958; 2036 GCT; 26°23'N, 115°07'W; sounding, 2000 fm; wind, 020°, force 4; weather, clear; sea, rough; wire angle, 00°. 127.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.79 | 34.60 | 4.90 | 366 | 0 | 20.79 | 34.60 | 4.90 | 24.27 | 366 | 0.00 |
| 10 | 20.80 | 34.60 | 4.90 | 367 | 10 | 20.80 | 34.60 | 4.90 | 24.26 | 367 | 0.04 |
| 30 | 20.74 | 34.60 | 4.93 | 366 | 20 | 20.79 | 34.60 | 4.92 | 24.26 | 367 | 0.07 |
| 58 | 20.04 | 34.51 | 4.97 | 354 | 30 | 20.74 | 34.60 | 4.93 | 24.27 | 366 | 0.11 |
| 68 | 19.72 | 34.50 | 5.04 | 347 | 50 | 20.30 | 34.54 | 4.96 | 24.36 | 358 | 0.18 |
| 78 | 19.10 | 34.47 | 4.93 | 334 | 75 | 19.30 | 34.48 | 4.99 | 24.57 | 338 | 0.27 |
| 92 | 14.54 | 33.86 | 3.99 | 276 | 100 | 13.44 | 33.91 | 3.30 | 25.49 | 251 | 0.34 |
| 106 | 12.90 | 33.94 | 2.87 | 238 | 150 | 11.50 | 34.36 | 1.22 | 26.21 | 182 | 0.45 |
| 121 | 12.15 | 34.07 | 2.42 | 215 | 200 | 10.96 | 34.54 | 0.70 | 26.45 | 159 | 0.54 |
| 139 | 11.62 | 34.26 | 1.50 | 192 | 250 | 10.51 | 34.62 | 0.33 | 26.58 | 147 | 0.62 |
| 157 | 11.44 | 34.39 | 1.14 | 179 | 300 | 9.90 | 34.60 | 0.33 | 26.67 | 138 | 0.69 |
| 185 | 11.04 | 34.52 | 0.89 | 163 | 400 | 8.86 | 34.56 | 0.30 | 26.82 | 124 | 0.83 |
| 207 | 10.90 | 34.55 | 0.59 | 157 | 500 | 7.79 | 34.52 | 0.19 | 26.95 | 112 | 0.95 |
| 258 | 10.42 | 34.62 | 0.32 | 145 | | | | | | | |
| 336 | 9.41 | 34.57 | 0.38 | 132 | | | | | | | |
| 438 | 8.54 | 34.56 | 0.18 | 119 | | | | | | | |
| 573 | 6.68 | 34.43 | 0.22 | 103 | | | | | | | |

STRANGER; January 23, 1958; 1627 GCT; 26°04'N, 115°45'W; sounding, 2100 fm; wind, 340°, force 3; weather, clear; sea, very rough; wire angle, 04°. 127.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.08 | 34.58 | 4.93 | 376 | 0 | 21.08 | 34.58 | 4.93 | 24.17 | 376 | 0.00 |
| 10 | 21.09 | 34.61 | 5.03 | 374 | 10 | 21.09 | 34.61 | 5.03 | 24.19 | 374 | 0.04 |
| 30 | 21.07 | 34.60 | 4.97 | 374 | 20 | 21.08 | 34.61 | 5.00 | 24.19 | 374 | 0.08 |
| 59 | 19.82 | 34.61 | 4.85 | 341 | 30 | 21.07 | 34.60 | 4.97 | 24.19 | 374 | 0.11 |
| 69 | 17.59 | 34.12 | 4.37 | 323 | 50 | 21.04 | 34.60 | 4.97 | 24.21 | 372 | 0.19 |
| 78 | 16.06 | 33.94 | 4.30 | 302 | 75 | 16.47 | 33.99 | 4.30 | 24.88 | 308 | 0.27 |
| 92 | 14.01 | 34.02 | 2.93 | 255 | 100 | 13.09 | 34.05 | 2.36 | 25.66 | 234 | 0.34 |
| 107 | 12.80 | 34.07 | 2.24 | 227 | 150 | 11.90 | 34.41 | 1.10 | 26.17 | 186 | 0.45 |
| 121 | 12.50 | 34.23 | 1.68 | 210 | 200 | 11.17 | 34.53 | 0.58 | 26.40 | 164 | 0.54 |
| 140 | 12.17 | 34.38 | 1.18 | 192 | 250 | 10.42 | 34.56 | 0.53 | 26.56 | 148 | 0.62 |
| 158 | 11.72 | 34.42 | 1.06 | 181 | 300 | 9.60 | 34.54 | 0.46 | 26.68 | 137 | 0.69 |
| 185 | 11.07 | 34.45 | 0.90 | 168 | 400 | 8.38 | 34.50 | 0.24 | 26.84 | 122 | 0.82 |
| 208 | 11.20 | 34.57 | 0.52 | 161 | 500 | 7.29 | 34.46 | 0.21 | 26.97 | 109 | 0.95 |
| 258 | 10.26 | 34.56 | 0.54 | 146 | | | | | | | |
| 336 | 9.13 | 34.52 | 0.28 | 131 | | | | | | | |
| 440 | 7.96 | 34.48 | 0.24 | 116 | | | | | | | |
| 575 | 6.42 | 34.43 | 0.21 | 100 | | | | | | | |

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 127.70 | STRANGER; January 23, 1958; 1112 GCT; 25°44'N, 116°25'W, sounding, 2100 fm; wind, 360°, force 5; weather, clear; sea, very rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 18.01 | 33.95 | 5.42 | 346 | 0 | 18.01 | 33.95 | 5.42 | 24.48 | 346 | 0.00 |
| 9 | 18.02 | 33.93 | 5.43 | 348 | 10 | 18.02 | 33.93 | 5.44 | 24.46 | 348 | 0.03 |
| 28 | 18.00 | 33.94 | 5.44 | 346 | 20 | 18.01 | 33.93 | 5.44 | 24.47 | 347 | 0.07 |
| 57 | 18.46 | 34.23 | 5.34 | 335 | 30 | 18.00 | 33.95 | 5.44 | 24.48 | 346 | 0.10 |
| 67 | 18.66 | 34.27 | 5.30 | 337 | 50 | 18.15 | 34.07 | 5.41 | 24.54 | 340 | 0.17 |
| 76 | 18.72 | 34.33 | 5.34 | 335 | 75 | 18.71 | 34.33 | 5.33 | 24.60 | 335 | 0.26 |
| 91 | 15.27 | 33.68 | 5.62 | 304 | 100 | 14.48 | 33.68 | 5.64 | 25.09 | 288 | 0.34 |
| 105 | 14.10 | 33.69 | 5.67 | 280 | 150 | 10.63 | 33.55 | 4.70 | 25.73 | 227 | 0.46 |
| 117 | 12.90 | 33.64 | 5.07 | 260 | 200 | 9.46 | 33.96 | 2.97 | 26.25 | 178 | 0.57 |
| 136 | 11.59 | 33.55 | 5.08 | 243 | 250 | 8.34 | 34.06 | 2.70 | 26.50 | 154 | 0.65 |
| 153 | 10.50 | 33.55 | 4.61 | 225 | 300 | 7.87 | 34.15 | 2.01 | 26.65 | 140 | 0.73 |
| 179 | 10.11 | 33.88 | 3.10 | 194 | 400 | 6.88 | 34.26 | 0.96 | 26.87 | 119 | 0.86 |
| 200 | 9.46 | 33.96 | 2.97 | 178 | 500 | 6.20 | 34.34 | 0.50 | 27.03 | 104 | 0.98 |
| 248 | 8.37 | 34.05 | 2.71 | 155 | | | | | | | |
| 324 | 7.64 | 34.20 | 1.55 | 133 | | | | | | | |
| 423 | 6.62 | 34.27 | 0.82 | 115 | | | | | | | |
| 556 | 5.97 | 34.40 | 0.30 | 97 | | | | | | | |
| 130.30 | STRANGER; January 22, 1958; 1141 GCT; 26°28.5'N, 113°30'W; sounding, 45 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.56 | 34.72 | 4.98 | 352 | 0 | 20.56 | 34.72 | 4.98 | 24.42 | 352 | 0.00 |
| 10 | 20.60 | 34.72 | 4.94 | 353 | 10 | 20.60 | 34.72 | 4.94 | 24.41 | 353 | 0.04 |
| 30 | 20.60 | 34.72 | 4.88 | 353 | 20 | 20.60 | 34.72 | 4.92 | 24.41 | 353 | 0.07 |
| 49 | 20.58 | 34.71 | 4.91 | 353 | 30 | 20.60 | 34.72 | 4.88 | 24.41 | 353 | 0.10 |
| 73 | 18.70 | 34.40 | 3.71 | 329 | 50 | 20.58 | 34.71 | 4.90 | 24.41 | 353 | 0.17 |
| | | | | | 75 | (18.30) | (34.35) | (3.40) | (24.72) | (324) | (0.26) |
| 130.35 | STRANGER; January 22, 1958; 1425 GCT; 26°19'N, 113°49'W; sounding, 340 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 02°. | | | | | | | | | | |
| 0 | 21.54 | 34.63 | 4.85 | 384 | 0 | 21.54 | 34.63 | 4.85 | 24.08 | 384 | 0.00 |
| 10 | 21.54 | 34.65 | 4.92 | 382 | 10 | 21.54 | 34.65 | 4.92 | 24.10 | 382 | 0.04 |
| 30 | 21.56 | 34.64 | 4.99 | 384 | 20 | 21.55 | 34.65 | 4.96 | 24.09 | 383 | 0.08 |
| 59 | 18.82 | 34.17 | 4.70 | 349 | 30 | 21.56 | 34.64 | 4.99 | 24.08 | 384 | 0.11 |
| 69 | 17.54 | 34.03 | 4.80 | 328 | 50 | 21.28 | 34.58 | 4.97 | 24.12 | 381 | 0.19 |
| 79 | 16.52 | 33.94 | 4.78 | 312 | 75 | 17.00 | 33.98 | 4.80 | 24.76 | 320 | 0.28 |
| 93 | 14.54 | 33.91 | 3.81 | 372 | 100 | 13.47 | 33.97 | 3.07 | 25.52 | 247 | 0.35 |
| 107 | 12.90 | 34.02 | 2.56 | 233 | 150 | 12.40 | 34.43 | 0.91 | 26.08 | 194 | 0.46 |
| 121 | 12.70 | 34.21 | 1.73 | 215 | 200 | 11.61 | 34.57 | 0.58 | 26.35 | 168 | 0.55 |
| 140 | 12.34 | 34.33 | 1.25 | 200 | 250 | 10.88 | 34.60 | 0.40 | 26.50 | 154 | 0.64 |
| 158 | 12.44 | 34.51 | 0.62 | 189 | 300 | 10.26 | 34.60 | 0.31 | 26.61 | 144 | 0.71 |
| 184 | 11.80 | 34.55 | 0.64 | 173 | 400 | 9.06 | 34.56 | 0.26 | 26.78 | 127 | 0.85 |
| 208 | 11.50 | 34.58 | 0.55 | 166 | 500 | 7.79 | 34.49 | 0.25 | 26.94 | 113 | 0.98 |
| 257 | 10.78 | 34.60 | 0.39 | 152 | | | | | | | |
| 334 | 9.88 | 34.59 | 0.27 | 138 | | | | | | | |
| 436 | 8.60 | 34.54 | 0.26 | 122 | | | | | | | |
| 566 | 7.00 | 34.45 | 0.25 | 106 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

STRANGER; January 22, 1958; 1741 GCT; 26°10'N, 114°07'W; sounding, 1300 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 10°. 13040

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.46 | 34.67 | 4.76 | 380 | 0 | 21.46 | 34.67 | 4.76 | 24.13 | 380 | 0.00 |
| 10 | 21.22 | 34.63 | 4.76 | 376 | 10 | 21.22 | 34.63 | 4.76 | 24.16 | 376 | 0.04 |
| 29 | 21.42 | 34.62 | 4.87 | 382 | 20 | 21.34 | 34.62 | 4.78 | 24.14 | 379 | 0.08 |
| 58 | 20.82 | 34.56 | 4.97 | 371 | 30 | 21.42 | 34.61 | 4.90 | 24.10 | 382 | 0.11 |
| 67 | 20.41 | 34.59 | 4.80 | 357 | 50 | 21.01 | 34.57 | 4.96 | 24.18 | 375 | 0.19 |
| 77 | 20.34 | 34.60 | 4.90 | 355 | 75 | 20.37 | 34.60 | 4.88 | 24.38 | 356 | 0.28 |
| 91 | 16.58 | 33.96 | 4.53 | 312 | 100 | 14.80 | 33.82 | 4.31 | 25.12 | 285 | 0.36 |
| 105 | 14.02 | 33.78 | 4.15 | 272 | 150 | 11.88 | 34.18 | 1.77 | 25.98 | 203 | 0.48 |
| 119 | 12.93 | 33.91 | 3.03 | 242 | 200 | 11.30 | 34.52 | 0.75 | 26.36 | 167 | 0.58 |
| 137 | 12.52 | 34.14 | 2.01 | 217 | 250 | 10.80 | 34.60 | 0.50 | 26.52 | 153 | 0.66 |
| 155 | 11.72 | 34.18 | 1.70 | 199 | 300 | 10.08 | 34.58 | 0.40 | 26.63 | 142 | 0.74 |
| 183 | 11.28 | 34.43 | 0.98 | 173 | 400 | 8.70 | 34.50 | 0.35 | 26.79 | 126 | 0.88 |
| 205 | 11.32 | 34.54 | 0.70 | 165 | 500 | 7.51 | 34.45 | 0.30 | 26.94 | 113 | 1.00 |
| 255 | 10.72 | 34.60 | 0.50 | 151 | | | | | | | |
| 332 | 9.61 | 34.56 | 0.35 | 136 | | | | | | | |
| 433 | 8.25 | 34.47 | 0.36 | 122 | | | | | | | |
| 567 | 6.91 | 34.45 | 0.20 | 105 | | | | | | | |

STRANGER; January 22, 1958; 2230 GCT; 25°51'N, 114°45'W; sounding, 1950 fm; wind, 310°, force 6; weather, cloudy; sea, very rough; wire angle, 13°. 130.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.52 | 34.60 | 4.99 | 359 | 0 | 20.52 | 34.60 | 4.99 | 24.35 | 359 | 0.00 |
| 9 | 20.53 | 34.59 | 5.02 | 360 | 10 | 20.53 | 34.59 | 5.02 | 24.34 | 360 | 0.04 |
| 28 | 20.52 | 34.60 | 4.99 | 359 | 20 | 20.53 | 34.60 | 5.01 | 24.35 | 359 | 0.07 |
| 57 | 20.46 | 34.56 | 4.87 | 360 | 30 | 20.52 | 34.60 | 4.94 | 24.35 | 359 | 0.11 |
| 67 | 20.02 | 34.45 | 4.97 | 358 | 50 | 20.50 | 34.57 | 4.90 | 24.34 | 360 | 0.18 |
| 76 | 17.54 | 34.09 | 4.49 | 324 | 75 | 17.78 | 34.11 | 4.52 | 24.65 | 329 | 0.26 |
| 90 | 14.65 | 34.09 | 2.76 | 262 | 100 | 13.40 | 34.01 | 2.60 | 25.57 | 242 | 0.34 |
| 104 | 13.14 | 34.00 | 2.57 | 238 | 150 | 11.78 | 34.28 | 1.36 | 26.10 | 192 | 0.45 |
| 117 | 12.80 | 34.17 | 1.84 | 220 | 200 | 11.15 | 34.54 | 0.71 | 26.41 | 163 | 0.54 |
| 135 | 11.82 | 34.24 | 1.50 | 192 | 250 | 10.37 | 34.52 | 0.70 | 26.54 | 151 | 0.62 |
| 154 | 11.76 | 34.40 | 0.72 | 183 | 300 | 9.79 | 34.52 | 0.51 | 26.64 | 141 | 0.69 |
| 181 | 11.37 | 34.52 | - | 167 | 400 | 8.50 | 34.50 | 0.31 | 26.83 | 123 | 0.83 |
| 203 | 11.10 | 34.54 | 0.71 | 162 | 500 | 7.30 | 34.47 | 0.29 | 26.98 | 108 | 0.95 |
| 251 | 10.36 | 34.52 | 0.70 | 150 | | | | | | | |
| 327 | 9.52 | 34.52 | 0.43 | 137 | | | | | | | |
| 427 | 8.10 | 34.49 | 0.29 | 118 | | | | | | | |
| 558 | 6.68 | 34.46 | 0.29 | 101 | | | | | | | |

STRANGER; January 23, 1958; 0402 GCT; 25°32'N, 115°24'W; sounding, 2100 fm; wind, 320°, force 6; weather, cloudy; sea, very rough; wire angle, 22°. 130.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.50 | 34.56 | 4.93 | 362 | 0 | 20.50 | 34.56 | 4.93 | 24.31 | 362 | 0.00 |
| 9 | 20.52 | 34.56 | 5.08 | 363 | 10 | 20.52 | 34.56 | 5.08 | 24.31 | 363 | 0.04 |
| 32 | 20.46 | 34.58 | 5.03 | 360 | 20 | 20.50 | 34.57 | 5.05 | 24.32 | 362 | 0.07 |
| 59 | 16.78 | 34.04 | 4.30 | 311 | 30 | 20.47 | 34.58 | 5.03 | 24.33 | 360 | 0.11 |
| 68 | 14.49 | 33.87 | 3.69 | 274 | 50 | 19.60 | 34.46 | 4.78 | 24.47 | 347 | 0.18 |
| 81 | 13.32 | 33.95 | 2.87 | 245 | 75 | 13.85 | 33.90 | 3.29 | 25.39 | 260 | 0.26 |
| 90 | 12.91 | 34.09 | 2.33 | 228 | 100 | 12.55 | 34.18 | 1.92 | 25.87 | 214 | 0.32 |
| 108 | 12.36 | 34.23 | 1.62 | 207 | 150 | 11.91 | 34.49 | 0.90 | 26.23 | 180 | 0.42 |
| 120 | 12.31 | 34.31 | 1.26 | 200 | 200 | 11.05 | 34.55 | 0.70 | 26.43 | 161 | 0.50 |
| 137 | 12.15 | 34.43 | 1.07 | 188 | 250 | 10.24 | 34.53 | 0.55 | 26.56 | 148 | 0.58 |
| 157 | 11.79 | 34.51 | 0.79 | 176 | 300 | 9.66 | 34.54 | 0.45 | 26.67 | 138 | 0.66 |
| 181 | 11.35 | 34.53 | 0.71 | 166 | 400 | 8.18 | 34.46 | 0.34 | 26.84 | 122 | 0.79 |
| 205 | 10.98 | 34.55 | 0.69 | 159 | 500 | 6.89 | 34.42 | 0.27 | 27.00 | 107 | 0.81 |
| 254 | 10.17 | 34.53 | 0.51 | 147 | | | | | | | |
| 330 | 9.34 | 34.54 | 0.40 | 133 | | | | | | | |
| 429 | 7.66 | 34.42 | 0.31 | 117 | | | | | | | |
| 567 | 6.26 | 34.43 | 0.24 | 98 | | | | | | | |

SIO

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |
| **133.25** | STRANGER; January 22, 1958; 0705 GCT; 26°09'N, 112°51'W; sounding, 43 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.40 | 34.72 | 4.94 | 348 | 0 | 20.40 | 34.72 | 4.94 | 24.46 | 348 | 0.00 |
| 10 | 20.44 | 34.72 | 4.80 | 249 | 10 | 20.44 | 34.72 | 4.80 | 24.45 | 349 | 0.03 |
| 29 | 20.43 | 34.72 | 4.93 | 349 | 20 | 20.44 | 34.72 | 4.80 | 24.45 | 349 | 0.07 |
| 49 | 20.44 | 34.70 | 4.80 | 351 | 30 | 20.43 | 34.72 | 4.93 | 24.44 | 350 | 0.10 |
| 60 | 20.44 | 34.72 | 4.86 | 350 | 50 | 20.44 | 34.70 | 4.80 | 24.43 | 351 | 0.17 |
| **133.30** | STRANGER; January 22, 1958; 0423 GCT; 25°59'N, 113°10'W; sounding, 95 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 20.70 | 34.60 | 5.00 | 364 | 0 | 20.70 | 34.60 | 5.00 | 24.29 | 364 | 0.00 |
| 10 | 20.72 | 34.63 | 5.03 | 363 | 10 | 20.72 | 34.63 | 5.03 | 24.30 | 363 | 0.04 |
| 29 | 20.74 | 34.60 | 4.99 | 365 | 20 | 20.73 | 34.62 | 5.01 | 24.29 | 364 | 0.07 |
| 47 | 20.42 | 34.61 | 4.90 | 357 | 30 | 20.73 | 34.60 | 4.96 | 24.28 | 365 | 0.11 |
| 72 | 18.21 | 34.66 | 3.63 | 299 | 50 | 20.37 | 34.61 | 4.90 | 24.39 | 355 | 0.18 |
| 96 | 14.38 | 34.33 | 3.04 | 239 | 75 | 17.64 | 34.63 | 3.46 | 25.09 | 288 | 0.26 |
| 119 | 13.74 | 34.44 | 1.02 | 218 | 100 | 14.03 | 34.32 | 2.98 | 25.67 | 233 | 0.33 |
| 147 | 13.10 | 34.53 | 0.40 | 199 | 150 | (13.02) | (34.54) | (0.35) | (26.05) | (197) | (0.44) |
| **133.40** | STRANGER; January 21, 1958; 2323 GCT; 25°39'N, 113°48.5'W; sounding, 1750 fm; wind, 310°, force 4; weather, partly cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 21.86 | 34.61 | 4.73 | 394 | 0 | 21.86 | 34.61 | 4.73 | 23.98 | 394 | 0.00 |
| 10 | 21.86 | 34.61 | 4.91 | 394 | 10 | 21.86 | 34.61 | 4.91 | 23.98 | 394 | 0.04 |
| 29 | 21.64 | 34.60 | 4.87 | 389 | 20 | 21.79 | 34.61 | 4.89 | 24.00 | 392 | 0.08 |
| 39 | 21.27 | 34.54 | 4.81 | 383 | 30 | 21.61 | 34.60 | 4.86 | 24.04 | 388 | 0.12 |
| 49 | 20.91 | 34.51 | 4.83 | 376 | 50 | 20.90 | 34.51 | 4.85 | 24.17 | 376 | 0.19 |
| 58 | 20.62 | 34.53 | 5.02 | 367 | 75 | 18.73 | 34.20 | 4.64 | 24.50 | 344 | 0.28 |
| 69 | 19.81 | 34.34 | 4.85 | 361 | 100 | 14.20 | 33.90 | 3.62 | 25.32 | 266 | 0.36 |
| 82 | 16.29 | 33.96 | 4.33 | 306 | 150 | 12.09 | 34.37 | 1.13 | 26.11 | 191 | 0.48 |
| 96 | 14.44 | 33.87 | 3.91 | 274 | 200 | 10.93 | 34.52 | 0.78 | 26.44 | 160 | 0.56 |
| 111 | 13.71 | 34.14 | 2.21 | 239 | 250 | 10.60 | 34.59 | 0.42 | 26.55 | 149 | 0.64 |
| 135 | 12.84 | 34.42 | 1.03 | 202 | 300 | 9.82 | 34.55 | 0.33 | 26.65 | 140 | 0.72 |
| 161 | 11.54 | 34.34 | 1.18 | 184 | 400 | 8.75 | 34.52 | 0.29 | 26.81 | 125 | 0.86 |
| 193 | 11.00 | 34.51 | 0.80 | 162 | 500 | 7.56 | 34.48 | 0.25 | 26.96 | 111 | 0.98 |
| 239 | 10.76 | 34.60 | 0.46 | 152 | | | | | | | |
| 312 | 9.64 | 34.54 | 0.31 | 138 | | | | | | | |
| 406 | 8.72 | 34.52 | 0.29 | 125 | | | | | | | |
| 530 | 7.18 | 34.47 | 0.24 | 107 | | | | | | | |
| **133.50** | STRANGER; January 21, 1958; 1847 GCT; 25°19'N, 114°26'W; sounding, 1400 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 06°. | | | | | | | | | | |
| 0 | 20.46 | 34.52 | 4.59 | 364 | 0 | 20.46 | 34.52 | 4.59 | 24.29 | 364 | 0.00 |
| 10 | 20.48 | 34.50 | 4.67 | 366 | 10 | 20.48 | 34.50 | 4.67 | 24.27 | 366 | 0.04 |
| 29 | 20.15 | 34.52 | 4.67 | 356 | 20 | 20.30 | 34.51 | 4.67 | 24.32 | 361 | 0.07 |
| 53 | 20.05 | 34.52 | 4.85 | 354 | 30 | 20.14 | 34.52 | 4.69 | 24.38 | 356 | 0.11 |
| 63 | 17.84 | 34.22 | 4.61 | 322 | 50 | 20.06 | 34.52 | 4.83 | 24.40 | 354 | 0.18 |
| 72 | 15.10 | 33.92 | 3.89 | 284 | 75 | 14.54 | 33.89 | 3.76 | 25.24 | 274 | 0.26 |
| 82 | 13.92 | 33.86 | 3.65 | 264 | 100 | 12.10 | 33.77 | 3.41 | 25.62 | 238 | 0.32 |
| 95 | 12.54 | 33.78 | 3.43 | 243 | 150 | 11.40 | 34.34 | 1.30 | 26.21 | 182 | 0.43 |
| 109 | 11.80 | 33.77 | 3.39 | 231 | 200 | 10.73 | 34.46 | 0.80 | 26.42 | 162 | 0.52 |
| 128 | 11.50 | 33.98 | 2.46 | 210 | 250 | 10.10 | 34.51 | 0.52 | 26.56 | 148 | 0.60 |
| 146 | 11.41 | 34.30 | 1.39 | 185 | 300 | 9.68 | 34.55 | 0.21 | 26.68 | 138 | 0.67 |
| 169 | 11.00 | 34.38 | 1.21 | 172 | 400 | 8.77 | 34.55 | 0.21 | 26.83 | 123 | 0.81 |
| 191 | 10.79 | 34.43 | 0.88 | 164 | 500 | 7.70 | 34.49 | 0.20 | 26.94 | 113 | 0.93 |
| 237 | 10.25 | 34.49 | 0.63 | 151 | | | | | | | |
| 311 | 9.60 | 34.56 | 0.20 | 135 | | | | | | | |
| 404 | 8.75 | 34.55 | 0.21 | 123 | | | | | | | |
| 529 | 7.34 | 34.46 | 0.20 | 110 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ $^{-5}_{10}$ cm$^3$/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ $^{-5}_{10}$ cm$^3$/g | ΔD dyn. m |

STRANGER; January 21, 1958; 1355 GCT; 24°57'N, 115°03'W; sounding, 2100 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 04°. 133.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.38 | 34.51 | 4.94 | 362 | 0 | 20.38 | 34.51 | 4.94 | 24.31 | 362 | 0.00 |
| 10 | 20.40 | 34.52 | 5.12 | 363 | 10 | 20.40 | 34.52 | 5.12 | 24.30 | 363 | 0.04 |
| 30 | 20.05 | 34.51 | 5.16 | 354 | 20 | 20.29 | 34.52 | 5.14 | 24.33 | 360 | 0.07 |
| 54 | 17.00 | 34.04 | 4.68 | 316 | 30 | 20.05 | 34.51 | 5.16 | 24.40 | 354 | 0.11 |
| 63 | 14.79 | 33.85 | 4.09 | 282 | 50 | 19.20 | 34.40 | 5.08 | 24.54 | 341 | 0.18 |
| 73 | 13.97 | 33.96 | 3.01 | 257 | 75 | 13.82 | 33.97 | 2.95 | 25.44 | 255 | 0.25 |
| 83 | 13.22 | 33.99 | 2.66 | 241 | 100 | 12.43 | 34.08 | 2.20 | 25.81 | 220 | 0.31 |
| 97 | 12.58 | 34.07 | 2.27 | 222 | 150 | 11.50 | 34.43 | 0.96 | 26.26 | 175 | 0.41 |
| 111 | 11.90 | 34.14 | 1.91 | 205 | 200 | 11.18 | 34.60 | 0.48 | 26.46 | 158 | 0.50 |
| 129 | 12.04 | 34.34 | 1.15 | 193 | 250 | 10.11 | 34.55 | 0.54 | 26.60 | 145 | 0.58 |
| 148 | 11.52 | 34.43 | 0.99 | 177 | 300 | 9.36 | 34.50 | 0.42 | 26.69 | 136 | 0.65 |
| 171 | 11.22 | 34.49 | 0.75 | 168 | 400 | 8.02 | 34.47 | 0.30 | 26.88 | 118 | 0.78 |
| 195 | 11.21 | 34.60 | 0.48 | 160 | 500 | 7.06 | 34.44 | 0.25 | 26.99 | 108 | 0.90 |
| 239 | 10.36 | 34.56 | 0.55 | 147 | | | | | | | |
| 314 | 9.16 | 34.49 | 0.39 | 133 | | | | | | | |
| 407 | 7.94 | 34.47 | 0.30 | 117 | | | | | | | |
| 531 | 6.83 | 34.43 | 0.25 | 106 | | | | | | | |

STRANGER; January 20, 1958; 1423 GCT; 25°34'N, 112°19'W; sounding, 40 fm; wind, 090°, force 1; weather, partly cloudy; sea, rough; wire angle, 00°. 137.23

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.18 | 34.72 | 4.87 | 368 | 0 | 21.18 | 34.72 | 4.87 | 24.25 | 368 | 0.00 |
| 9 | 21.19 | 34.74 | 4.92 | 366 | 10 | 21.18 | 34.74 | 4.91 | 24.27 | 366 | 0.04 |
| 29 | 20.88 | 34.68 | 4.85 | 364 | 20 | 21.00 | 34.69 | 4.86 | 24.29 | 365 | 0.07 |
| 48 | 20.83 | 34.70 | 4.86 | 361 | 30 | 20.88 | 34.68 | 4.85 | 24.30 | 363 | 0.11 |

STRANGER; January 20, 1958; 1745 GCT; 25°19'N, 112°46'W; sounding, 180 fm; wind, 020°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°. 137.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.23 | 34.61 | | 377 | 0 | 21.23 | 34.61 | | 24.15 | 377 | 0.00 |
| 10 | 21.22 | 34.63 | | 376 | 10 | 21.22 | 34.63 | | 24.17 | 376 | 0.04 |
| 27 | 21.20 | 34.60 | | 379 | 20 | 21.21 | 34.61 | | 24.15 | 377 | 0.08 |
| 49 | 20.88 | 34.60 | | 369 | 30 | 21.18 | 34.60 | | 24.16 | 377 | 0.11 |
| 73 | 18.86 | 34.36 | | 336 | 50 | 20.86 | 34.60 | | 24.24 | 368 | 0.19 |
| 96 | 15.80 | 34.38 | | 265 | 75 | 18.70 | 34.36 | | 24.62 | 332 | 0.28 |
| 119 | 14.09 | 34.38 | | 229 | 100 | 15.40 | 34.38 | | 25.43 | 256 | 0.35 |
| 155 | 12.19 | 34.56 | | 179 | 150 | 12.39 | 34.53 | | 26.17 | 185 | 0.46 |
| 191 | 11.60 | 34.65 | | 163 | 200 | 11.51 | 34.65 | | 26.43 | 161 | 0.55 |
| 235 | 11.20 | 34.65 | | 155 | 250 | 11.10 | 34.65 | | 26.50 | 154 | 0.63 |
| 282 | 10.94 | 34.65 | | 151 | | | | | | | |

STRANGER; January 20, 1958; 2035 GCT; 25°10'N, 113°04'W; sounding, 800 fm; wind, 020°, force 3; weather, partly cloudy; sea, rough; wire angle, 02°. 137.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.58 | 34.66 | 4.90 | 383 | 0 | 21.58 | 34.66 | 4.90 | 24.10 | 383 | 0.00 |
| 10 | 21.39 | 34.67 | 4.97 | 377 | 10 | 21.39 | 34.67 | 4.97 | 24.16 | 377 | 0.04 |
| 30 | 20.72 | 34.56 | 4.76 | 368 | 20 | 21.10 | 34.63 | 4.91 | 24.20 | 372 | 0.08 |
| 39 | 20.04 | 34.40 | 4.38 | 363 | 30 | 20.72 | 34.56 | 4.76 | 24.25 | 368 | 0.11 |
| 48 | 18.84 | 34.24 | 4.02 | 344 | 50 | 18.75 | 34.24 | 4.00 | 24.52 | 343 | 0.18 |
| 58 | 18.32 | 34.22 | 3.85 | 333 | 75 | 16.50 | 34.09 | 3.69 | 24.94 | 303 | 0.26 |
| 67 | 17.63 | 34.08 | 4.03 | 327 | 100 | 15.05 | 34.22 | 2.40 | 25.38 | 261 | 0.34 |
| 81 | 15.84 | 34.11 | 3.36 | 285 | 150 | 12.37 | 34.45 | 1.01 | 26.10 | 192 | 0.45 |
| 95 | 15.37 | 34.23 | 2.41 | 266 | 200 | 11.10 | 34.49 | 0.83 | 26.38 | 166 | 0.54 |
| 110 | 13.90 | 34.15 | 2.35 | 242 | 250 | 11.02 | 34.66 | 0.27 | 26.53 | 152 | 0.62 |
| 132 | 12.92 | 34.36 | 1.21 | 208 | 300 | 10.46 | 34.64 | 0.25 | 26.61 | 144 | 0.70 |
| 160 | 12.10 | 34.48 | 0.93 | 184 | 400 | 9.15 | 34.58 | 0.30 | 26.78 | 128 | 0.84 |
| 192 | 11.32 | 34.49 | 0.84 | 169 | 500 | 7.84 | 34.46 | 0.26 | 26.87 | 117 | 0.97 |
| 237 | 11.10 | 34.66 | 0.29 | 153 | | | | | | | |
| 311 | 10.32 | 34.63 | 0.25 | 142 | | | | | | | |
| 405 | 9.06 | 34.57 | 0.30 | 127 | | | | | | | |
| 531 | 7.42 | 34.42 | 0.25 | 114 | | | | | | | |

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

137.40 STRANGER; January 20, 1958; 2330 GCT; 24°57'N, 113°29'W; sounding, 2000 fm; wind, 030°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.18 | 34.60 | 4.87 | 403 | 0 | 22.18 | 34.60 | 4.87 | 23.88 | 403 | 0.00 |
| 10 | 22.20 | 34.61a) | 4.81 | 403 | 10 | 22.20 | 34.61 | 4.81 | 23.88 | 403 | 0.04 |
| 29 | 22.12 | 34.60 | 4.90 | 402 | 20 | 22.16 | 34.60 | 4.86 | 23.89 | 402 | 0.08 |
| 59 | 22.10 | 34.60 | 4.80 | 401 | 30 | 22.12 | 34.60 | 4.90 | 23.90 | 402 | 0.12 |
| 68 | 21.29 | 34.58 | 4.58 | 381 | 50 | 22.11 | 34.60 | 4.86 | 23.90 | 402 | 0.20 |
| 78 | 18.00 | 34.21 | 3.85 | 327 | 75 | 19.30 | 34.35 | 4.12 | 24.47 | 347 | 0.29 |
| 92 | 16.02 | 34.14a) | 3.09 | 287 | 100 | 14.85 | 34.06 | 2.98 | 25.30 | 268 | 0.37 |
| 106 | 14.16 | 34.02 | 2.93 | 257 | 150 | 12.50 | 34.57 | 0.86 | 26.18 | 185 | 0.49 |
| 120 | 13.65 | 34.21 | 1.80 | 233 | 200 | 11.70 | 34.61 | 0.29 | 26.36 | 168 | 0.58 |
| 138 | 12.87 | 34.38 | 1.11 | 206 | 250 | 11.08 | 34.61 | 0.23 | 26.48 | 156 | 0.66 |
| 156 | 12.36 | 34.63 | 0.70 | 177 | 300 | 10.33 | 34.58 | 0.18 | 26.59 | 146 | 0.74 |
| 183 | 11.91 | 34.60 | 0.33 | 172 | 400 | 8.92 | 34.58 | 0.20 | 26.82 | 124 | 0.88 |
| 207 | 11.60 | 34.61 | 0.28 | 166 | 500 | 7.68 | 34.52 | 0.23 | 26.96 | 110 | 1.00 |
| 256 | 10.98 | 34.61 | 0.22 | 155 | | | | | | | |
| 335 | 9.82 | 34.57 | 0.16 | 139 | | | | | | | |
| 437 | 8.42 | 34.58b) | 0.21 | 117 | | | | | | | |
| 570 | 6.88 | 34.43b) | 0.25 | 106 | | | | | | | |

137.50 STRANGER; January 21, 1958; 0400 GCT; 24°41'N, 114°03'W; sounding, 1995 fm; wind, 360°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.31 | 34.53 | 4.99 | 411 | 0 | 22.31 | 34.53 | 4.99 | 23.80 | 411 | 0.00 |
| 10 | 22.36 | 34.53 | 4.87 | 413 | 10 | 22.36 | 34.53 | 4.87 | 23.78 | 413 | 0.04 |
| 29 | 22.10 | 34.47 | 5.05 | 411 | 20 | 22.25 | 34.50 | 4.99 | 23.79 | 412 | 0.08 |
| 54 | 21.70 | 34.45 | 4.89 | 401 | 30 | 22.07 | 34.47 | 5.05 | 23.81 | 410 | 0.12 |
| 64 | 20.12 | 34.27 | 4.78 | 373 | 50 | 21.79 | 34.45 | 4.92 | 23.88 | 403 | 0.20 |
| 73 | 17.94 | 34.07 | 4.31 | 335 | 75 | 17.72 | 34.06 | 4.28 | 24.63 | 332 | 0.30 |
| 83 | 16.60 | 34.03 | 3.89 | 308 | 100 | 14.75 | 34.01 | 3.06 | 25.28 | 270 | 0.37 |
| 97 | 15.10 | 34.00 | 3.26 | 278 | 150 | 12.68 | 34.47 | 0.84 | 26.06 | 196 | 0.49 |
| 111 | 13.62 | 34.05 | 2.44 | 245 | 200 | 11.65 | 34.59 | 0.42 | 26.36 | 168 | 0.58 |
| 129 | 12.34 | 34.08 | 2.14 | 218 | 250 | 11.10 | 34.65 | 0.29 | 26.51 | 153 | 0.66 |
| 148 | 12.72 | 34.47 | 0.89 | 196 | 300 | 10.14 | 34.58 | 0.27 | 26.62 | 142 | 0.74 |
| 170 | 11.84 | 34.47 | 0.80 | 180 | 400 | 8.88 | 34.53 | 0.21 | 26.79 | 126 | 0.88 |
| 192 | 11.72 | 34.58 | 0.48 | 169 | 500 | 7.61 | 34.46 | 0.24 | 26.93 | 112 | 1.01 |
| 237 | 11.28 | 34.66 | 0.30 | 156 | | | | | | | |
| 311 | 9.94 | 34.57 | 0.27 | 140 | | | | | | | |
| 404 | 8.82 | 34.53 | 0.21 | 126 | | | | | | | |
| 529 | 7.22 | 34.44 | 0.27 | 111 | | | | | | | |

137.60 STRANGER; January 21, 1958; 0902 GCT; 24°23'N, 114°40'W; sounding, 2000 fm; wind, 340°, force 2; weather, clear; sea, rough; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.71 | 34.58b) | 4.78 | 419 | 0 | 22.71 | 34.58 | 4.78 | 23.22 | 419 | 0.00 |
| 10 | 22.71 | 34.59 | 4.84 | 418 | 10 | 22.71 | 34.59 | 4.84 | 23.73 | 418 | 0.04 |
| 29 | 22.30 | 34.56 | 4.80 | 409 | 20 | 22.53 | 34.58 | 4.82 | 23.77 | 414 | 0.08 |
| 53 | 21.54 | 34.40 | 4.70 | 400 | 30 | 22.29 | 34.56 | 4.80 | 23.82 | 409 | 0.12 |
| 63 | 19.89 | 34.40b) | 4.68 | 359 | 50 | 21.77 | 34.45 | 4.73 | 23.88 | 403 | 0.20 |
| 73 | 17.96 | 34.22 | 4.43 | 325 | 75 | 17.35 | 34.15 | 4.24 | 24.81 | 315 | 0.30 |
| 83 | 16.28 | 34.04 | 3.80 | 300 | 100 | 14.13 | 34.13 | 2.41 | 25.51 | 248 | 0.37 |
| 96 | 14.46 | 34.11 | 2.57 | 257 | 150 | 12.43 | 34.53 | 0.60 | 26.16 | 186 | 0.48 |
| 110 | 13.60 | 34.15 | 2.16 | 236 | 200 | 11.23 | 34.61 | 0.44 | 26.45 | 159 | 0.56 |
| 130 | 12.82 | 34.40 | 1.13 | 203 | 250 | 10.60 | 34.59 | 0.34 | 26.56 | 149 | 0.64 |
| 148 | 12.46 | 34.53 | 0.61 | 187 | 300 | 9.88 | 34.57 | 0.31 | 26.66 | 140 | 0.72 |
| 171 | 11.88 | 34.58 | 0.52 | 173 | 400 | 8.66 | 34.51 | 0.24 | 26.81 | 125 | 0.86 |
| 193 | 11.38 | 34.61 | 0.47 | 161 | 500 | 7.49 | 34.48 | 0.20 | 26.96 | 110 | 0.98 |
| 238 | 10.72 | 34.60 | 0.35 | 151 | | | | | | | |
| 312 | 9.73 | 34.56 | 0.30 | 137 | | | | | | | |
| 405 | 8.60 | 34.51 | 0.24 | 124 | | | | | | | |
| 529 | 7.09 | 34.48 | 0.20 | 105 | | | | | | | |

a) Possible evaporation; value falls on property curve.
b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

STRANGER; January 20, 1958; 0917 GCT; 24°49'N, 112°29'W; sounding, 65 fm; wind, 360°, force 3; weather, clear; sea, rough; wire angle, 00°. 140.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.98 | 34.72 | 4.83 | 389 | 0 | 21.98 | 34.72 | 4.83 | 24.03 | 389 | 0.00 |
| 10 | 21.98 | 34.70 | 4.94 | 390 | 10 | 21.98 | 34.70 | 4.94 | 24.02 | 390 | 0.04 |
| 29 | 21.88 | 34.72 | 4.90 | 387 | 20 | 21.94 | 34.71 | 4.92 | 24.03 | 389 | 0.08 |
| 49 | 21.55 | 34.70 | 4.67 | 379 | 30 | 21.87 | 34.72 | 4.89 | 24.06 | 386 | 0.12 |
| 73 | 17.56 | 34.20 | 3.76 | 317 | 50 | 21.54 | 34.70 | 4.64 | 24.14 | 378 | 0.19 |
| 97 | 16.10 | 34.35 | 2.31 | 273 | 75 | 17.40 | 34.20 | 3.69 | 24.83 | 313 | 0.28 |
| | | | | | 100 | (15.98) | (34.37) | (2.13) | (25.29) | (269) | (0.35) |

STRANGER; January 20, 1958; 0703 GCT; 24°41'N, 112°47'W; sounding, 390 fm; wind, 300°, force 3; weather, partly cloudy; sea, rough; wire angle, 06°. 140.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.84 | 34.66 | 4.81 | 390 | 0 | 21.84 | 34.66 | 4.81 | 24.02 | 390 | 0.00 |
| 10 | 21.84 | 34.64 | 4.84 | 392 | 10 | 21.84 | 34.64 | 4.84 | 24.00 | 392 | 0.04 |
| 29 | 21.09 | 34.62 | 4.92 | 373 | 20 | 21.50 | 34.63 | 4.90 | 24.09 | 383 | 0.08 |
| 39 | 20.94 | 34.62 | 4.91 | 369 | 30 | 21.08 | 34.62 | 4.92 | 24.20 | 373 | 0.12 |
| 48 | 20.88 | 34.62 | 4.94 | 370 | 50 | 20.85 | 34.62 | 4.94 | 24.27 | 366 | 0.19 |
| 58 | 20.67 | 34.61 | 4.62 | 363 | 75 | 18.63 | 34.30 | 4.01 | 24.60 | 335 | 0.28 |
| 67 | 19.46 | 34.39 | 4.31 | 349 | 100 | 15.75 | 34.20 | 2.88 | 25.21 | 277 | 0.36 |
| 82 | 18.04 | 34.25 | 3.79 | 325 | 150 | 13.17 | 34.45 | 0.94 | 25.95 | 206 | 0.48 |
| 96 | 16.08 | 34.22 | 2.98 | 283 | 200 | 11.82 | 34.52 | 0.71 | 26.27 | 176 | 0.58 |
| 110 | 15.00 | 34.13 | 2.67 | 267 | 250 | 11.48 | 34.68 | 0.28 | 26.46 | 158 | 0.66 |
| 133 | 13.92 | 34.40 | 1.16 | 224 | 300 | 10.09 | 34.61 | 0.30 | 26.66 | 139 | 0.74 |
| 160 | 12.76 | 34.47 | 0.85 | 197 | 400 | 8.63 | 34.54 | 0.25 | 26.84 | 122 | 0.87 |
| 191 | 11.86 | 34.51 | 0.75 | 177 | 500 | 7.58 | 34.48 | 0.22 | 26.95 | 112 | 1.00 |
| 237 | 11.74 | 34.69 | 0.28 | 161 | | | | | | | |
| 309 | 9.82 | 34.60 | 0.30 | 138 | | | | | | | |
| 402 | 8.62 | 34.70r | 0.25 | | | | | | | | |
| 529 | 7.34 | 34.47 | 0.21 | 109 | | | | | | | |

STRANGER; January 20, 1958; 0323 GCT; 24°29'N, 113°11'W; sounding, 1850 fm; wind, 310°, force 3; weather, partly cloudy; sea, very rough; wire angle, 06°. 140.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.50 | 34.67 | | 380 | 0 | 21.50 | 34.67 | | 24.12 | 380 | 0.00 |
| 10 | 21.50 | 34.66 | | 381 | 10 | 21.50 | 34.66 | | 24.11 | 381 | 0.04 |
| 29 | 21.16 | 34.59 | | 377 | 20 | 21.36 | 34.62 | | 24.12 | 380 | 0.08 |
| 39 | 20.89 | 34.58 | | 371 | 30 | 21.15 | 34.59 | | 24.16 | 376 | 0.11 |
| 49 | 20.24 | 34.43 | | 365 | 50 | 20.23 | 34.43 | | 24.29 | 364 | 0.19 |
| 58 | 19.86 | 34.43 | | 355 | 75 | 17.45 | 34.15 | | 24.78 | 318 | 0.27 |
| 68 | 18.31 | 34.22 | | 333 | 100 | 14.98 | 33.99 | | 25.22 | 276 | 0.35 |
| 82 | 16.80 | 34.11 | | 306 | 150 | 12.23 | 34.33 | | 26.05 | 197 | 0.47 |
| 96 | 15.40 | 33.98 | | 286 | 200 | 11.81 | 34.58 | | 26.32 | 171 | 0.56 |
| 110 | 14.17 | 34.03 | | 256 | 250 | 10.99 | 34.60 | | 26.49 | 155 | 0.64 |
| 134 | 12.66 | 34.25 | | 211 | 300 | 10.52 | 34.63 | | 26.59 | 146 | 0.72 |
| 160 | 12.02 | 34.38 | | 190 | 400 | 9.11 | 34.52 | | 26.74 | 131 | 0.87 |
| 193 | 11.87 | 34.57 | | 173 | 500 | 7.98 | 34.45 | | 26.88 | 118 | 1.00 |
| 237 | 11.17 | 34.59 | | 159 | | | | | | | |
| 310 | 10.42 | 34.63 | | 144 | | | | | | | |
| 403 | 9.06 | 34.52 | | 130 | | | | | | | |
| 526 | 7.68 | 34.46 | | 115 | | | | | | | |

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

140.50 STRANGER; January 19, 1958; 2210 GCT; 24°07'N, 113°41'W; sounding, 1750 fm; wind, 310°, force 3; weather, partly cloudy; sea, high; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.32 | 34.70 | 4.77 | 401 | 0 | 22.32 | 34.70 | 4.77 | 23.90 | 401 | 0.00 |
| 10 | 22.28 | 34.70 | 4.81 | 399 | 10 | 22.28 | 34.70 | 4.81 | 23.92 | 399 | 0.04 |
| 30 | 22.17 | 34.72 | 4.80 | 393 | 20 | 22.23 | 34.71 | 4.80 | 23.96 | 396 | 0.08 |
| 59 | 22.16 | 34.70 | 4.75 | 395 | 30 | 22.17 | 34.72 | 4.80 | 23.98 | 393 | 0.12 |
| 69 | 22.18 | 34.72 | 4.76 | 398 | 50 | 22.16 | 34.71 | 4.75 | 23.98 | 394 | 0.20 |
| 78 | 22.14 | 34.70 | 4.84 | 394 | 75 | 22.17 | 34.71 | 4.80 | 23.98 | 394 | 0.30 |
| 92 | 20.25 | 34.42 | 4.11 | 366 | 100 | 17.72 | 34.14 | 3.90 | 24.70 | 325 | 0.39 |
| 107 | 16.54 | 34.04 | 3.83 | 305 | 150 | 12.01 | 34.23 | 1.57 | 26.01 | 201 | 0.52 |
| 122 | 14.65 | 34.12 | 2.60 | 260 | 200 | 11.16 | 34.51 | 0.69 | 26.39 | 165 | 0.61 |
| 140 | 12.32 | 34.16 | 1.93 | 212 | 250 | 10.67 | 34.61 | 0.38 | 26.55 | 149 | 0.69 |
| 158 | 11.85 | 34.30 | 1.35 | 193 | 300 | 10.00 | 34.62 | 0.31 | 26.67 | 138 | 0.77 |
| 186 | 11.36 | 34.47 | 0.84 | 171 | 400 | 8.72 | 34.56 | 0.27 | 26.84 | 122 | 0.90 |
| 208 | 11.04 | 34.53 | 0.59 | 162 | 500 | 7.71 | 34.54 | 0.21 | 26.98 | 109 | 1.02 |
| 258 | 10.60 | 34.63 | 0.36 | 147 | | | | | | | |
| 336 | 9.50 | 34.60 | 0.30 | 131 | | | | | | | |
| 440 | 8.27 | 34.54 | 0.25 | 117 | | | | | | | |
| 573 | 7.06 | 34.54 | 0.16 | 100 | | | | | | | |

140.60 STRANGER; January 19, 1958; 1758 GCT; 23°46'N, 114°16'W; sounding, 2000 fm; wind, 310°, force 3; weather, partly cloudy; sea, high; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.50 | 34.57 | 4.58 | 414 | 0 | 22.50 | 34.57 | 4.58 | 23.77 | 414 | 0.00 |
| 10 | 22.47 | 34.53 | 4.74 | 416 | 10 | 22.47 | 34.53 | 4.74 | 23.75 | 416 | 0.04 |
| 29 | 22.30 | 34.52 | 4.78 | 412 | 20 | 22.41 | 34.53 | 4.75 | 23.77 | 414 | 0.08 |
| 59 | 19.82 | 34.16 | 4.90 | 374 | 30 | 22.30 | 34.52 | 4.77 | 23.79 | 412 | 0.12 |
| 68 | 17.78 | 34.02 | 4.55 | 335 | 50 | 21.00 | 34.33 | 4.86 | 24.01 | 391 | 0.20 |
| 78 | 16.44 | 33.94 | 4.32 | 311 | 75 | 16.86 | 33.96 | 4.42 | 24.77 | 319 | 0.29 |
| 92 | 15.26 | 33.97 | 3.50 | 283 | 100 | 14.22 | 33.93 | 3.18 | 25.34 | 265 | 0.37 |
| 106 | 13.44 | 33.90 | 2.99 | 252 | 150 | 12.01 | 34.39 | 1.00 | 26.14 | 189 | 0.48 |
| 121 | 12.78 | 34.07 | 2.26 | 226 | 200 | 11.63 | 34.63 | 0.45 | 26.39 | 165 | 0.57 |
| 139 | 11.96 | 34.13 | 1.78 | 207 | 250 | 11.03 | 34.66 | 0.27 | 26.52 | 152 | 0.65 |
| 157 | 12.02 | 34.50 | 0.71 | 182 | 300 | 10.37 | 34.64 | 0.21 | 26.63 | 142 | 0.73 |
| 185 | 11.90 | 34.60 | 0.52 | 171 | 400 | 8.88 | 34.58 | 0.29 | 26.83 | 123 | 0.87 |
| 207 | 11.52 | 34.64 | 0.41 | 162 | 500 | 7.50 | 34.51 | 0.30 | 26.98 | 108 | 0.99 |
| 257 | 10.98 | 34.66 | 0.23 | 150 | | | | | | | |
| 335 | 9.84 | 34.62 | 0.20 | 135 | | | | | | | |
| 439 | 8.28 | 34.55 | 0.32 | 116 | | | | | | | |
| 572 | 6.66 | 34.47a) | 0.24 | 100 | | | | | | | |

143.26 STRANGER; January 18, 1958; 1741 GCT; 24°19'N, 111°48'W; sounding, 40 fm; wind, calm; weather, partly cloudy; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.54 | 34.70 | | 406 | 0 | 22.54 | 34.70 | | 23.85 | 406 | 0.00 |
| 10 | 22.54 | 34.69 | | 406 | 10 | 22.54 | 34.69 | | 23.85 | 406 | 0.04 |
| 29 | 22.44 | 34.72 | | 402 | 20 | 22.50 | 34.71 | | 23.87 | 404 | 0.08 |
| 49 | 22.02 | 34.69 | | 393 | 30 | 22.43 | 34.72 | | 23.90 | 401 | 0.12 |
| 73 | 19.84 | 34.49 | | 350 | 50 | 21.98 | 34.68 | | 24.00 | 392 | 0.20 |
| | | | | | 75 | (19.62) | (34.47) | | (24.48) | (346) | (0.29) |

143.30 STRANGER; January 18, 1958; 1956 GCT; 24°11'N, 112°03'W; sounding, 120 fm; wind, 250°, force 3; weather, partly cloudy; sea, very rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.43 | 34.58 | 4.79 | 412 | 0 | 22.43 | 34.58 | 4.79 | 23.80 | 412 | 0.00 |
| 10 | 22.23 | 34.64 | 4.82 | 402 | 10 | 22.23 | 34.64 | 4.82 | 23.90 | 402 | 0.04 |
| 29 | 21.98 | 34.69 | 4.79 | 391 | 20 | 22.10 | 34.67 | 4.81 | 23.96 | 396 | 0.08 |
| 49 | 21.26 | 34.86 | 4.67 | 360 | 30 | 21.97 | 34.69 | 4.78 | 24.02 | 390 | 0.12 |
| 73 | 16.68 | 34.13 | 3.44 | 302 | 50 | 21.21 | 34.86 | 4.66 | 24.34 | 359 | 0.19 |
| 97 | 14.90 | 34.25 | 2.12 | 255 | 75 | 16.58 | 34.13 | 3.40 | 24.97 | 300 | 0.28 |
| 120 | 13.72 | 34.38 | 1.29 | 222 | 100 | 14.73 | 34.27 | 2.00 | 25.49 | 250 | 0.35 |
| 157 | 12.74 | 34.54 | 0.61 | 191 | 150 | 12.87 | 34.51 | 0.73 | 26.06 | 196 | 0.46 |
| 195 | 12.24 | 34.61 | 0.45 | 177 | 200 | (12.21) | (34.62) | (0.44) | (26.27) | (176) | (0.55) |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; January 18, 1958; 2258, 2325 GCT; 24°01'N, 112°22'W; sounding, 1400 fm; wind, 290°, force 4; weather, cloudy; sea, very rough; wire angle, 24°, 35°. | | | | | | | | | | | 143.35 |
| 0 | 22.28 | 34.60 | 4.79 | 406 | 0 | 22.28 | 34.60 | 4.79 | 23.85 | 406 | 0.00 |
| 8 | 22.16 | 34.64 | 4.94 | 400 | 10 | 22.13 | 34.64 | 4.94 | 23.93 | 399 | 0.04 |
| 27 | 21.96 | 34.67 | 4.94 | 392 | 20 | 22.02 | 34.66 | 4.94 | 23.97 | 395 | 0.08 |
| 54 | 21.84 | 34.69 | 4.97 | 388 | 30 | 21.95 | 34.67 | 4.95 | 24.01 | 391 | 0.12 |
| 62 | 21.72 | 34.65 | 4.85 | 387 | 50 | 21.86 | 34.69 | 4.96 | 24.03 | 389 | 0.20 |
| 71 | 21.48 | 34.67 | 4.87 | 380 | 75 | 21.37 | 34.66 | 4.85 | 24.15 | 377 | 0.29 |
| 83 | 20.66 | 34.52 | 4.54 | 370 | 100 | 16.48 | 34.14 | 3.56 | 25.00 | 297 | 0.38 |
| 94 | 18.26 | 34.23 | 4.21 | 331 | 150 | 12.99 | 34.44 | 1.01 | 25.99 | 203 | 0.50 |
| 106 | 15.32 | 34.10 | 2.92 | 275 | 200 | 11.86 | 34.60 | 0.42 | 26.33 | 170 | 0.60 |
| 121 | 13.82 | 34.22 | 2.02 | 236 | 250 | 11.31 | 34.62 | 0.32 | 26.44 | 160 | 0.68 |
| 137 | 13.28 | 34.34 | 1.45 | 216 | 300 | 10.58 | 34.61 | 0.30 | 26.56 | 148 | 0.76 |
| 161 | 12.72 | 34.51 | 0.73 | 193 | 400 | 9.02 | 34.54 | 0.25 | 26.78 | 128 | 0.90 |
| 180 | 12.06 | 34.57 | 0.56 | 177 | 500 | 7.81 | 34.51 | 0.25 | 26.94 | 113 | 1.03 |
| 224 | 11.63 | 34.62 | 0.35 | 166 | | | | | | | |
| 294 | 10.64 | 34.61 | 0.30 | 149 | | | | | | | |
| 379 | 9.32 | 34.55 | 0.26 | 132 | | | | | | | |
| 504 | 7.74 | 34.51 | 0.25 | 111 | | | | | | | |
| STRANGER; January 19, 1958; 0212 GCT; 23°51'N, 112°47'W; sounding, 1700 fm; wind, 230°, force 2; weather, partly cloudy; sea, very rough; wire angle, 05°. | | | | | | | | | | | 143.40 |
| 0 | 23.12 | 34.62 | 4.78 | 427 | 0 | 23.12 | 34.62 | 4.78 | 23.63 | 427 | 0.00 |
| 10 | 23.12 | 34.61 | 4.89 | 428 | 10 | 23.12 | 34.61 | 4.89 | 23.62 | 428 | 0.04 |
| 29 | 23.12 | 34.61 | 4.85 | 428 | 20 | 23.12 | 34.61 | 4.87 | 23.62 | 428 | 0.08 |
| 58 | 22.98 | 34.61 | 4.87 | 423 | 30 | 23.11 | 34.61 | 4.85 | 23.63 | 427 | 0.13 |
| 67 | 22.02 | 34.44 | 4.93 | 411 | 50 | 23.04 | 34.61 | 4.86 | 23.64 | 426 | 0.21 |
| 77 | 20.90 | 34.36 | 4.83 | 387 | 75 | 21.10 | 34.37 | 4.85 | 24.01 | 391 | 0.32 |
| 91 | 17.52 | 34.11 | 3.86 | 322 | 100 | 15.96 | 34.08 | 3.29 | 25.06 | 290 | 0.40 |
| 104 | 15.44 | 34.08 | 3.09 | 280 | 150 | 12.69 | 34.32 | 1.40 | 25.95 | 206 | 0.52 |
| 118 | 13.78 | 34.18 | 2.07 | 237 | 200 | 11.90 | 34.65 | 0.35 | 26.36 | 168 | 0.62 |
| 136 | 12.84 | 34.20 | 1.81 | 218 | 250 | 11.21 | 34.68 | 0.17 | 26.51 | 153 | 0.70 |
| 154 | 12.62 | 34.41 | 1.16 | 199 | 300 | 10.42 | 34.65 | 0.16 | 26.63 | 142 | 0.78 |
| 181 | 12.23 | 34.60 | 0.46 | 178 | 400 | 8.90 | 34.55 | 0.17 | 26.81 | 125 | 0.92 |
| 203 | 11.84 | 34.66 | 0.34 | 166 | 500 | 7.67 | 34.51 | 0.24 | 26.95 | 111 | 1.04 |
| 253 | 11.19 | 34.68 | 0.17 | 153 | | | | | | | |
| 330 | 9.92 | 34.62 | 0.16 | 126 | | | | | | | |
| 435 | 8.42 | 34.53 | 0.19 | 120 | | | | | | | |
| 566 | 6.95 | 34.49 | 0.31 | 102 | | | | | | | |
| STRANGER; January 19, 1958; 0702 GCT; 23°31'N, 113°15'W; sounding, 1900 fm; wind, 270°, force 2; weather, partly cloudy; sea, very rough; wire angle, 03°. | | | | | | | | | | | 143.50 |
| 0 | 23.32 | 34.67 | | 429 | 0 | 23.32 | 34.67 | | 23.61 | 429 | 0.00 |
| 10 | 23.32 | 34.65 | | 431 | 10 | 23.32 | 34.65 | | 23.59 | 431 | 0.04 |
| 29 | 23.33 | 34.65 | | 431 | 20 | 23.32 | 34.65 | | 23.59 | 431 | 0.08 |
| 59 | 23.23 | 34.68 | | 426 | 30 | 23.33 | 34.65 | | 23.59 | 431 | 0.13 |
| 68 | 20.72 | 34.35 | | 383 | 50 | 23.33 | 34.65 | | 23.59 | 431 | 0.21 |
| 78 | 17.63 | 34.05 | | 330 | 75 | 18.29 | 34.11 | | 24.54 | 340 | 0.31 |
| 92 | 15.38 | 33.96 | | 286 | 100 | 14.00 | 34.97 | | 25.40 | 258 | 0.39 |
| 107 | 13.26 | 33.98 | | 242 | 150 | 11.97 | 34.38 | | 26.13 | 189 | 0.50 |
| 120 | 12.52 | 34.16 | | 215 | 200 | 11.56 | 34.66 | | 26.43 | 161 | 0.59 |
| 139 | 12.14 | 34.34 | | 195 | 250 | 10.82 | 34.64 | | 26.55 | 150 | 0.67 |
| 157 | 11.86 | 34.42 | | 184 | 300 | 10.03 | 34.61 | | 26.66 | 139 | 0.74 |
| 185 | 11.62 | 34.56 | | 170 | 400 | 8.78 | 34.57 | | 26.84 | 122 | 0.88 |
| 207 | 11.56 | 34.67 | | 160 | 500 | 7.80 | 34.54 | | 26.97 | 110 | 1.00 |
| 258 | 10.66 | 34.63 | | 148 | | | | | | | |
| 336 | 9.53 | 34.60 | | 131 | | | | | | | |
| 441 | 8.34 | 34.55 | | 117 | | | | | | | |
| 573 | 7.16 | 34.53 | | 102 | | | | | | | |

SIO

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5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

143.60 STRANGER; January 19, 1958; 1235 GCT; 23°13'N, 113°51'W; sounding, 2000 fm; wind, 310°, force 4; weather, partly cloudy; sea, very rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.76 | 34.35 | 4.62 | 436 | 0 | 22.76 | 34.35 | 4.62 | 23.54 | 436 | 0.00 |
| 10 | 22.77 | 34.34 | 4.84 | 437 | 10 | 22.77 | 34.34 | 4.84 | 23.53 | 437 | 0.04 |
| 30 | 22.76 | 34.34 | 4.84 | 437 | 20 | 22.76 | 34.34 | 4.84 | 23.53 | 437 | 0.09 |
| 59 | 22.40 | 34.52 | 4.43 | 415 | 30 | 22.76 | 34.34 | 4.84 | 23.53 | 437 | 0.13 |
| 68 | 21.08 | 34.42 | 3.84 | 387 | 50 | 22.70 | 34.35 | 4.84 | 23.55 | 435 | 0.22 |
| 78 | 19.55 | 34.36 | 3.40 | 352 | 75 | 20.20 | 34.38 | 3.56 | 24.26 | 367 | 0.32 |
| 92 | 17.52 | 34.30 | 2.95 | 309 | 100 | 16.65 | 34.35 | 2.48 | 25.12 | 286 | 0.40 |
| 106 | 16.09 | 34.38a) | 2.11 | 271 | 150 | 13.20 | 34.54 | 0.78 | 26.02 | 200 | 0.52 |
| 120 | 14.93 | 34.45 | 1.39 | 241 | 200 | 12.10 | 34.68 | 0.35 | 26.34 | 169 | 0.62 |
| 139 | 13.84 | 34.54 | 0.89 | 213 | 250 | 11.42 | 34.68 | 0.18 | 26.47 | 157 | 0.70 |
| 157 | 12.88 | 34.54 | 0.73 | 194 | 300 | 10.69 | 34.66 | 0.18 | 26.58 | 146 | 0.78 |
| 184 | 12.34 | 34.65 | 0.51 | 176 | 400 | 9.35 | 34.61 | 0.30 | 26.77 | 128 | 0.92 |
| 207 | 12.00 | 34.69 | 0.30 | 167 | 500 | 8.21 | 34.56 | 0.31 | 26.91 | 115 | 1.05 |
| 257 | 11.37 | 34.68 | 0.16 | 156 | | | | | | | |
| 337 | 10.14 | 34.64 | 0.20 | 139 | | | | | | | |
| 441 | 8.88 | 34.59 | 0.35 | 122 | | | | | | | |
| 574 | 7.27 | 34.51 | 0.23 | 105 | | | | | | | |

147.20 STRANGER; January 17, 1958; 1317 GCT; 24°07'N, 111°20'W; sounding, 60 fm; wind, 040°, force 4; weather, cloudy; sea, very rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.36 | 34.69 | 4.84 | 401 | 0 | 22.36 | 34.69 | 4.84 | 23.90 | 401 | 0.00 |
| 10 | 22.36 | 34.69 | 4.89 | 401 | 10 | 22.36 | 34.69 | 4.89 | 23.90 | 401 | 0.04 |
| 29 | 22.24 | 34.71 | 4.73 | 397 | 20 | 22.30 | 34.70 | 4.81 | 23.92 | 400 | 0.08 |
| 49 | 21.79 | 34.70 | 4.58 | 385 | 30 | 22.23 | 34.71 | 4.72 | 23.96 | 396 | 0.12 |
| 74 | 20.54 | 34.60 | 3.41 | 360 | 50 | 21.77 | 34.70 | 4.55 | 24.07 | 384 | 0.20 |
| 98 | 17.66 | 34.42 | 2.58 | 303 | 75 | 20.49 | 34.60 | 3.37 | 24.35 | 359 | 0.29 |
| | | | | | 100 | (17.40) | (34.41) | (2.52) | (24.99) | (298) | (0.38) |

147.25 STRANGER; January 17, 1958; 1042 GCT; 23°56'N, 111°35'W; sounding, 175 fm; wind, 050°, force 4; weather, overcast; sea, high; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.17 | 34.67 | 4.42 | 398 | 0 | 22.17 | 34.67 | 4.42 | 23.94 | 398 | 0.00 |
| 10 | 22.17 | 34.67 | 4.91 | 398 | 10 | 22.17 | 34.67 | 4.91 | 23.94 | 398 | 0.04 |
| 29 | 22.20 | 34.68 | 4.96 | 398 | 20 | 22.18 | 34.67 | 4.92 | 23.94 | 398 | 0.08 |
| 48 | 21.97 | 34.72 | 4.84 | 388 | 30 | 22.20 | 34.69 | 4.95 | 23.95 | 397 | 0.12 |
| 72 | 19.99 | 34.44 | 4.30 | 357 | 50 | 21.90 | 34.72 | 4.83 | 24.04 | 388 | 0.20 |
| 97 | 15.44 | 34.18 | 2.79 | 272 | 75 | 19.22 | 34.38 | 4.11 | 24.49 | 345 | 0.29 |
| 120 | 14.24 | 34.35 | 1.73 | 235 | 100 | 15.22 | 34.19 | 2.62 | 25.32 | 266 | 0.37 |
| 156 | 12.78 | 34.54 | 0.72 | 192 | 150 | 13.00 | 34.51 | 0.88 | 26.03 | 199 | 0.48 |
| 193 | 12.04 | 34.63 | 0.43 | 172 | 200 | 11.96 | 34.63 | 0.40 | 26.33 | 170 | 0.58 |
| 240 | 11.36 | 34.65 | 0.26 | 158 | 250 | (11.20) | (34.65) | (0.23) | (26.49) | (155) | (0.66) |

147.30 STRANGER; January 17, 1958; 0755 GCT; 23°43'N, 111°52'W; sounding, 235 fm; wind, 100°, force 4; weather, cloudy; sea, moderate; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.48 | 34.58 | 4.64 | 413 | 0 | 22.48 | 34.58 | 4.64 | 23.78 | 413 | 0.00 |
| 9 | 22.49 | 34.60 | 4.77 | 413 | 10 | 22.48 | 34.60 | 4.78 | 23.78 | 413 | 0.04 |
| 28 | 22.20 | 34.65a) | 4.86 | 400 | 20 | 22.38 | 34.64 | 4.81 | 23.86 | 406 | 0.08 |
| 47 | 21.53 | 34.56 | 4.76 | 389 | 30 | 22.19 | 34.65 | 4.86 | 23.93 | 399 | 0.12 |
| 72 | 19.38 | 34.31 | 4.24 | 352 | 50 | 21.35 | 34.54 | 4.72 | 24.06 | 386 | 0.20 |
| 95 | 15.57b) | 34.01 | 3.34 | 289 | 75 | 18.87 | 34.26 | 4.13 | 24.50 | 344 | 0.29 |
| 118 | 14.23 | 34.22 | 2.12 | 244 | 100 | 15.25 | 34.02 | 3.12 | 25.17 | 280 | 0.37 |
| 154 | 12.80 | 34.57 | 0.53 | 190 | 150 | 12.93 | 34.54 | 0.65 | 26.08 | 194 | 0.49 |
| 191 | 12.34 | 34.61 | 0.40 | 179 | 200 | 12.20 | 34.62 | 0.37 | 26.28 | 175 | 0.58 |
| 237 | 11.38 | 34.67 | 0.29 | 157 | 250 | 11.16 | 34.66 | 0.28 | 26.51 | 153 | 0.67 |
| 285 | 10.59 | 34.64 | 0.26 | 145 | 300 | 10.39 | 34.63 | 0.24 | 26.62 | 143 | 0.75 |
| 382 | 9.46 | 34.59 | 0.17 | 131 | | | | | | | |

a) Loose bottle cap; value falls on property curve.
b) Mean value of 15.49 and 15.64°C.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{10}{}^{3}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{10}{}^{3}$ cm/g | ΔD dyn. m |
| STRANGER; January 17, 1958; 0248 GCT; 23°18'N, 112°27'W; sounding, 1800 fm; wind, 110°, force 2; weather, rain; sea, rough; wire angle, 14°. | | | | | | | | | | | 147.40 |
| 0 | 24.02 | 34.55 | | 458 | 0 | 24.02 | 34.55 | | 23.31 | 458 | 0.00 |
| 10 | 24.03 | 34.56 | | 457 | 10 | 24.03 | 34.56 | | 23.32 | 457 | 0.04 |
| 28 | 23.78 | 34.60 | | 446 | 20 | 23.87 | 34.59 | | 23.39 | 450 | 0.09 |
| 43 | 23.32 | 34.65 | | 431 | 30 | 23.77 | 34.60 | | 23.44 | 445 | 0.14 |
| 52 | 22.97 | 34.65 | | 420 | 50 | 23.02 | 34.65 | | 23.69 | 422 | 0.22 |
| 61 | 21.72 | 34.57 | | 393 | 75 | 20.75 | 34.50 | | 24.21 | 372 | 0.32 |
| 70 | 21.20 | 34.54 | | 381 | 100 | 16.84 | 34.30 | | 25.03 | 294 | 0.41 |
| 88 | 18.96 | 34.34 | | 339 | 150 | 12.40 | 34.37 | | 26.05 | 198 | 0.53 |
| 101 | 16.64 | 34.30 | | 289 | 200 | 11.49 | 34.62 | | 26.40 | 164 | 0.62 |
| 115 | 13.41 | 33.95 | | 248 | 250 | 11.00 | 34.65 | | 26.52 | 152 | 0.70 |
| 136 | 12.83 | 34.32 | | 209 | 300 | 10.48 | 34.64 | | 26.61 | 144 | 0.77 |
| 161 | 12.04 | 34.40 | | 189 | 400 | 9.38 | 34.60 | | 26.77 | 129 | 0.92 |
| 195 | 11.57 | 34.61 | | 164 | 500 | 8.02 | 34.54 | | 26.94 | 113 | 1.05 |
| 241 | 11.08 | 34.65 | | 154 | | | | | | | |
| 316 | 10.30 | 34.64 | | 141 | | | | | | | |
| 409 | 9.25 | 34.60 | | 127 | | | | | | | |
| 543 | 7.28 | 34.51 | | 106 | | | | | | | |
| STRANGER; January 16, 1958; 0900 GCT; 23°23'N, 110°39'W; sounding, 100 fm; wind, 040°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | 150.19 |
| 0 | 22.04 | 34.72 | | 390 | 0 | 22.04 | 34.72 | | 24.02 | 390 | 0.00 |
| 10 | 22.06 | 34.77 | | 388 | 10 | 22.06 | 34.77 | | 24.04 | 388 | 0.04 |
| 30 | 22.04 | 34.72 | | 390 | 20 | 22.06 | 34.75 | | 24.03 | 389 | 0.08 |
| 49 | 20.58 | 34.52 | | 367 | 30 | 22.04 | 34.72 | | 24.02 | 390 | 0.12 |
| 73 | 17.63 | 34.55 | | 295 | 50 | 20.43 | 34.52 | | 24.30 | 364 | 0.19 |
| 97 | 15.46 | 34.52 | | 247 | 75 | 17.41 | 34.55 | | 25.07 | 290 | 0.27 |
| 121 | 14.08 | 34.63 | | 211 | 100 | 15.46 | 34.60 | | 25.58 | 242 | 0.34 |
| 150 | 13.49 | 34.63 | | 200 | 150 | 13.49 | 34.63 | | 26.02 | 200 | 0.45 |
| STRANGER; January 16, 1958; 1232 GCT; 23°12'N, 111°02'W; sounding, 650 fm; wind, 040°, force 4; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | | 150.25 |
| 0 | 22.28 | 34.71 | 4.65 | 398 | 0 | 22.28 | 34.71 | 4.65 | 23.94 | 398 | 0.00 |
| 10 | 22.29 | 34.70 | 4.70 | 399 | 10 | 22.29 | 34.70 | 4.70 | 23.93 | 399 | 0.04 |
| 29 | 22.30 | 34.71 | 4.78 | 398 | 20 | 22.29 | 34.70 | 4.74 | 23.93 | 399 | 0.08 |
| 43 | 22.24 | 34.70 | 4.77 | 397 | 30 | 22.30 | 34.71 | 4.78 | 23.94 | 398 | 0.12 |
| 53 | 20.88 | 34.56 | 3.70 | 372 | 50 | 22.02 | 34.68 | 4.64 | 23.99 | 393 | 0.20 |
| 62 | 19.77 | 34.51 | 3.36 | 347 | 75 | 19.00 | 34.52 | 2.71 | 24.67 | 328 | 0.29 |
| 72 | 19.28 | 34.53 | 2.78 | 334 | 100 | 15.78 | 34.39 | 1.87 | 25.35 | 264 | 0.36 |
| 90 | 16.52 | 34.28 | 2.69 | 288 | 150 | 13.55 | 34.63 | 0.63 | 26.01 | 200 | 0.48 |
| 105 | 15.45 | 34.45 | 1.46 | 252 | 200 | 12.19 | 34.66 | 0.37 | 26.31 | 172 | 0.57 |
| 120 | 14.37 | 34.54 | 1.05 | 223 | 250 | 11.49 | 34.70 | 0.20 | 26.47 | 157 | 0.66 |
| 142 | 13.86 | 34.63 | 0.73 | 207 | 300 | 10.73 | 34.66 | 0.17 | 26.58 | 146 | 0.74 |
| 168 | 12.66 | 34.62 | 0.49 | 184 | 400 | 9.25 | 34.57 | 0.16 | 26.76 | 129 | 0.88 |
| 204 | 12.12 | 34.67 | 0.36 | 170 | 500 | 8.07 | 34.55 | 0.16 | 26.94 | 113 | 1.01 |
| 253 | 11.45 | 34.70 | 0.20 | 156 | | | | | | | |
| 331 | 10.26 | 34.63 | 0.16 | 141 | | | | | | | |
| 426 | 8.87 | 34.56 | 0.16 | 124 | | | | | | | |
| 564 | 7.44 | 34.55 | 0.16 | 104 | | | | | | | |

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

150.30 STRANGER; January 16, 1958; 1550 GCT; 23°03'N, 111°21'W; sounding, 1550 fm; wind, 040°, force 4; weather, drizzle; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.62 | 34.55 | 4.57 | 446 | 0 | 23.62 | 34.55 | 4.57 | 23.43 | 446 | 0.00 |
| 9 | 23.62 | 34.54 | 4.78 | 446 | 10 | 23.62 | 34.54 | 4.79 | 23.43 | 446 | 0.04 |
| 33 | 22.74 | 34.70 | 5.00 | 411 | 20 | 22.84 | 34.69 | 5.00 | 23.77 | 414 | 0.09 |
| 62 | 22.40 | 34.68 | 4.63 | 403 | 30 | 22.77 | 34.70 | 5.00 | 23.79 | 412 | 0.13 |
| 72 | 20.67 | 34.48 | 4.02 | 373 | 50 | 22.58 | 34.69 | 4.90 | 23.84 | 407 | 0.21 |
| 86 | 17.87 | 34.28 | 3.39 | 318 | 75 | 19.67 | 34.40 | 3.78 | 24.41 | 353 | 0.30 |
| 96 | 16.97 | 34.31 | 2.72 | 295 | 100 | 16.65 | 34.35 | 2.39 | 25.11 | 286 | 0.38 |
| 114 | 15.50 | 34.52 | 1.27 | 248 | 150 | 13.40 | 34.61 | 0.52 | 26.03 | 199 | 0.51 |
| 128 | 14.48 | 34.60 | 0.87 | 221 | 200 | 11.58 | 34.59 | 0.43 | 26.37 | 166 | 0.60 |
| 146 | 13.62 | 34.61 | 0.56 | 203 | 250 | 11.13 | 34.69 | 0.26 | 26.53 | 152 | 0.68 |
| 169 | 12.44 | 34.61 | 0.43 | 181 | 300 | 10.60 | 34.67 | 0.26 | 26.62 | 143 | 0.76 |
| 196 | 11.62 | 34.58 | 0.48 | 168 | 400 | 8.92 | 34.54 | 0.22 | 26.79 | 126 | 0.90 |
| 224 | 11.37 | 34.69 | 0.26 | 155 | 500 | 7.70 | 34.53 | 0.15 | 26.96 | 110 | 1.02 |
| 280 | 10.83 | 34.69 | 0.27 | 146 | 600 | 6.84 | 34.51 | 0.14 | 27.08 | 99 | 1.14 |
| 377 | 9.24 | 34.55 | 0.24 | 131 | | | | | | | |
| 472 | 8.01 | 34.53 | 0.16 | 114 | | | | | | | |
| 617 | 6.72 | 34.51 | 0.13 | 97 | | | | | | | |

150.40 STRANGER; January 16, 1958; 2059 GCT; 22°44'N, 112°00'W; sounding, 1800 fm; wind, 050°, force 6; weather, cloudy; sea, very rough; wire angle, 32°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.68 | 34.73 | 4.88 | 407 | 0 | 22.68 | 34.73 | 4.88 | 23.84 | 407 | 0.00 |
| 8 | 22.66 | 34.69 | 4.85 | 410 | 10 | 22.66 | 34.70 | 4.86 | 23.82 | 409 | 0.04 |
| 29 | 22.54 | 34.76 | 4.91 | 401 | 20 | 22.62 | 34.75 | 4.88 | 23.86 | 405 | 0.08 |
| 54 | 22.32 | 34.71 | 4.91 | 399 | 30 | 22.53 | 34.76 | 4.91 | 23.91 | 401 | 0.12 |
| 62 | 22.04 | 34.72 | - | 391 | 50 | 22.36 | 34.72 | 4.91 | 23.92 | 400 | 0.20 |
| 74 | 21.94 | 34.75 | 4.76 | 386 | 75 | 21.93 | 34.75 | 4.76 | 24.06 | 386 | 0.30 |
| 81 | 21.60 | 34.71 | 4.86 | 380 | 100 | 20.73 | 34.59 | 4.34 | 24.28 | 365 | 0.40 |
| 96 | 21.06 | 34.63 | 4.59 | 371 | 150 | 13.67 | 34.58 | 0.83 | 25.95 | 206 | 0.53 |
| 106 | 17.84 | 34.33 | 3.09 | 314 | 200 | 12.29 | 34.76 | 0.35 | 26.36 | 167 | 0.62 |
| 120 | 15.02 | 34.29 | 2.78 | 255 | 250 | 11.15 | 34.70 | 0.31 | 26.54 | 151 | 0.71 |
| 136 | 14.17 | 34.50 | 1.19 | 222 | 300 | 10.22 | 34.63 | 0.30 | 26.64 | 141 | 0.78 |
| 155 | 13.48 | 34.61 | 0.71 | 200 | 400 | 9.10 | 34.60 | 0.20 | 26.80 | 125 | 0.92 |
| 175 | 12.90 | 34.70 | 0.53 | 183 | 500 | (7.61) | (34.55) | (0.16) | (27.00) | (107) | (1.04) |
| 215 | 11.97 | 34.77 | 0.29 | 160 | | | | | | | |
| 276 | 10.60 | 34.65 | 0.33 | 145 | | | | | | | |
| 357 | 9.65 | 34.61 | 0.26 | 132 | | | | | | | |
| 482 | 7.94 | 34.56 | 0.16 | 111 | | | | | | | |

153.16 STRANGER; January 16, 1958; 0446 GCT; 22°55'N, 110°07'W; sounding, 280 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.67 | 34.68 | 4.92 | 411 | 0 | 22.67 | 34.68 | 4.92 | 23.80 | 411 | 0.00 |
| 10 | 22.56 | 34.70 | 4.85 | 406 | 10 | 22.56 | 34.70 | 4.85 | 23.85 | 406 | 0.04 |
| 30 | 22.54 | 34.70 | 4.81 | 405 | 20 | 22.55 | 34.70 | 4.83 | 23.85 | 406 | 0.08 |
| 49 | 22.30 | 34.67 | 4.49 | 401 | 30 | 22.54 | 34.70 | 4.81 | 23.86 | 405 | 0.12 |
| 73 | 19.81 | 34.51 | 3.22 | 348 | 50 | 22.29 | 34.67 | 4.48 | 23.90 | 401 | 0.20 |
| 97 | 16.44 | 34.49 | 1.74 | 271 | 75 | 19.51 | 34.50 | 3.11 | 24.52 | 342 | 0.30 |
| 120 | 14.70 | 34.52 | 0.98 | 231 | 100 | 16.19 | 34.49 | 1.60 | 25.34 | 265 | 0.37 |
| 159 | 13.55 | 34.63 | 0.50 | 200 | 150 | 13.79 | 34.61 | 0.60 | 25.94 | 207 | 0.49 |
| 195 | 12.68 | 34.87u | 0.34 | | 200 | 12.60 | 34.68 | 0.33 | 26.25 | 178 | 0.59 |
| 242 | 11.83 | 34.71 | 0.23 | 162 | 250 | 11.70 | 34.71 | 0.22 | 26.44 | 160 | 0.68 |
| 289 | 11.23 | 34.70 | 0.19 | 152 | 300 | 11.10 | 34.69 | 0.17 | 26.54 | 150 | 0.76 |
| 390 | 9.81 | 34.60 | 0.16 | 136 | 400 | (9.65) | (34.59) | (0.16) | (26.71) | (134) | (0.90) |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; January 16, 1958; 0105, 0150 GCT; 22°47'N, 110°22'W; sounding, 750 fm; wind, 290°, force 2; weather, overcast; sea, moderate; wire angle, 12°, 16°. 153.20

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.74 | 34.58 | 4.79 | 447 | 0 | 23.74 | 34.58 | 4.79 | 23.42 | 447 | 0.00 |
| 9 | 23.42 | 34.65 | 4.76 | 433 | 10 | 23.40 | 34.65 | 4.74 | 23.58 | 432 | 0.04 |
| 28 | 22.54 | 34.60 | 4.23 | 413 | 20 | 22.90 | 34.62 | 4.48 | 23.69 | 421 | 0.09 |
| 38 | 22.51 | 34.69 | 4.13 | 406 | 30 | 22.53 | 34.60 | 4.20 | 23.78 | 412 | 0.13 |
| 48 | 21.60 | 34.63 | 4.05 | 386 | 50 | 21.55 | 34.63 | 4.02 | 24.08 | 384 | 0.21 |
| 57 | 21.42 | 34.65 | 3.98 | 379 | 75 | 19.89 | 34.51 | 3.81 | 24.43 | 351 | 0.30 |
| 67 | 20.76 | 34.59 | 3.95 | 367 | 100 | 16.30 | 34.33 | 2.29 | 25.19 | 279 | 0.38 |
| 81 | 18.88 | 34.42 | 3.53 | 332 | 150 | 13.24 | 34.56 | 0.90 | 26.03 | 199 | 0.50 |
| 94 | 17.08 | 34.27 | 2.89 | 301 | 200 | 12.31 | 34.72 | 0.23 | 26.32 | 171 | 0.59 |
| 108 | 15.54 | 34.45 | 1.53 | 254 | 250 | 11.47 | 34.68 | 0.18 | 26.45 | 158 | 0.68 |
| 130 | 13.52 | 34.44 | 0.95 | 214 | 300 | 10.94 | 34.67 | 0.23 | 26.55 | 150 | 0.76 |
| 156 | 13.20 | 34.60 | 0.89 | 196 | 400 | 9.55 | 34.60 | 0.16 | 26.73 | 132 | 0.90 |
| | | | | | 500 | 8.10 | 34.52 | 0.20 | 26.90 | 116 | 1.03 |
| 188 | 12.53 | 34.72 | 0.30 | 174 | | | | | | | |
| 232 | 11.74 | 34.68 | 0.16 | 162 | | | | | | | |
| 304 | 10.87 | 34.67 | 0.26 | 149 | | | | | | | |
| 394 | 9.62 | 34.60 | 0.16 | 133 | | | | | | | |
| 515 | 7.90 | 34.51 | 0.21 | 114 | | | | | | | |

STRANGER; January 15, 1958; 1857 GCT; 22°27'N, 110°59'W; sounding, 1600 fm; wind, 040°, force 4; weather, cloudy; sea, rough; wire angle, 03°. 153.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.44 | 34.49 | 4.71 | 473 | 0 | 24.44 | 34.49 | 4.71 | 23.15 | 473 | 0.00 |
| 10 | 24.44 | 34.50 | 4.73 | 473 | 10 | 24.44 | 34.50 | 4.73 | 23.15 | 473 | 0.05 |
| 28 | 24.36 | 34.49 | 4.74 | 271 | 20 | 24.40 | 34.49 | 4.73 | 23.16 | 472 | 0.09 |
| 44 | 24.27 | 34.52 | 4.67 | 467 | 30 | 24.35 | 34.49 | 4.74 | 23.18 | 470 | 0.14 |
| 53 | 24.20 | 34.56 | 4.67 | 461 | 50 | 24.23 | 34.55 | 4.67 | 23.26 | 463 | 0.24 |
| 63 | 22.48 | 34.45 | 3.65 | 422 | 75 | 19.02 | 34.39 | 3.14 | 24.57 | 338 | 0.34 |
| 71 | 20.12 | 34.42 | 3.37 | 362 | 100 | 16.19 | 34.43 | 1.77 | 25.28 | 270 | 0.41 |
| 90 | 16.86 | 34.31 | 2.49 | 293 | 150 | 13.30 | 34.60 | 0.49 | 26.05 | 198 | 0.53 |
| 104 | 15.83 | 34.45 | 1.50 | 260 | 200 | 11.73 | 34.65 | 0.26 | 26.39 | 165 | 0.62 |
| 117 | 13.28 | 34.13 | 2.19 | 232 | 250 | 11.06 | 34.69 | 0.24 | 26.54 | 151 | 0.70 |
| 140 | 13.58 | 34.60 | 0.63 | 203 | 300 | 10.43 | 34.67 | 0.20 | 26.64 | 141 | 0.78 |
| 168 | 12.54 | 34.60 | 0.41 | 183 | 400 | 8.97 | 34.55 | 0.20 | 26.80 | 126 | 0.92 |
| 204 | 11.62 | 34.65 | 0.25 | 163 | 500 | 7.61 | 34.51 | 0.20 | 26.97 | 110 | 1.04 |
| 256 | 11.00 | 34.69 | 0.24 | 149 | | | | | | | |
| 334 | 9.86 | 34.64 | 0.18 | 134 | | | | | | | |
| 433 | 8.41 | 34.51 | 0.24 | 121 | | | | | | | |
| 571 | 6.97 | 34.51 | 0.16 | 101 | | | | | | | |

STRANGER; January 15, 1958; 1324 GCT; 22°06'N, 111°36'W; sounding, 1800 fm; wind, 040°, force 3; weather, cloudy; sea, moderate; wire angle, 04°. 153.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.08 | 34.54 | | 460 | 0 | 24.08 | 34.54 | | 23.28 | 460 | 0.00 |
| 10 | 24.08 | 34.56 | | 459 | 10 | 24.08 | 34.56 | | 23.30 | 459 | 0.04 |
| 29 | 24.07 | 34.61 | | 455 | 20 | 24.07 | 34.58 | | 23.32 | 457 | 0.09 |
| 39 | 24.04 | 34.57 | | 456 | 30 | 24.05 | 34.60 | | 23.34 | 455 | 0.14 |
| 49 | 23.64 | 34.56 | | 446 | 50 | 23.53 | 34.56 | | 23.46 | 443 | 0.23 |
| 58 | 22.60 | 34.52 | | 420 | 75 | 19.53 | 34.52 | | 24.52 | 342 | 0.32 |
| 68 | 20.39 | 34.45 | | 367 | 100 | 17.35 | 34.61 | | 25.15 | 282 | 0.40 |
| 82 | 18.84 | 34.58 | | 320 | 150 | 13.94 | 34.79 | | 26.06 | 196 | 0.52 |
| 96 | 17.70 | 34.60 | | 391 | 200 | 12.05 | 34.81 | | 26.46 | 158 | 0.61 |
| 111 | 16.28 | 34.65 | | 256 | 250 | 10.89 | 34.74 | | 26.62 | 143 | 0.69 |
| 134 | 14.64 | 34.74 | | 214 | 300 | 9.94 | 34.68 | | 26.73 | 132 | 0.76 |
| 161 | 13.43 | 34.81 | | 185 | 400 | 8.28 | 34.59 | | 26.91 | 115 | 0.89 |
| 193 | 12.24 | 34.82 | | 161 | 500 | 6.97 | 34.55 | | 27.09 | 98 | 1.00 |
| 239 | 11.12 | 34.76 | | 146 | | | | | | | |
| 313 | 9.68 | 34.66 | | 130 | | | | | | | |
| 406 | 8.28 | 34.58 | | 114 | | | | | | | |
| 530 | 6.53 | 34.54 | | 93 | | | | | | | |

S10

CCOFI 5801

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

153.50 STRANGER; January 15, 1958; 0750 GCT; 21°46'N, 112°14'W; sounding, 1800 fm; wind, 360°, force 1; weather, cloudy; sea, moderate; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.62 | 34.63 | 4.64 | 440 | 0 | 23.62 | 34.63 | 4.64 | 23.50 | 440 | 0.00 |
| 10 | 23.57 | 34.64 | 4.81 | 438 | 10 | 23.57 | 34.64 | 4.81 | 23.52 | 438 | 0.04 |
| 29 | 23.48 | 34.63 | 4.73 | 437 | 20 | 23.54 | 34.64 | 4.81 | 23.52 | 438 | 0.09 |
| 39 | 22.32 | 34.51 | 4.31 | 413 | 30 | 23.46 | 34.62 | 4.72 | 23.54 | 436 | 0.13 |
| 48 | 21.06 | 34.45 | 3.64 | 384 | 50 | 20.95 | 34.45 | 3.60 | 24.11 | 382 | 0.21 |
| 58 | 20.08 | 34.51 | 3.33 | 355 | 75 | 17.33 | 34.41 | 2.46 | 25.00 | 297 | 0.30 |
| 67 | 18.70 | 34.47 | 2.81 | 324 | 100 | 14.91 | 34.34 | 1.63 | 25.50 | 249 | 0.37 |
| 82 | 16.38 | 34.36 | 2.22 | 278 | 150 | 11.82 | 34.40 | 0.90 | 26.18 | 184 | 0.48 |
| 96 | 15.20 | 34.33 | 1.78 | 256 | 200 | 11.30 | 34.69 | 0.42 | 26.50 | 154 | 0.56 |
| 110 | 14.15 | 34.42 | 1.26 | 227 | 250 | 10.78 | 34.66 | 0.27 | 26.57 | 148 | 0.64 |
| 132 | 12.26 | 34.31 | 1.23 | 200 | 300 | 10.22 | 34.68 | 0.21 | 26.68 | 137 | 0.71 |
| 160 | 11.62 | 34.50 | 0.72 | 174 | 400 | 8.62 | 34.57 | 0.33 | 26.86 | 120 | 0.85 |
| 193 | 11.38 | 34.69 | 0.48 | 156 | 500 | 7.47 | 34.53 | 0.34 | 27.00 | 107 | 0.97 |
| 239 | 10.88 | 34.66 | 0.28 | 150 | | | | | | | |
| 312 | 10.06 | 34.68 | 0.20 | 134 | | | | | | | |
| 407 | 8.52 | 34.56 | 0.34 | 119 | | | | | | | |
| 530 | 7.20 | 34.52 | 0.34 | 103 | | | | | | | |

157.10 STRANGER; January 14, 1958; 0615 GCT; 22°33'N, 109°23'W; sounding, 1600 fm; wind, 040°, force 3; weather, clear; sea, moderate; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.68 | 34.45a) | 4.64 | 484 | 0 | 24.68 | 34.45 | 4.64 | 23.04 | 484 | 0.00 |
| 10 | 24.69 | 34.44 | 4.68 | 484 | 10 | 24.69 | 34.44 | 4.68 | 23.04 | 484 | 0.05 |
| 29 | 24.22 | 34.47 | 4.62 | 469 | 20 | 24.67 | 34.44 | 4.68 | 23.04 | 484 | 0.10 |
| 43 | 23.30 | 34.58 | 4.67 | 435 | 30 | 24.21 | 34.47 | 4.62 | 23.20 | 468 | 0.14 |
| 52 | 22.71 | 34.60 | 4.31 | 418 | 50 | 22.78 | 34.60 | 4.34 | 23.71 | 420 | 0.23 |
| 62 | 22.42 | 34.65 | 4.33 | 406 | 75 | 21.63 | 34.69 | 3.78 | 24.11 | 382 | 0.33 |
| 71 | 21.98 | 34.70 | 4.00 | 390 | 100 | 16.90 | 34.59 | 1.97 | 25.25 | 273 | 0.42 |
| 89 | 18.81 | 34.57 | 2.64 | 320 | 150 | 13.81 | 34.74 | 0.52 | 26.05 | 197 | 0.53 |
| 103 | 16.36 | 34.60 | 1.74 | 261 | 200 | 12.49 | 34.81 | 0.36 | 26.36 | 167 | 0.63 |
| 116 | 15.20 | 34.58 | 1.09 | 237 | 250 | 11.46 | 34.77 | 0.21 | 26.54 | 151 | 0.71 |
| 137 | 14.21 | 34.69 | 0.60 | 209 | 300 | 10.70 | 34.74 | 0.09 | 26.64 | 141 | 0.78 |
| 162 | 13.46 | 34.78 | 0.47 | 188 | 400 | 9.19 | 34.59 | 0.12 | 26.79 | 127 | 0.92 |
| 196 | 12.60 | 34.81 | 0.39 | 169 | 500 | 7.85 | 34.53 | 0.11 | 26.95 | 112 | 1.05 |
| 242 | 11.61 | 34.78 | 0.25 | 153 | | | | | | | |
| 316 | 10.47 | 34.72 | 0.08 | 138 | | | | | | | |
| 408 | 9.05 | 34.58 | 0.12 | 126 | | | | | | | |
| 544 | 7.28 | 34.52 | 0.09 | 104 | | | | | | | |

157.20 STRANGER; January 14, 1958; 1109 GCT; 22°13'N, 110°00'W; sounding, 1700 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.91 | 34.50 | 4.71 | 486 | 0 | 24.91 | 34.50 | 4.71 | 23.01 | 486 | 0.00 |
| 9 | 24.94 | 34.50 | 4.64 | 487 | 10 | 24.94 | 34.50 | 4.64 | 23.00 | 487 | 0.05 |
| 28 | 24.85 | 34.47 | 4.65 | 487 | 20 | 24.93 | 34.48 | 4.64 | 23.00 | 487 | 0.10 |
| 42 | 24.44 | 34.60 | 4.67 | 466 | 30 | 24.84 | 34.47 | 4.66 | 23.01 | 486 | 0.15 |
| 51 | 24.12 | 34.69 | 4.36 | 450 | 50 | 24.15 | 34.69 | 4.39 | 23.38 | 451 | 0.24 |
| 60 | 23.96 | 34.74 | 4.38 | 442 | 75 | 23.66 | 34.91 | 4.44 | 23.69 | 421 | 0.35 |
| 69 | 23.80 | 34.87 | 4.49 | 428 | 100 | 21.90 | 35.07 | 3.68 | 24.32 | 362 | 0.45 |
| 88 | 22.98 | 35.03 | 4.09 | 394 | 150 | 14.85 | 34.56 | 1.00 | 25.68 | 232 | 0.60 |
| 101 | 21.84 | 35.07 | 3.65 | 360 | 200 | 12.81 | 34.74 | 0.37 | 26.25 | 178 | 0.70 |
| 113 | 19.22 | 34.78 | 2.29 | 314 | 250 | 11.85 | 34.75 | 0.26 | 26.44 | 160 | 0.79 |
| 135 | 16.34 | 34.58 | 1.33 | 262 | 300 | 11.09 | 34.71 | 0.27 | 26.56 | 149 | 0.87 |
| 159 | 14.20 | 34.56 | 0.83 | 218 | 400 | 9.46 | 34.60 | 0.14 | 26.75 | 130 | 1.02 |
| 192 | 13.05 | 34.73 | 0.42 | 183 | 500 | 7.98 | 34.57 | 0.21 | 26.96 | 110 | 1.14 |
| 238 | 12.01 | 34.75 | 0.25 | 163 | | | | | | | |
| 311 | 10.92 | 34.70 | 0.27 | 147 | | | | | | | |
| 405 | 9.38 | 34.60 | 0.12 | 129 | | | | | | | |
| 541 | 7.39 | 34.56 | 0.27 | 103 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

STRANGER; January 14, 1958; 1616 GCT; 21°52'N, 110°38'W; sounding, 1700 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 15°. 157.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.04 | 34.43 | | 495 | 0 | 25.04 | 34.43 | | 22.92 | 495 | 0.00 |
| 10 | 25.04 | 34.43 | | 495 | 10 | 25.04 | 34.43 | | 22.92 | 495 | 0.05 |
| 28 | 25.04 | 34.43 | | 495 | 20 | 25.04 | 34.43 | | 22.92 | 495 | 0.10 |
| 42 | 24.66 | 34.56 | | 475 | 30 | 25.04 | 34.43 | | 22.92 | 495 | 0.15 |
| 52 | 24.46 | 34.67 | | 461 | 50 | 24.49 | 34.66 | | 23.27 | 462 | 0.24 |
| 61 | 24.06 | 34.72 | | 446 | 75 | (23.70) | (34.86) | | (23.65) | (425) | (0.36) |
| 71 | 23.94 | 34.85 | | 433 | | | | | | | |

STRANGER; January 14, 1958; 2100 GCT; 21°32.5'N, 111°14.5'W; sounding, 1705 fm; wind, 020°, force 3; weather, overcast; sea, moderate; wire angle, 04°. 157.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.30 | 34.27 | 4.62 | 514 | 0 | 25.30 | 34.27 | 4.62 | 22.72 | 514 | 0.00 |
| 9 | 25.34 | 34.25 | 4.81 | 516 | 10 | 25.34 | 34.25 | 4.81 | 22.70 | 516 | 0.05 |
| 29 | 25.03 | 34.42 | 4.77 | 495 | 20 | 25.30 | 34.26 | 4.81 | 22.71 | 515 | 0.10 |
| 43 | 24.89 | 34.45 | 4.79 | 489 | 30 | 25.01 | 34.43 | 4.77 | 22.93 | 494 | 0.15 |
| 53 | 22.86 | 34.40 | 4.60 | 436 | 50 | 24.29 | 34.44 | 4.75 | 23.15 | 473 | 0.25 |
| 62 | 20.98 | 34.37 | 3.52 | 388 | 75 | 18.30 | 34.35 | 2.62 | 24.72 | 324 | 0.35 |
| 72 | 18.80 | 34.34 | 2.86 | 336 | 100 | 15.33 | 34.51 | 1.01 | 25.54 | 245 | 0.42 |
| 91 | 16.08 | 34.45 | 1.21 | 266 | 150 | 13.20 | 34.73 | 0.42 | 26.16 | 186 | 0.53 |
| 105 | 14.92 | 34.54 | 0.94 | 235 | 200 | 11.89 | 34.73 | 0.25 | 26.42 | 162 | 0.62 |
| 120 | 14.28 | 34.58 | 0.70 | 218 | 250 | 11.32 | 34.74 | 0.17 | 26.54 | 151 | 0.70 |
| 143 | 13.46 | 34.73 | 0.42 | 191 | 300 | 10.57 | 34.70 | 0.16 | 26.64 | 141 | 0.78 |
| 170 | 12.37 | 34.70 | 0.26 | 173 | 400 | 9.09 | 34.59 | 0.20 | 26.80 | 126 | 0.92 |
| 207 | 11.84 | 34.73 | 0.25 | 161 | 500 | 7.93 | 34.54 | 0.20 | 26.95 | 112 | 1.04 |
| 258 | 11.21 | 34.74 | 0.16 | 149 | | | | | | | |
| 336 | 9.92 | 34.63 | 0.15 | 135 | | | | | | | |
| 436 | 8.62 | 34.57 | 0.21 | 120 | | | | | | | |
| 574 | 7.13 | 34.52 | 0.15 | 102 | | | | | | | |

STRANGER; January 15, 1958; 0202, 0230 GCT; 21°12'N, 111°52'W; sounding, 1650 fm; wind, 360°, force 1; weather, overcast; sea, moderate; wire angle, 02°, 02°. 157.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.14 | 34.36a) | 4.76 | 474 | 0 | 24.14 | 34.36 | 4.76 | 23.14 | 474 | 0.00 |
| 10 | 24.14 | 34.36 | 4.77 | 474 | 10 | 24.14 | 34.36 | 4.77 | 23.14 | 474 | 0.05 |
| 29 | 24.12 | 34.42 | 4.77 | 470 | 20 | 24.14 | 34.39 | 4.77 | 23.16 | 472 | 0.09 |
| 43 | 23.94 | 34.49 | 4.79 | 459 | 30 | 24.10 | 34.45 | 4.77 | 23.21 | 467 | 0.14 |
| 53 | 22.38 | 34.35 | 4.70 | 426 | 50 | 23.61 | 34.48 | 4.77 | 23.37 | 452 | 0.23 |
| 62 | 20.66 | 34.40 | 3.84 | 378 | 75 | 17.29 | 34.11 | 4.07 | 24.79 | 317 | 0.33 |
| 71 | 17.72 | 34.09 | 4.07 | 329 | 100 | 14.22 | 34.13 | 2.38 | 25.49 | 250 | 0.40 |
| 90 | 15.79 | 34.27 | 2.35 | 273 | 150 | 13.02 | 34.71 | 0.18 | 26.18 | 185 | 0.51 |
| 104 | 13.75 | 34.10 | 2.39 | 243 | 200 | 11.71 | 34.71 | 0.21 | 26.44 | 160 | 0.60 |
| 118 | 14.14 | 34.62 | 0.23 | 213 | 250 | 10.87 | 34.69 | 0.17 | 26.58 | 147 | 0.68 |
| 140 | 13.35 | 34.69 | 0.18 | 192 | 300 | 10.13 | 34.65 | 0.16 | 26.68 | 137 | 0.75 |
| 167 | 12.58 | 34.72 | 0.14 | 175 | 400 | 8.72 | 34.58 | 0.19 | 26.86 | 120 | 0.88 |
| 203 | 11.61 | 34.71 | 0.21 | 158 | 500 | 7.47 | 34.53 | 0.18 | 27.00 | 107 | 1.00 |
| 254 | 10.80 | 34.69 | 0.16 | 146 | | | | | | | |
| 332 | 9.67 | 34.63 | 0.16 | 132 | | | | | | | |
| 430 | 8.28 | 34.56 | 0.20 | 115 | | | | | | | |
| 569 | 6.79 | 34.51 | 0.15 | 99 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

S10

CCOFI 5802

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **80.55** | PAOLINA-T; February 10, 1958; 1652 GCT; 34°19'N, 120°48.5'W; sounding, 415 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 04°. | | | | | | | | | | |
| 0 | 15.13 | 33.55 | 311 | | 0 | 15.13 | 33.55 | | 24.85 | 311 | 0.00 |
| 10 | 15.12 | 33.56 | 310 | | 10 | 15.12 | 33.56 | | 24.86 | 310 | 0.03 |
| 30 | 15.14 | 33.58 | 310 | | 20 | 15.13 | 33.57 | | 24.86 | 310 | 0.06 |
| 60 | 13.86 | 33.55 | 286 | | 30 | 15.14 | 33.58 | | 24.86 | 310 | 0.09 |
| 69 | 12.93 | 33.51 | 270 | | 50 | 14.61 | 33.57 | | 24.98 | 299 | 0.15 |
| 79 | 12.32 | 33.58 | 254 | | 75 | 12.50 | 33.56 | | 25.39 | 259 | 0.22 |
| 93 | 11.10 | 33.62 | 230 | | 100 | 10.87 | 33.67 | | 25.79 | 222 | 0.28 |
| 107 | 10.76 | 33.73 | 216 | | 150 | 9.81 | 33.90 | | 26.15 | 187 | 0.39 |
| 122 | 10.48 | 33.77 | 208 | | 200 | 9.32 | 34.04 | | 26.34 | 170 | 0.48 |
| 141 | 9.96 | 33.85 | 194 | | 250 | 8.84 | 34.16 | | 26.50 | 154 | 0.56 |
| 160 | 9.72 | 33.93 | 184 | | 300 | 8.48 | 34.21 | | 26.60 | 145 | 0.64 |
| 189 | 9.44 | 34.00 | 175 | | 400 | 7.62 | 34.27 | | 26.78 | 128 | 0.78 |
| 214 | 9.15 | 34.09 | 163 | | 500 | 6.86 | 34.29 | | 26.90 | 116 | 0.91 |
| 267 | 8.75 | 34.18 | 150 | | 600 | (6.00) | (34.30) | | (27.02) | (105) | (1.02) |
| 350 | 8.00 | 34.25 | 134 | | | | | | | | |
| 457 | 7.22 | 34.29 | 121 | | | | | | | | |
| 595 | 6.02 | 34.30 | 105 | | | | | | | | |
| **80.60** | PAOLINA-T; February 10, 1958; 1337 GCT; 34°11.5'N, 121°03'W; sounding, 670 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 07°. | | | | | | | | | | |
| 0 | 14.98 | 33.53 | 309 | | 0 | 14.98 | 33.53 | | 24.87 | 309 | 0.00 |
| 10 | 14.97 | 33.51 | 310 | | 10 | 14.97 | 33.51 | | 24.86 | 310 | 0.03 |
| 29 | 14.71 | 33.49 | 307 | | 20 | 14.83 | 33.50 | | 24.87 | 309 | 0.06 |
| 45 | 14.43 | 33.53 | 298 | | 30 | 14.70 | 33.49 | | 24.90 | 306 | 0.09 |
| 54 | 13.85 | 33.50 | 289 | | 50 | 14.16 | 33.52 | | 25.03 | 294 | 0.15 |
| 64 | 13.40 | 33.48 | 282 | | 75 | 11.96 | 33.46 | | 25.43 | 256 | 0.22 |
| 73 | 12.12 | 33.46 | 259 | | 100 | 10.65 | 33.56 | | 25.74 | 227 | 0.28 |
| 92 | 11.20 | 33.51 | 240 | | 150 | 9.52 | 33.96 | | 26.24 | 179 | 0.38 |
| 106 | 10.26 | 33.60 | 217 | | 200 | 9.21 | 34.09 | | 26.39 | 165 | 0.47 |
| 121 | 9.65 | 33.65 | 204 | | 250 | 8.46 | 34.14 | | 26.56 | 149 | 0.55 |
| 144 | 9.52 | 33.91 | 182 | | 300 | 7.82 | 34.18 | | 26.68 | 137 | 0.63 |
| 172 | 9.50 | 34.02 | 174 | | 400 | 7.00 | 34.24 | | 26.85 | 121 | 0.76 |
| 211 | 9.06 | 34.11 | 161 | | 500 | 6.24 | 34.26 | | 26.96 | 110 | 0.88 |
| 263 | 8.21 | 34.15 | 145 | | 600 | (5.65) | (34.31) | | (27.08) | (100) | (0.99) |
| 344 | 7.46 | 34.22 | 129 | | | | | | | | |
| 446 | 6.60 | 34.25 | 116 | | | | | | | | |
| 589 | 5.71 | 34.30 | 101 | | | | | | | | |
| **80.90** | PAOLINA-T; February 9, 1958; 2025 GCT; 33°16.5'N, 123°11.5'W; sounding, 2300+ fm; wind, 320°, force 1; weather, cloudy; sea, high; wire angle, 00°. | | | | | | | | | | |
| 1 | 15.20 | 33.31 | 330 | | 0 | (15.20) | (33.32) | | (24.64) | (331) | (0.00) |
| 11 | 14.93 | 33.30 | 325 | | 10 | 14.94 | 33.30 | | 24.69 | 326 | 0.03 |
| 31 | 15.06 | 33.50 | 314 | | 20 | 14.97 | 33.40 | | 24.76 | 320 | 0.06 |
| 56 | 14.76 | 33.49 | 308 | | 30 | 15.06 | 33.49 | | 24.82 | 314 | 0.10 |
| 66 | 14.37 | 33.40 | 306 | | 50 | 14.83 | 33.49 | | 24.87 | 309 | 0.16 |
| 75 | 13.78 | 33.41 | 294 | | 75 | 13.78 | 33.41 | | 25.03 | 294 | 0.23 |
| 85 | 13.14 | 33.44 | 280 | | 100 | 12.21 | 33.38 | | 25.31 | 267 | 0.30 |
| 99 | 12.26 | 33.38 | 268 | | 150 | 9.58 | 33.50 | | 25.88 | 213 | 0.43 |
| 114 | 11.56 | 33.42 | 252 | | 200 | 8.62 | 33.89 | | 26.33 | 170 | 0.52 |
| 133 | 10.03 | 33.46 | 224 | | 250 | 8.02 | 34.12 | | 26.60 | 145 | 0.60 |
| 152 | 9.52 | 33.51 | 212 | | 300 | 7.43 | 34.14 | | 26.70 | 135 | 0.68 |
| 176 | 8.90 | 33.76 | 184 | | 400 | 6.60 | 34.18 | | 26.85 | 121 | 0.81 |
| 200 | 8.62 | 33.89 | 170 | | 500 | 6.00 | 34.25 | | 26.98 | 109 | 0.93 |
| 248 | 8.07 | 34.12 | 145 | | | | | | | | |
| 325 | 7.21 | 34.14 | 132 | | | | | | | | |
| 422 | 6.43 | 34.20 | 117 | | | | | | | | |
| 549 | 5.72 | 34.28 | 103 | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_{-5}^{3}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_{-5}^{3}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

90.30

PAOLINA-T; February 7, 1958; 0905, 0928 GCT; 33°24'N, 117°57'W; sounding, 220 fm; wind, direction missing, force 1; weather, overcast; sea, slight; wire angle, 00°, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.32 | 33.66 | 329 | 0 | (16.32) | (33.65) | (24.66) | (329) | (0.00) |
| 11 | 16.34 | 33.70 | 326 | 10 | 16.33 | 33.70 | 24.68 | 327 | 0.03 |
| 31 | 16.20 | 33.66 | 326 | 20 | 16.28 | 33.68 | 24.70 | 326 | 0.06 |
| 51 | 15.48 | 33.62 | 314 | 30 | 16.22 | 33.66 | 24.70 | 326 | 0.10 |
| 75 | 13.77 | 33.53 | 285 | 50 | 15.50 | 33.62 | 24.82 | 314 | 0.16 |
| 101 | 12.34 | 33.56 | 256 | 75 | 13.77 | 33.53 | 25.12 | 285 | 0.24 |
| 126 | 11.22 | 33.58 | 235 | 100 | 12.40 | 33.56 | 25.41 | 258 | 0.31 |
| 164 | 10.32 | 33.84a) | 200 | 150 | 10.59 | 33.77 | 25.91 | 210 | 0.42 |
| 204 | 9.12 | 33.89 | 178 | 200 | 9.21 | 33.88 | 26.23 | 180 | 0.52 |
| 251 | 9.30 | 34.27 | 152 | 250 | 9.30 | 34.26 | 26.51 | 153 | 0.61 |
| 301 | 8.99 | 34.37 | 140 | 300 | 8.99 | 34.37 | 26.65 | 140 | 0.68 |
| 340 | 8.51 | 34.34 | 135 | | | | | | |

90.37

PAOLINA-T; February 7, 1958; 1335 GCT; 33°11'N, 118°23.5'W; sounding, 630 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.25 | 33.66 | 327 | 0 | 16.25 | 33.66 | 24.68 | 327 | 0.00 |
| 10 | 16.26 | 33.65 | 328 | 10 | 16.26 | 33.65 | 24.67 | 328 | 0.03 |
| 30 | 16.20 | 33.67 | 325 | 20 | 16.23 | 33.66 | 24.68 | 327 | 0.06 |
| 56 | 15.40 | 33.56a) | 316 | 30 | 16.20 | 33.67 | 24.70 | 325 | 0.10 |
| 65 | 14.26 | 33.46 | 300 | 50 | 16.08 | 33.65 | 24.72 | 324 | 0.16 |
| 75 | 13.32 | 33.45 | 282 | 75 | 13.32 | 33.45 | 25.16 | 282 | 0.24 |
| 85 | 12.91 | 33.52 | 269 | 100 | 11.80 | 33.51 | 25.49 | 250 | 0.31 |
| 99 | 11.88 | 33.51 | 251 | 150 | 10.37 | 33.79 | 25.97 | 204 | 0.42 |
| 113 | 10.80 | 33.48 | 235 | 200 | 9.65 | 34.00 | 26.25 | 178 | 0.52 |
| 132 | 10.46 | 33.60 | 220 | 250 | 8.51 | 34.14 | 26.55 | 149 | 0.60 |
| 152 | 10.37 | 33.82 | 202 | 300 | 8.05 | 34.20 | 26.66 | 139 | 0.68 |
| 176 | 10.06 | 33.96 | 187 | 400 | 7.30 | 34.31 | 26.85 | 121 | 0.81 |
| 199 | 9.68 | 34.00 | 178 | 500 | 6.62 | 34.34 | 26.98 | 109 | 0.93 |
| 247 | 8.59 | 34.13 | 152 | | | | | | |
| 323 | 7.92 | 34.22 | 136 | | | | | | |
| 420 | 7.18 | 34.33 | 117 | | | | | | |
| 548 | 6.27 | 34.34 | 105 | | | | | | |

90.45

PAOLINA-T; February 7, 1958; 1905 GCT; 32°55.5'N, 118°56'W; sounding, 940 fm; wind, 190°, force 1; weather, cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.51 | 33.71a) | 329 | 0 | 16.51 | 33.71 | 24.66 | 329 | 0.00 |
| 11 | 16.40 | 33.69 | 328 | 10 | 16.40 | 33.70 | 24.67 | 328 | 0.03 |
| 30 | 16.38 | 33.68 | 328 | 20 | 16.39 | 33.69 | 24.67 | 328 | 0.06 |
| 54 | 16.38 | 33.70 | 326 | 30 | 16.38 | 33.68 | 24.67 | 328 | 0.10 |
| 63 | 15.91 | 33.73 | 314 | 50 | 16.38 | 33.69 | 24.68 | 327 | 0.16 |
| 72 | 15.14 | 33.66 | 303 | 75 | 14.80 | 33.63 | 24.98 | 299 | 0.24 |
| 81 | 14.22 | 33.58 | 290 | 100 | 12.20 | 33.50 | 25.41 | 258 | 0.31 |
| 95 | 12.57 | 33.48 | 266 | 150 | 10.43 | 33.80 | 25.96 | 205 | 0.43 |
| 109 | 11.68 | 33.57 | 244 | 200 | 9.62 | 34.05 | 26.30 | 174 | 0.52 |
| 126 | 11.00 | 33.70 | 222 | 250 | 8.92 | 34.22 | 26.54 | 150 | 0.61 |
| 146 | 10.56 | 33.77 | 209 | 300 | 8.43 | 34.24 | 26.63 | 142 | 0.68 |
| 168 | 9.94 | 33.90 | 190 | 400 | 7.45 | 34.30 | 26.82 | 124 | 0.82 |
| 197 | 9.62 | 34.02 | 176 | 500 | 6.74 | 34.34 | 26.96 | 111 | 0.94 |
| 244 | 9.00 | 34.22 | 152 | | | | | | |
| 319 | 8.28 | 34.24 | 140 | | | | | | |
| 414 | 7.34 | 34.31 | 121 | | | | | | |
| 538 | 6.46 | 34.34 | 107 | | | | | | |

a) Loose bottle cap; value falls on property curve.

S10

CCOFI 5802

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

90.55 PAOLINA-T; February 8, 1958; 0225 GCT; 32°35.5'N, 119°38'W; sounding, 500 fm; wind, 190°, force 4; weather, overcast; sea, very rough; wire angle, 00°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 33.52 | 315 | 0 | 15.20 | 33.52 | 24.81 | 315 | 0.00 |
| 10 | 15.21 | 33.49 | 317 | 10 | 15.21 | 33.49 | 24.79 | 317 | 0.03 |
| 31 | 15.06 | 33.52 | 312 | 20 | 15.15 | 33.50 | 24.81 | 315 | 0.06 |
| 56 | 14.06 | 33.48 | 295 | 30 | 15.06 | 33.52 | 24.84 | 312 | 0.09 |
| 65 | 12.44 | 33.43 | 268 | 50 | 14.85 | 33.52 | 24.88 | 308 | 0.16 |
| 75 | 11.85 | 33.44 | 256 | 75 | 11.85 | 33.44 | 25.43 | 256 | 0.23 |
| 84 | 10.86 | 33.48 | 236 | 100 | 10.02 | 33.54 | 25.82 | 218 | 0.29 |
| 99 | 10.06 | 33.54 | 219 | 150 | 9.38 | 33.82 | 26.15 | 187 | 0.39 |
| 113 | 9.74 | 33.62 | 207 | 200 | 8.90 | 34.04 | 26.40 | 164 | 0.48 |
| 132 | 9.52 | 33.75 | 194 | 250 | 8.45 | 34.23 | 26.62 | 143 | 0.56 |
| 151 | 9.38 | 33.82 | 187 | 300 | 7.99 | 34.27 | 26.72 | 133 | 0.63 |
| 175 | 9.19 | 33.92a) | 177 | 400 | 7.11 | 34.30 | 26.87 | 119 | 0.76 |
| 199 | 8.93 | 34.03 | 164 | 500 | 6.72 | 34.31 | 26.94 | 113 | 0.88 |
| 246 | 8.51 | 34.22 | 144 | | | | | | |
| 323 | 7.74 | 34.28 | 128 | | | | | | |
| 420 | 7.00 | 34.30 | 117 | | | | | | |
| 548 | 6.54 | 34.33 | 109 | | | | | | |

90.60 PAOLINA-T; February 8, 1958; 0611 GCT; 32°26.5'N, 119°59'W; sounding, 540 fm; wind, 190°, force 4; weather, drizzle; sea, very rough; wire angle, 15°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.06 | 33.60 | 327 | 0 | 16.06 | 33.60 | 24.68 | 327 | 0.00 |
| 10 | 16.07 | 33.55 | 331 | 10 | 16.07 | 33.55 | 24.64 | 331 | 0.03 |
| 28 | 16.02 | 33.59 | 327 | 20 | 16.03 | 33.57 | 24.66 | 329 | 0.06 |
| 52 | 15.48 | 33.58 | 316 | 30 | 16.02 | 33.59 | 24.69 | 326 | 0.10 |
| 61 | 15.12 | 33.51 | 314 | 50 | 15.58 | 33.58 | 24.78 | 318 | 0.16 |
| 71 | 14.82 | 33.53 | 307 | 75 | 14.18 | 33.50 | 25.01 | 296 | 0.24 |
| 80 | 13.42 | 33.46 | 284 | 100 | 11.23 | 33.44 | 25.54 | 245 | 0.31 |
| 94 | 11.82 | 33.43 | 256 | 150 | 9.65 | 33.66 | 25.98 | 203 | 0.42 |
| 108 | 10.67 | 33.47 | 233 | 200 | 8.98 | 34.01 | 26.38 | 166 | 0.51 |
| 127 | 10.00 | 33.59 | 214 | 250 | 8.24 | 34.15 | 26.59 | 146 | 0.59 |
| 146 | 9.74 | 33.64 | 206 | 300 | 8.01 | 34.23 | 26.68 | 137 | 0.67 |
| 169 | 9.18 | 33.90 | 178 | 400 | 7.09 | 34.32 | 26.89 | 177 | 0.80 |
| 193 | 9.03 | 33.98 | 170 | 500 | 6.28 | 34.34 | 27.02 | 105 | 0.92 |
| 240 | 8.35 | 34.13 | 148 | | | | | | |
| 315 | 7.97 | 34.25 | 134 | | | | | | |
| 410 | 6.99 | 34.33 | 115 | | | | | | |
| 534 | 6.11 | 34.34 | 103 | | | | | | |

90.70 PAOLINA-T; February 8, 1958; 1240 GCT; 32°08'N, 120°40.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 21°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.24 | 33.48 | 319 | 0 | 15.24 | 33.48 | 24.77 | 319 | 0.00 |
| 10 | 15.22 | 33.48 | 318 | 10 | 15.22 | 33.48 | 24.78 | 318 | 0.03 |
| 34 | 15.00 | 33.50 | 312 | 20 | 15.13 | 33.49 | 24.80 | 316 | 0.06 |
| 61 | 14.88 | 33.53 | 308 | 30 | 15.02 | 33.50 | 24.82 | 314 | 0.10 |
| 70 | 14.61 | 33.49 | 305 | 50 | 14.97 | 33.52 | 24.86 | 310 | 0.16 |
| 83 | 12.40 | 33.41 | 268 | 75 | 13.63 | 33.44 | 25.08 | 289 | 0.23 |
| 91 | 11.42 | 33.42 | 250 | 100 | 10.67 | 33.46 | 25.66 | 234 | 0.30 |
| 109 | 10.26 | 33.49 | 225 | 150 | 9.22 | 33.67 | 26.07 | 195 | 0.41 |
| 124 | 9.67 | 33.56 | 211 | 200 | 8.26 | 33.99 | 26.46 | 158 | 0.50 |
| 141 | 9.38 | 33.61 | 202 | 250 | 7.48 | 34.06 | 26.63 | 142 | 0.57 |
| 164 | 9.00 | 33.77 | 185 | 300 | 7.05 | 34.10 | 26.72 | 133 | 0.64 |
| 191 | 8.46 | 33.95 | 164 | 400 | 6.42 | 34.20 | 26.89 | 117 | 0.77 |
| 218 | 7.92 | 34.04 | 149 | 500 | 5.86 | 34.26 | 27.01 | 106 | 0.89 |
| 273 | 7.30 | 34.07 | 138 | 600 | 5.30 | 34.32 | 27.12 | 95 | 1.00 |
| 356 | 6.67 | 34.17a) | 122 | | | | | | |
| 464 | 6.03 | 34.24 | 110 | | | | | | |
| 606 | 5.26 | 34.33 | 94 | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; February 9, 1958; 0145 GCT; 31°17'N, 121°57'W; sounding, 2200 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 05°. 90.90

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.75 | 33.69 | | 336 | 0 | 16.75 | 33.69 | | 24.59 | 336 | 0.00 |
| 11 | 16.74 | 33.62 | | 340 | 10 | 16.74 | 33.63 | | 24.55 | 340 | 0.03 |
| 31 | 16.66 | 33.68a) | | 335 | 20 | 16.68 | 33.65 | | 24.57 | 338 | 0.07 |
| 41 | 16.64 | 33.68 | | 334 | 30 | 16.66 | 33.67 | | 24.59 | 336 | 0.10 |
| 51 | 16.64 | 33.68 | | 334 | 50 | 16.64 | 33.68 | | 24.61 | 334 | 0.17 |
| 61 | 16.64 | 33.66 | | 336 | 75 | 16.66 | 33.68 | | 24.60 | 335 | 0.25 |
| 70 | 16.66 | 33.65 | | 337 | 100 | 16.61 | 33.68 | | 24.62 | 333 | 0.34 |
| 85 | 16.66 | 33.68 | | 334 | 150 | 13.10 | 33.47 | | 25.22 | 276 | 0.49 |
| 99 | 16.61 | 33.68 | | 334 | 200 | 9.42 | 33.60 | | 25.98 | 204 | 0.62 |
| 114 | 15.56 | 33.52 | | 322 | 250 | 8.41 | 34.07 | | 26.50 | 154 | 0.71 |
| 136 | 14.46 | 33.48 | | 303 | 300 | 7.83 | 34.12 | | 26.63 | 142 | 0.79 |
| 164 | 10.96 | 33.46 | | 239 | 400 | 6.69 | 34.16 | | 26.82 | 124 | 0.92 |
| 196 | 9.54 | 33.58 | | 207 | 500 | 5.96 | 34.26 | | 26.99 | 108 | 1.05 |
| 244 | 8.50 | 34.05 | | 157 | | | | | | | |
| 319 | 7.66 | 34.13 | | 139 | | | | | | | |
| 413 | 6.51 | 34.16 | | 121 | | | | | | | |
| 538 | 5.86 | 34.33 | | 101 | | | | | | | |

STRANGER; February 24, 1958; 0815 GCT; 29°50.5'N, 117°23.5'W; sounding, 1550 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 04°. 107.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.58 | 33.60 | 5.53 | 338 | 0 | 16.58 | 33.60 | 5.53 | 24.56 | 338 | 0.00 |
| 10 | 16.58 | 33.56 | 5.51 | 341 | 10 | 16.58 | 33.56 | 5.51 | 24.54 | 341 | 0.03 |
| 29 | 16.60 | 33.59 | 5.55 | 340 | 20 | 16.59 | 33.57 | 5.53 | 24.54 | 341 | 0.07 |
| 39 | 16.60 | 33.67 | 5.51 | 334 | 30 | 16.60 | 33.60 | 5.54 | 24.55 | 340 | 0.10 |
| 44 | 16.52 | 33.66 | 5.62 | 332 | 50 | 16.50 | 33.71 | 5.62 | 24.66 | 329 | 0.17 |
| 49 | 16.42 | 33.66 | 5.62 | 331 | | | | | | | |
| 54 | 16.89 | 33.84 | 5.62 | 328 | | | | | | | |
| 58 | 17.48 | 34.05 | 5.38 | 326 | | | | | | | |
| 69 | 16.84 | 33.96 | 5.26 | 318 | | | | | | | |

STRANGER; February 24, 1958; 0305 GCT; 29°31'N, 118°03'W; sounding, 1800 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 05°. 107.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.66 | 33.95 | 5.45 | 338 | 0 | 17.66 | 33.95 | 5.45 | 24.57 | 338 | 0.00 |
| 10 | 17.67 | 33.98 | 5.41 | 336 | 10 | 17.67 | 33.98 | 5.41 | 24.59 | 336 | 0.03 |
| 29 | 17.66 | 33.99 | 5.45 | 334 | 20 | 17.67 | 33.99 | 5.44 | 24.60 | 335 | 0.07 |
| 54 | 17.58 | 33.96 | 5.33 | 334 | 30 | 17.66 | 33.99 | 5.45 | 24.61 | 334 | 0.10 |
| 63 | 17.60 | 33.98 | 5.38 | 333 | 50 | 17.59 | 33.97 | 5.34 | 24.61 | 334 | 0.17 |
| 83 | 17.54 | 33.99 | 5.37 | 332 | 75 | 17.56 | 33.98 | 5.38 | 24.62 | 333 | 0.25 |
| 97 | 15.68 | 33.78 | 5.33 | 306 | 100 | 15.20 | 33.72 | 5.30 | 24.97 | 300 | 0.33 |
| 112 | 13.38 | 33.50 | 5.17 | 280 | 150 | 10.90 | 33.66 | 3.84 | 25.78 | 223 | 0.46 |
| 130 | 11.90 | 33.54 | 4.61 | 249 | 200 | 10.09 | 34.15 | 1.98 | 26.30 | 173 | 0.56 |
| 148 | 10.98 | 33.64 | 3.88 | 226 | 250 | 9.59 | 34.28 | 1.40 | 26.48 | 156 | 0.65 |
| 172 | 10.32 | 33.90 | 2.96 | 196 | 300 | 9.19 | 34.42 | 0.85 | 26.65 | 140 | 0.72 |
| 195 | 10.18 | 34.11 | 2.08 | 178 | 400 | 8.00 | 34.35 | 0.74 | 26.79 | 127 | 0.86 |
| 240 | 9.68 | 34.25 | 1.52 | 160 | 500 | 6.90 | 34.36 | 0.50 | 26.96 | 111 | 0.99 |
| 314 | 9.09 | 34.42 | 0.76 | 138 | | | | | | | |
| 406 | 7.94 | 34.35 | 0.74 | 126 | | | | | | | |
| 528 | 6.60 | 34.38 | 0.36 | 106 | | | | | | | |

a) Possible evaporation; value falls on property curve.

SIO

CCOFI 5802

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **110.60** | STRANGER; February 22, 1958; 2305 GCT; 28°56.5'N, 117°39'W; sounding, 2000 fm; wind, direction missing, force 1; weather, cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 17.96 | 34.00 | 5.37 | 341 | 0 | 17.96 | 34.00 | 5.37 | 24.54 | 341 | 0.00 |
| 10 | 17.69 | 33.92 | 5.33 | 340 | 10 | 17.69 | 33.92 | 5.33 | 24.54 | 340 | 0.03 |
| 29 | 17.64 | 34.00 | 5.35 | 334 | 20 | 17.66 | 33.97 | 5.34 | 24.59 | 336 | 0.07 |
| 53 | 17.60 | 34.02 | 5.38 | 331 | 30 | 17.64 | 34.00 | 5.35 | 24.62 | 333 | 0.10 |
| 73 | 17.64 | 34.04 | 5.37 | 330 | 50 | 17.61 | 34.01 | 5.36 | 24.63 | 332 | 0.17 |
| 83 | 17.78 | 34.17 | 5.03 | 324 | 75 | 17.69 | 34.06 | 5.37 | 24.65 | 330 | 0.25 |
| 97 | 17.52 | 34.19 | 4.66 | 317 | 100 | 17.37 | 34.17 | 4.66 | 24.82 | 314 | 0.33 |
| 111 | 16.62 | 34.05 | 4.67 | 307 | 150 | 12.32 | 33.86 | 3.07 | 25.67 | 233 | 0.47 |
| 131 | 13.58 | 33.73 | 4.10 | 266 | 200 | 10.60 | 34.19 | 1.68 | 26.23 | 180 | 0.58 |
| 149 | 12.36 | 33.86 | 3.14 | 234 | 250 | 9.97 | 34.21 | 1.01 | 26.36 | 167 | 0.67 |
| 171 | 11.54 | 34.12 | 1.88 | 201 | 300 | 9.35 | 34.37 | 0.84 | 26.59 | 145 | 0.75 |
| 194 | 10.76 | 34.18 | 1.75 | 182 | 400 | 7.82 | 34.32 | 0.70 | 26.79 | 127 | 0.89 |
| 242 | 10.03 | 34.20 | 1.07 | 170 | 500 | 6.89 | 34.33 | 0.44 | 26.93 | 114 | 1.02 |
| 315 | 9.18 | 34.40 | 0.81 | 141 | | | | | | | |
| 407 | 7.73 | 34.31 | 0.69 | 126 | | | | | | | |
| 531 | 6.64 | 34.34 | 0.32 | 110 | | | | | | | |
| **120.50** | STRANGER; February 19, 1958; 0045 GCT; 27°37.5'N, 115°52'W; sounding, 2400 fm; wind, 360°, force 1; weather, cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 18.55 | 34.22 | 5.32 | 338 | 0 | 18.55 | 34.22 | 5.32 | 24.56 | 338 | 0.00 |
| 10 | 18.36 | 34.15 | 5.35 | 338 | 10 | 18.36 | 34.15 | 5.35 | 24.56 | 338 | 0.03 |
| 20 | 18.30 | 34.22 | 5.23 | 333 | 20 | 18.30 | 34.22 | 5.23 | 24.62 | 333 | 0.07 |
| 39 | 18.25 | 34.22 | 5.19 | 332 | 30 | 18.25 | 34.22 | 5.19 | 24.63 | 332 | 0.10 |
| 64 | 17.49 | 34.16 | 5.15 | 318 | 50 | 18.22 | 34.22 | 5.16 | 24.64 | 331 | 0.17 |
| 93 | 13.54 | 33.85 | 3.68 | 257 | 75 | 15.97 | 34.03 | 4.81 | 25.04 | 293 | 0.24 |
| 108 | 12.85 | 33.87 | 3.27 | 243 | 100 | 13.15 | 33.86 | 3.46 | 25.50 | 249 | 0.31 |
| 121 | 12.24 | 33.88 | 3.14 | 231 | 150 | 10.83 | 33.93 | 2.86 | 26.00 | 202 | 0.43 |
| 140 | 11.51 | 33.96 | 2.75 | 212 | 200 | 10.00 | 34.22 | 1.87 | 26.37 | 167 | 0.52 |
| 158 | 10.20 | 33.90 | 2.94 | 194 | 250 | 9.26 | 34.31 | 1.31 | 26.56 | 149 | 0.60 |
| 181 | 10.01 | 34.07 | 2.73 | 179 | 300 | 8.16 | 34.26 | 1.31 | 26.70 | 136 | 0.68 |
| 203 | 9.88 | 34.22 | 1.83 | 165 | 400 | 7.58 | 34.41 | 0.37 | 26.89 | 117 | 0.81 |
| 248 | 9.33 | 34.31 | 1.31 | 149 | 500 | 6.87 | 34.42 | 0.23 | 27.00 | 107 | 0.92 |
| 321 | 7.73 | 34.25 | 1.32 | 131 | | | | | | | |
| 411 | 7.58 | 34.42 | 0.33 | 116 | | | | | | | |
| 532 | 6.57 | 34.41 | 0.23 | 103 | | | | | | | |
| **120.80** | STRANGER; February 18, 1958; 1050 GCT; 26°35'N, 117°50'W; sounding, 1900 fm; wind, direction missing, force 1; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 18.59 | 34.22 | 5.25 | 340 | 0 | 18.59 | 34.22 | 5.25 | 24.54 | 340 | 0.00 |
| 10 | 18.60 | 34.09 | 5.24 | 349 | 10 | 18.60 | 34.09 | 5.24 | 24.45 | 349 | 0.03 |
| 30 | 18.61 | 34.18 | 5.27 | 344 | 20 | 18.60 | 34.13 | 5.25 | 24.48 | 346 | 0.07 |
| 54 | 18.83 | 34.26 | 5.29 | 343 | 30 | 18.61 | 34.18 | 5.27 | 24.50 | 344 | 0.10 |
| 64 | 18.80 | 34.26 | 5.19 | 342 | 50 | 18.82 | 34.24 | 5.29 | 24.52 | 343 | 0.17 |
| 83 | 18.44 | 34.22 | 5.25 | 336 | 75 | 18.61 | 34.24 | 5.22 | 24.56 | 338 | 0.26 |
| 98 | 14.26 | 33.69 | 4.88 | 282 | 100 | 14.01 | 33.67 | 4.88 | 25.18 | 279 | 0.34 |
| 112 | 12.60 | 33.60 | 4.93 | 258 | 150 | 11.78 | 34.08 | 2.17 | 25.93 | 208 | 0.46 |
| 130 | 11.38 | 33.64 | 4.29 | 233 | 200 | 11.33 | 34.45 | 1.02 | 26.32 | 172 | 0.56 |
| 148 | 11.76 | 34.05 | 2.31 | 209 | 250 | 10.97 | 34.61 | 0.46 | 26.50 | 154 | 0.64 |
| 171 | 11.72 | 34.31 | 1.35 | 190 | 300 | 10.05 | 34.58 | 0.36 | 26.64 | 141 | 0.72 |
| 194 | 11.42 | 34.43 | 1.05 | 176 | 400 | 8.59 | 34.51 | 0.30 | 26.81 | 125 | 0.85 |
| 239 | 11.18 | 34.61 | 0.53 | 157 | 500 | 7.40 | 34.49 | 0.20 | 26.98 | 108 | 0.98 |
| 313 | 9.80 | 34.57 | 0.36 | 138 | | | | | | | |
| 406 | 8.50 | 34.50 | 0.29 | 123 | | | | | | | |
| 528 | 7.08 | 34.49 | 0.19 | 104 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; February 14, 1958; 1540 GCT; 25°00'N, 113°23.5'W; sounding, 1775 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 05°. 137.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.57 | 34.65 | 5.01 | 357 | 0 | 20.57 | 34.65 | 5.01 | 24.37 | 357 | 0.00 |
| 10 | 20.60 | 34.61 | 5.03 | 361 | 10 | 20.60 | 34.61 | 5.03 | 24.32 | 361 | 0.04 |
| 29 | 20.44 | 34.66 | 4.94 | 353 | 20 | 20.55 | 34.64 | 4.98 | 24.37 | 357 | 0.07 |
| 39 | 20.34 | 34.67 | 4.99 | 350 | 30 | 20.43 | 34.66 | 4.94 | 24.41 | 353 | 0.11 |
| 48 | 20.21 | 34.69 | 4.99 | 345 | 50 | 20.20 | 34.68 | 4.97 | 24.49 | 345 | 0.18 |
| 67 | 20.02 | 34.65 | 4.85 | 344 | 75 | 19.50 | 34.58 | 4.40 | 24.60 | 335 | 0.26 |
| 83 | 18.52a) | 34.49 | 3.87 | 318 | 100 | 15.80 | 34.28 | 2.68 | 25.26 | 272 | 0.34 |
| 96 | 16.26 | 34.31 | 2.83 | 280 | 150 | 12.49 | 34.41 | 1.07 | 26.06 | 196 | 0.46 |
| 110 | 14.08 | 34.16 | 2.33 | 245 | 200 | 11.82 | 34.60 | 0.37 | 26.34 | 170 | 0.55 |
| 133 | 13.08 | 34.31 | 1.45 | 215 | 250 | 11.12 | 34.66 | 0.27 | 26.51 | 153 | 0.63 |
| 160 | 12.16 | 34.45 | 0.89 | 187 | 300 | 10.31 | 34.61 | 0.29 | 26.62 | 143 | 0.71 |
| 194 | 11.91 | 34.42r | 0.44 | | | | | | | | |
| 240 | 11.25 | 34.67 | 0.26 | 155 | | | | | | | |
| 315 | 10.01 | 34.59b) | 0.31 | 141 | | | | | | | |

STRANGER; February 10, 1958; 2023 GCT; 23°10'N, 111°03'W; sounding, 750 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 05°. 150.25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.56 | 34.54 | 4.46 | 444 | 0 | 23.56 | 34.54 | 4.46 | 23.45 | 444 | 0.00 |
| 10 | 23.44 | 34.57 | 4.48 | 440 | 10 | 23.44 | 34.57 | 4.48 | 23.50 | 440 | 0.04 |
| 30 | 23.14 | 34.60 | 4.54 | 429 | 20 | 23.28 | 34.58 | 4.51 | 23.55 | 435 | 0.09 |
| 39 | 23.13 | 34.61 | 4.44 | 428 | 30 | 23.14 | 34.60 | 4.54 | 23.61 | 429 | 0.13 |
| 49 | 22.78 | 34.73 | 4.33 | 410 | 50 | 22.66 | 34.73 | 4.28 | 23.84 | 407 | 0.21 |
| 58 | 21.81 | 34.67 | 3.80 | 388 | 75 | 19.60 | 34.54 | 2.80 | 24.54 | 341 | 0.31 |
| 69 | 20.37 | 34.49 | 3.10 | 364 | 100 | 16.63 | 34.64 | 1.35 | 25.35 | 263 | 0.39 |
| 82 | 18.74 | 34.65 | 2.36 | 312 | 150 | 12.90 | 34.60 | 0.54 | 26.12 | 190 | 0.50 |
| 96 | 17.20 | 34.68 | 1.52 | 274 | 200 | 11.81 | 34.73 | 0.16 | 26.44 | 159 | 0.59 |
| 110 | 15.12 | 34.50 | 1.03 | 242 | 250 | 11.17 | 34.73 | 0.12 | 26.56 | 149 | 0.67 |
| 133 | 13.79 | 34.49 | 0.88 | 215 | 300 | 10.58 | 34.69 | 0.13 | 26.64 | 142 | 0.74 |
| 164p | 12.33 | 34.70 | 0.29 | 172 | | | | | | | |
| 228p | 11.42 | 34.74 | 0.11 | 153 | | | | | | | |
| 324p | 10.32 | 34.67 | 0.13 | 139 | | | | | | | |

STRANGER; February 11, 1958; 0350 GCT; 22°42'N, 111°57.5'W; sounding, 1750 fm; wind, 360°, force 4; weather, missing; sea, moderate; wire angle, 10°. 150.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.66 | 34.57 | 4.80 | 446 | 0 | 23.66 | 34.57 | 4.80 | 23.43 | 446 | 0.00 |
| 10 | 23.70 | 34.58 | 4.77 | 445 | 10 | 23.70 | 34.58 | 4.77 | 23.44 | 445 | 0.04 |
| 29 | 23.46 | 34.67 | 4.83 | 433 | 20 | 23.61 | 34.64 | 4.80 | 23.50 | 439 | 0.09 |
| 38 | 23.08 | 34.65 | 4.79 | 424 | 30 | 23.43 | 34.67 | 4.83 | 23.57 | 433 | 0.13 |
| 47 | 22.66 | 34.72 | 4.48 | 407 | 50 | 22.49 | 34.72 | 4.33 | 23.89 | 403 | 0.22 |
| 57 | 21.12 | 34.63 | 3.70 | 373 | 75 | 19.71 | 35.06 | 3.07 | 24.92 | 304 | 0.30 |
| 66 | 19.58 | 34.68 | 2.67 | 330 | 100 | 17.13 | 34.95 | 1.92 | 25.47 | 252 | 0.38 |
| 78 | 19.71 | 35.12 | 3.15 | 302 | 150 | 13.62 | 34.62 | 0.44 | 26.00 | 202 | 0.49 |
| 90 | 18.47 | 35.07 | 2.50 | 275 | 200 | 11.83 | 34.66 | | 26.38 | 165 | 0.58 |
| 101 | 16.82 | 34.92 | 1.81 | 248 | 250 | 10.99 | 34.62 | 0.23 | 26.50 | 154 | 0.66 |
| 120 | 15.49 | 34.79 | 0.95 | 228 | 300 | 10.38 | 34.61 | 0.15 | 26.61 | 144 | 0.74 |
| 144 | 13.99 | 34.63 | 0.50 | 209 | 400 | 9.06 | 34.60 | 0.13 | 26.82 | 124 | 0.88 |
| 172 | 12.18 | 34.61 | 0.35 | 175 | 500 | (7.65) | (34.50) | | (26.96) | (111) | (1.01) |
| 213 | 11.42 | 34.62 | 0.30 | 162 | | | | | | | |
| 278 | 10.65 | 34.61 | 0.19 | 149 | | | | | | | |
| 361 | 9.58 | 34.63 | 0.15 | 130 | | | | | | | |
| 474 | 8.04 | 34.53 | 0.13 | 114 | | | | | | | |

a) Alternate value, 18.66°C, not used in interpolation.
b) Loose bottle cap; value falls on property curve.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80.51-P | II-10 | 1910 | 34°26.5' | 120°32.0' | 50 | 320° | 5 | partly cloudy | very rough | 15.12 | 33.62 | 14.76 | 33.63 |
| 80.70-P | 10 | 0730 | 33°51.0' | 121°53.0' | 2000+ | 320° | 2 | cloudy | very rough | 14.44 | 33.29 | 13.72 | 33.51 |
| 80.80-P | 10 | 0140 | 33°31.0' | 122°40.0' | 2200 | 270° | 3 | cloudy | very rough | 15.24 | 33.26 | 14.92 | 33.26 |
| 82.47-P | 10 | 2340 | 34°16.5' | 119°55.0' | 270 | 320° | 6 | clear | very rough | 15.48 | 33.65 | 13.82 | 33.62 |
| 83.40-P | 11 | 0414 | 34°14.0' | 119°22.5' | 13 | 320° | 1 | clear | rough | 16.05 | 33.63 | - | - |
| 83.43-P | 11 | 0230 | 34°08.0' | 119°34.0' | 140 | 320° | 5 | partly cloudy | very rough | 16.00 | 33.65 | 14.08 | 33.59 |
| 83.51-P | 11 | 1150 | 33°52.0' | 120°08.5' | 53 | 320° | 6 | clear | very rough | 15.34 | 33.63 | 14.56 | 33.62 |
| 87.35-P | 12 | 1100 | 33°50.0' | 118°38.5' | 417 | 320° | 3 | fog | rough | 16.10 | 33.66 | 16.09 | 33.68 |
| 87.40-P | 12 | 0810 | 33°40.5' | 118°59.0' | 470 | 320° | 4 | clear | rough | 16.35 | 33.71 | 14.30 | 33.56 |
| 87.45-P | 12 | 0500 | 33°29.0' | 119°19.0' | 910 | 300° | 5 | partly cloudy | rough | 15.56 | 33.65 | 12.82 | 33.64 |
| 90.28-P | 7 | 0640 | 33°28.5' | 117°46.5' | 240 | - | 1 | overcast | slight | 16.28 | 33.68 | 15.03 | 33.62 |
| 90.50-P | 7 | 2230 | 32°45.0' | 119°16.5' | 195 | 190° | 2 | cloudy | rough | 15.62 | 33.63 | 14.31 | 33.59 |
| 90.80-P | 8 | 1820 | 31°45.5' | 121°19.0' | 205 | 320° | 4 | cloudy | rough | 15.42 | 33.50 | 14.66 | 33.44 |
| 93.27-P | 13 | 2320 | 32°56.0' | 117°19.0' | 65 | 270° | 2 | partly cloudy | rough | 16.48 | 33.75 | 13.42 | 33.63 |
| 93.30-P | 14 | 0125 | 32°50.0' | 117°31.5' | 500 | 270° | 2 | cloudy | rough | 16.26 | 33.68 | 15.02 | 33.67 |
| 93.35-P | 14 | 0445 | 32°40.0' | 117°52.0' | 200 | 270° | 3 | partly cloudy | rough | 16.20 | 33.60 | 15.40 | 33.57 |
| 93.40-P | 14 | 0805 | 32°30.0' | 118°12.5' | 800 | 270° | 4 | partly cloudy | very rough | 16.31 | 33.80 | 16.10 | 33.60 |
| 93.45-P | 14 | 1125 | 32°20.0' | 118°32.5' | 910 | 320° | 4 | cloudy | very rough | 15.80 | 33.55 | 15.82 | 33.58 |
| 93.50-P | 14 | 1440 | 32°11.5' | 118°54.0' | 830 | 320° | 4 | cloudy | very rough | 15.99 | 33.56 | 16.02 | 33.58 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.60-P | II-14 | 1940 | 31°53.0' | 119°33.0' | 1160 | 320° | 4 | partly cloudy | very rough | 15.95 | 33.59 | 15.58 | 33.53 |
| 93.70-P | 15 | 0040 | 31°29.0' | 120°11.0' | 2200 | 320° | 4 | partly cloudy | very rough | 15.89 | 33.58 | 15.72 | 33.53 |
| 93.80-P | 15 | 0645 | 31°07.0' | 120°52.0' | 2278 | 320° | 3 | cloudy | rough | 16.30 | 33.53 | 15.18 | 33.35 |
| 97.30-P | 16 | 1640 | 32°15.5' | 117°07.0' | 26 | 320° | 4 | cloudy | moderate | 16.36 | 33.66 | - | - |
| 97.32-P | 16 | 1530 | 32°13.0' | 117°16.5' | 732 | 320° | 3 | cloudy | moderate | 16.22 | 33.64 | 12.93 | 33.51 |
| 97.40-P | 16 | 1122 | 31°57.5' | 117°46.0' | 860 | 340° | 3 | partly cloudy | moderate | 16.69 | 33.69 | 16.68 | 33.68 |
| 97.45-P | 16 | 0825 | 31°46.0' | 118°09.0' | 650 | 320° | 4 | clear | rough | 16.40 | 33.65 | 16.28 | 33.66 |
| 97.50-P | 16 | 0530 | 31°35.5' | 118°30.0' | 1150 | 320° | 3 | cloudy | rough | 16.22 | 33.56 | 15.72 | 33.55 |
| 97.60-P | 16 | 0000 | 31°18.0' | 119°07.0' | 1730 | 320° | 3 | cloudy | rough | 15.98 | 33.53 | 15.72 | 33.51 |
| 97.70-P | 15 | 1810 | 30°53.5' | 119°47.0' | 1920 | 320° | 3 | cloudy | rough | 15.90 | 33.53 | 15.37 | 33.51 |
| 97.80-P | 15 | 1200 | 30°34.0' | 120°27.5' | 2100 | 320° | 3 | drizzle | rough | 16.18 | 33.53 | 15.83 | 33.48 |
| 100.30-P | 16 | 2140 | 31°40.5' | 116°46.5' | 240 | 320° | 3 | cloudy | moderate | 16.13 | 33.65 | 12.23 | 33.66 |
| 100.32-P | 16 | 2310 | 31°38.0' | 116°57.5' | 630 | 320° | 3 | cloudy | moderate | 16.62 | 33.69 | 15.46 | 33.58 |
| 100.40-P | 17 | 0345 | 31°21.0' | 117°27.0' | 1100 | 040° | 2 | cloudy | moderate | 16.64 | 33.65 | 16.46 | 33.64 |
| 100.50-P | 17 | 0910 | 31°00.0' | 118°07.0' | 900 | 340° | 2 | overcast | moderate | 16.66 | 33.65 | 16.66 | 33.66 |
| 100.60-P | 17 | 1450 | 30°38.5' | 118°46.0' | 1720 | 340° | 2 | overcast | moderate | 16.64 | 33.66 | 16.58 | 33.66 |
| 100.70-P | 17 | 2020 | 30°18.0' | 119°24.5' | 2100 | - | 1 | overcast | rough | 16.90 | 33.66 | 16.37 | 33.58 |
| 100.80-P | 18 | 0105 | 30°01.0' | 120°07.0' | 2180 | - | 1 | overcast | rough | 15.84 | 33.53 | 15.08 | 33.46 |
| 100.90-P | 18 | 0625 | 29°41.0' | 120°46.0' | 2800 | 240° | 3 | cloudy | rough | 16.46 | 33.59 | 16.29 | 33.58 |

## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.30-P | II-19 | 1500 | 31°03.0' | 116°24.5' | 40 | 180° | 4 | overcast | rough | - | 33.68 | - | 33.55 |
| 103.35-P | 19 | 1230 | 30°53.5' | 116°43.0' | 950 | 180° | 6 | cloudy | very rough | 16.49 | 33.67 | 16.44 | 33.68 |
| 103.40-P | 19 | 0920 | 30°43.0' | 117°04.5' | 1000 | 180° | 5 | overcast | moderate | 16.64 | 33.66 | 16.60 | 33.66 |
| 103.50-P | 19 | 0345 | 30°27.0' | 117°45.0' | 1530 | 160° | 3 | cloudy | moderate | 16.68 | 33.71 | 16.40 | 33.68 |
| 103.60-P | 18 | 2225 | 30°08.0' | 118°25.5' | 1800 | 200° | 4 | cloudy | moderate | 16.54 | 33.66 | 16.40 | 33.58 |
| 103.70-P | 18 | 1725 | 29°43.0' | 119°03.0' | 1870 | 200° | 4 | overcast | moderate | 16.98 | 33.74 | 16.96 | 33.74 |
| 107.32-S | 24 | 1750 | 30°28.0' | 116°12.0' | 310 | 320° | 3 | cloudy | rough | 16.50 | 33.63 | 15.12 | 33.58 |
| 107.35-S | 24 | 1605 | 30°21.5' | 116°24.0' | 800 | 330° | 3 | cloudy | rough | 16.69 | 33.68 | 16.42 | 33.69 |
| 107.40-S | 24 | 1245 | 30°10.0' | 116°43.0' | 1600 | 320° | 3 | clear | very rough | 16.50 | 33.62 | 16.22 | 33.60 |
| 107.70-S | 23 | 2220 | 29°10.0' | 118°44.0' | 1750 | 320° | 4 | cloudy | rough | 16.97 | 33.69 | 16.79 | 33.68 |
| 110.33-S | 22 | 1020 | 29°50.5' | 115°52.0' | 50 | 310° | 3 | partly cloudy | moderate | 16.68 | 33.67 | 16.32 | 33.69 |
| 110.35-S | 22 | 1130 | 29°46.5' | 116°00.0' | 750 | 310° | 3 | partly cloudy | moderate | 16.42 | 33.60 | 15.74 | 33.58 |
| 110.40-S | 22 | 1415 | 29°36.5' | 116°19.5' | 1245 | 340° | 3 | partly cloudy | very rough | 17.42 | 33.96 | 17.60 | 34.10 |
| 110.50-S | 22 | 1810 | 29°16.5' | 116°59.0' | 1650 | 320° | 3 | cloudy | rough | 16.73 | 33.70 | 17.50 | 33.99 |
| 110.70-S | 23 | 0400 | 28°36.5' | 118°18.0' | 1950 | 320° | 3 | cloudy | moderate | 17.60 | 33.96 | 17.50 | 33.99 |
| 110.80-S | 23 | 0820 | 28°16.5' | 118°57.5' | 2200 | 320° | 3 | partly cloudy | rough | 17.28 | 33.80 | 17.22 | 33.81 |
| 110.90-S | 23 | 1300 | 27°56.5' | 119°36.0' | 2125 | 320° | 2 | partly cloudy | rough | 17.40 | 33.85 | 17.34 | 33.84 |
| 113.30-S | 22 | 0520 | 29°22.5' | 115°17.5' | 30 | 300° | 3 | missing | moderate | 17.47 | 34.16 | 16.57 | 34.10 |
| 113.35-S | 22 | 0235 | 29°07.0' | 115°37.0' | 850 | 340° | 3 | partly cloudy | high | 16.76 | 33.90 | 14.24 | 33.75 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.40-S | II-22 | 0015 | 29°02.0' | 115°58.5' | 1050 | 320° | 4 | partly cloudy | very rough | 16.57 | - | 15.99 | 33.69 |
| 113.45-S | 21 | 2200 | 28°52.0' | 116°18.0' | 1150 | 310° | 3 | partly cloudy | very rough | 17.32 | 33.87 | 17.08 | 33.89 |
| 113.50-S | 21 | 1920 | 28°42.0' | 116°37.5' | 1900 | 320° | 3 | partly cloudy | very rough | 16.76 | 33.74 | 16.48 | 33.75 |
| 113.60-S | 21 | 1445 | 28°22.0' | 117°17.0' | 2050 | 320° | 5 | cloudy | very rough | 17.48 | 34.05 | 17.62 | 34.13 |
| 117.26-S | 20 | 0720 | 28°56.0' | 114°41.0' | 42 | 270° | 6 | clear | moderate | 17.50 | 34.15 | 17.18 | 34.15 |
| 117.30-S | 20 | 0915 | 28°48.0' | 114°56.5' | 55 | 230° | 1 | clear | slight | 16.92 | 33.82 | 16.22 | 33.85 |
| 117.35-S | 20 | 1200 | 28°32.5' | 115°15.0' | 85 | 230° | 4 | clear | slight | 17.52 | 34.16 | 17.56 | 34.19 |
| 117.40-S | 20 | 1710 | 28°28.0' | 115°35.5' | 535 | 220° | 4 | rain | moderate | 17.07 | 33.91 | 17.04 | 34.01 |
| 117.50-S | 20 | 2150 | 28°07.0' | 116°14.0' | 2300 | 270° | 4 | cloudy | high | 16.75 | 33.74 | 16.29 | 33.74 |
| 117.60-S | 21 | 0255 | 27°45.5' | 116°52.0' | 1875 | 320° | 6 | cloudy | high | 18.00 | 34.25 | 17.92 | 34.23 |
| 117.70-S | 21 | 0725 | 27°30.0' | 117°32.0' | 2000 | 320° | 6 | partly cloudy | high | 17.90 | 34.01 | 17.93 | 34.02 |
| 118.39-S | 20 | 1350 | 28°18.5' | 115°24.0' | 145 | 220° | 4 | cloudy | moderate | 17.66 | 34.22 | 17.45 | 34.21 |
| 119.33-S | 19 | 2310 | 28°19.0' | 114°53.0' | 60 | 200° | 3 | overcast | moderate | 17.68 | 34.17 | 17.54 | 34.17 |
| 120.25-S | 20 | 0305 | 28°23.0' | 114°14.5' | 37 | 220° | 4 | overcast | moderate | 17.90 | 34.22 | 16.78 | 34.14 |
| 120.30-S | 20 | 0120 | 28°13.0' | 114°34.0' | 50 | 200° | 3 | drizzle | moderate | 17.78 | 34.22 | 17.48 | 34.22 |
| 120.35-S | 19 | 2120 | 28°03.0' | 114°54.0' | 43 | 200° | 2 | overcast | moderate | 17.94 | 34.24 | 17.58 | 34.19 |
| 120.40-S | 19 | 0540 | 27°57.0' | 115°15.0' | 26 | 270° | 1 | cloudy | moderate | 17.78 | 34.23 | 17.74a) | 34.18 |

a) Depth, 40 meters.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.45-S | II-19 | 0320 | 27°44.0' | 115°33.0' | 2150 | 360° | 1 | cloudy | moderate | 18.68 | 34.31 | 17.78 | 34.24 |
| 120.60-S | 18 | 2010 | 27°18.0' | 116°32.0' | 2000 | - | 1 | cloudy | slight | 18.11 | 34.04 | 18.00 | 34.02 |
| 120.70-S | 18 | 1550 | 26°57.0' | 117°13.0' | 2050 | - | 1 | cloudy | moderate | 18.20 | 34.11 | 18.17 | 34.11 |
| 120.90-S | 18 | 0520 | 26°13.0' | 118°27.5' | 2200 | 320° | 1 | missing | slight | 18.70 | 34.15 | 18.53 | 34.16 |
| 123.37-S | 17 | 0525 | 27°24.0' | 114°40.0' | 45 | 320° | 2 | missing | slight | 18.56 | 34.38 | 17.47 | 34.30 |
| 123.42-S | 17 | 0740 | 27°14.5' | 114°58.0' | 1700 | 320° | 2 | missing | slight | 18.18 | 34.29 | 17.58 | 34.20 |
| 123.50-S | 17 | 1140 | 26°55.5' | 115°31.5' | 1700 | 310° | 3 | partly cloudy | moderate | 19.08 | 34.51 | 19.06 | 34.51 |
| 123.60-S | 17 | 1515 | 26°36.5' | 116°07.0' | 2025 | 320° | 2 | partly cloudy | slight | 19.92 | 34.55 | 19.70 | 34.52 |
| 127.34-S | 17 | 0110 | 26°55.0' | 114°07.0' | 40 | 320° | 2 | cloudy | moderate | 20.35 | 34.60 | 18.55 | 34.40 |
| 127.40-S | 16 | 2240 | 26°44.0' | 114°30.0' | 1700 | 300° | 2 | cloudy | moderate | 18.56 | 34.36 | 18.14 | 34.33 |
| 127.45-S | 16 | 2005 | 26°34.5' | 114°50.0' | 1850 | 330° | 3 | partly cloudy | moderate | 19.94 | 34.54 | 18.86 | 34.51 |
| 127.50-S | 16 | 1730 | 26°25.0' | 115°08.0' | 600 | 320° | 3 | partly cloudy | moderate | 19.74 | 34.56 | 19.37 | 34.56 |
| 127.60-S | 16 | 1300 | 26°06.5' | 115°47.0' | 2100 | 320° | 3 | clear | moderate | 19.76 | - | 19.72 | - |
| 130.30-S | 15 | 1830 | 26°28.0' | 113°42.5' | 40 | 040° | 2 | clear | moderate | 20.18 | 34.58 | 19.60 | 34.62 |
| 130.35-S | 15 | 2000 | 26°24.0' | 114°49.5' | 75 | 360° | 1 | clear | moderate | 20.46 | 34.60 | 19.60 | 34.60 |
| 130.40-S | 15 | 2200 | 26°14.0' | 114°08.5' | 750 | 340° | 2 | clear | rough | 20.95 | 34.60 | 20.40 | 34.61 |
| 130.45-S | 16 | 0140 | 26°05.0' | 114°26.5' | 2000 | 320° | 2 | clear | moderate | 20.40 | 34.61 | 19.60 | 34.58 |
| 130.50-S | 16 | 0445 | 25°53.0' | 114°48.0' | 1000 | 330° | 4 | clear | rough | 20.18 | 34.59 | 19.70 | 34.56 |
| 130.60-S | 16 | 0900 | 25°33.5' | 115°26.0' | 2100 | 340° | 3 | clear | moderate | 18.36 | 34.07 | 18.38 | 34.11 |

## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 133.25-S | II-15 | 1300 | 26°05.5' | 112°49.5' | 40 | 320° | 3 | clear | rough | 19.44 | 34.69 | 19.30a) | 34.68 |
| 133.30-S | 15 | 1030 | 25°55.0' | 113°08.0' | 120 | 360° | 3 | partly cloudy | rough | 19.94 | 34.66 | 19.84 | 34.69 |
| 133.35-S | 15 | 0750 | 25°45.0' | 113°26.0' | 500 | 330° | 4 | partly cloudy | rough | 20.48 | 34.61 | 19.90 | 34.61 |
| 133.40-S | 15 | 0550 | 25°34.5' | 113°45.5' | 1650 | 320° | 4 | partly cloudy | rough | 20.84 | 34.60 | 20.79 | 34.62 |
| 133.50-S | 15 | 0100 | 25°13.0' | 114°25.5' | 2050 | 320° | 2 | clear | rough | 21.08 | 34.61 | 20.96 | 34.56 |
| 137.23-S | 14 | 0700 | 25°34.0' | 112°18.5' | 40 | 320° | 4 | partly cloudy | rough | 20.21 | - | 20.04 | 34.69 |
| 137.30-S | 14 | 1015 | 25°20.0' | 112°45.5' | 160 | 310° | 4 | partly cloudy | rough | 21.16 | 34.61 | 21.14 | 34.62 |
| 137.35-S | 14 | 1300 | 25°10.0' | 113°04.5' | 850 | 320° | 4 | cloudy | rough | 20.66 | 34.61 | 19.73 | 34.61 |
| 137.50-S | 14 | 2020 | 24°40.0' | 114°01.5' | 2000 | 330° | 3 | cloudy | rough | 21.46 | 34.61 | 21.46 | 34.54 |
| 140.30-S | 12 | 2230 | 24°38.0' | 112°23.0' | 88 | 310° | 3 | clear | moderate | 21.68 | 34.63 | 19.29 | 34.47 |
| 140.35-S | 12 | 2000 | 24°31.0' | 112°41.0' | 600 | 320° | 2 | clear | moderate | 20.98 | 34.62 | 20.52 | 34.70 |
| 140.40-S | 12 | 1720 | 24°23.0' | 113°00.0' | 1900 | 340° | 3 | clear | moderate | 21.16 | - | 20.94 | 34.61 |
| 140.50-S | 12 | 1250 | 24°05.0' | 113°40.0' | 2000 | 320° | 4 | partly cloudy | rough | 21.42 | 34.60 | 21.35 | 34.63 |
| 143.26-S | 12 | 0000 | 24°19.0' | 111°48.0' | 40 | 320° | 4 | clear | rough | 21.30 | 34.61 | 20.75 | 34.56 |
| 143.30-S | 12 | 0155 | 24°11.0' | 112°03.0' | 110 | 320° | 3 | clear | moderate | 22.68 | 34.65 | 21.83 | 34.63 |
| 143.35-S | 12 | 0430 | 24°01.0' | 112°22.0' | 950 | 330° | 4 | clear | rough | 22.14 | 34.67 | 21.74 | 34.61 |
| 143.40-S | 12 | 0645 | 23°51.0' | 112°40.0' | 1700 | 320° | 4 | clear | rough | 22.66 | 34.62 | 21.52 | 34.61 |

a) Depth, 30 meters.

## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 147.20-S | II-11 | 1900 | 23°56.0' | 111°03.0' | 80 | 330° | 4 | clear | rough | 22.82 | 34.61 | 20.82 | 34.60 |
| 147.25-S | 11 | 1645 | 23°47.0' | 111°23.0' | 160 | 360° | 5 | partly cloudy | rough | 21.60 | 34.70 | 21.39 | 34.67 |
| 147.30-S | 11 | 1340 | 23°35.5' | 111°47.0' | 560 | 320° | 3 | partly cloudy | rough | 23.50 | 34.62 | 23.50 | 34.61 |
| 147.40-S | 11 | 0845 | 23°17.0' | 112°22.0' | 1800 | 320° | 4 | missing | rough | 23.24 | 34.60 | 22.90 | 34.67 |
| 150.19-S | 10 | 1640 | 23°24.0' | 110°38.5' | 100 | 220° | 2 | clear | smooth | 22.73 | 34.61 | 21.94 | 34.70 |
| 150.30-S | 10 | 2315 | 23°01.0' | 111°19.0' | 1450 | 330° | 3 | partly cloudy | smooth | 23.64 | 34.55 | 22.63 | 34.56 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; March 1, 1958; 2108 GCT; 36°08.5'N, 121°50'W; sounding, 300 fm; wind, 300°, force 2; weather, cloudy; sea, very rough; wire angle, 07°. 70.52

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.75 | 33.33 | 6.00 | 299 | 0 | 13.75 | 33.33 | 6.00 | 24.98 | 299 | 0.00 |
| 9 | 13.66 | 33.31 | 6.07 | 299 | 10 | 13.65 | 33.31 | 6.05 | 24.98 | 299 | 0.03 |
| 29 | 12.49 | 33.33 | 5.61 | 276 | 20 | 13.58 | 33.31 | 6.04 | 25.00 | 296 | 0.06 |
| 39 | 11.75 | 33.25 | 5.59 | 268 | 30 | 12.40 | 33.32 | 5.60 | 25.24 | 274 | 0.09 |
| 48 | 12.14 | 33.55 | 4.56 | 253 | 50 | 12.05 | 33.59 | 4.33 | 25.51 | 248 | 0.14 |
| 58 | 11.83 | 33.60 | 4.17 | 244 | 75 | 11.17 | 33.62 | 3.96 | 25.69 | 231 | 0.20 |
| 67 | 11.65 | 33.60 | 4.16 | 241 | 100 | 9.97 | 33.79 | 3.12 | 26.04 | 198 | 0.25 |
| 80 | 10.74 | 33.68 | 3.53 | 219 | 150 | 9.13 | 34.02 | 2.24 | 26.35 | 168 | 0.35 |
| 94 | 10.26 | 33.75 | 3.17 | 206 | 200 | 8.55 | 34.08 | 2.01 | 26.49 | 155 | 0.43 |
| 107 | 9.61 | 33.82 | 3.12 | 191 | 250 | 7.93 | 34.10 | 1.94 | 26.61 | 144 | 0.50 |
| 129 | 9.33 | 33.97 | 2.50 | 175 | 300 | 7.42 | 34.15 | 1.46 | 26.71 | 134 | 0.58 |
| 156 | 9.11 | 34.04 | 2.23 | 166 | 400 | (6.48) | (34.24) | (0.86) | (26.91) | (115) | (0.70) |
| 186 | 8.75 | 34.08 | 2.05 | 158 | | | | | | | |
| 231 | 8.15 | 34.08 | 1.99 | 149 | | | | | | | |
| 303 | 7.40 | 34.16 | 1.42 | 133 | | | | | | | |
| 395 | 6.52 | 34.23 | 0.90 | 116 | | | | | | | |

BLACK DOUGLAS; March 2, 1958; 0239 GCT; 35°53'N, 122°23'W; sounding, 1600 fm; wind, 360°, force 3; weather, cloudy; sea, very rough; wire angle, 10°. 70.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.80 | 33.01 | 5.59 | 324 | 0 | 13.80 | 33.01 | 5.59 | 24.72 | 324 | 0.00 |
| 9 | 13.80 | 32.97 | 5.59 | 327 | 10 | 13.80 | 32.97 | 5.59 | 24.68 | 327 | 0.03 |
| 28 | 13.72 | 32.99 | 5.55 | 324 | 20 | 13.77 | 32.98 | 5.58 | 24.70 | 325 | 0.06 |
| 53 | 13.68 | 32.99 | 5.60 | 323 | 30 | 13.70 | 32.99 | 5.56 | 24.73 | 323 | 0.10 |
| 62 | 13.44 | 33.03 | 5.61 | 316 | 50 | 13.68 | 32.99 | 5.59 | 24.73 | 323 | 0.16 |
| 72 | 11.71 | 33.17 | 5.50 | 274 | 75 | 10.83 | 33.17 | 5.36 | 25.40 | 259 | 0.24 |
| 80 | 10.58 | 33.17 | 5.33 | 254 | 100 | 9.75 | 33.25 | 5.07 | 25.66 | 234 | 0.30 |
| 94 | 10.10 | 33.22 | 5.21 | 243 | 150 | 8.66 | 33.58 | 3.82 | 26.08 | 194 | 0.41 |
| 107 | 9.30 | 33.26 | 4.92 | 227 | 200 | 8.17 | 33.92 | 2.31 | 26.43 | 161 | 0.50 |
| 124 | 8.96 | 33.41 | 4.53 | 211 | 250 | 7.86 | 34.05 | 1.78 | 26.58 | 147 | 0.58 |
| 141 | 8.78 | 33.55 | 3.94 | 198 | 300 | 7.22 | 34.09 | 1.52 | 26.69 | 136 | 0.65 |
| 163 | 8.46 | 33.71 | 3.77 | 181 | 400 | 6.65 | 34.17 | 0.80 | 26.84 | 122 | 0.78 |
| 185 | 8.23 | 33.84 | 3.25 | 169 | 500 | 5.83 | 34.20 | 0.56 | 26.96 | 111 | 0.90 |
| 228 | 8.04 | 34.04 | 1.98 | 151 | | | | | | | |
| 299 | 7.25 | 34.08 | 1.54 | 137 | | | | | | | |
| 389 | 6.70 | 34.17 | 0.85 | 123 | | | | | | | |
| 510 | 5.77 | 34.20 | 0.55 | 109 | | | | | | | |

BLACK DOUGLAS; March 2, 1958; 0915 GCT; 35°33'N, 123°06'W; sounding, 2000 fm; wind, 360°, force 2; weather, clear; sea, very rough; wire angle, 04°. 70.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.82 | 33.35 | 5.69 | 299 | 0 | 13.82 | 33.35 | 5.69 | 24.97 | 299 | 0.00 |
| 10 | 13.82 | 33.40 | 5.60 | 296 | 10 | 13.82 | 33.40 | 5.60 | 25.01 | 296 | 0.03 |
| 29 | 13.84 | 33.34 | 5.60 | 301 | 20 | 13.83 | 33.38 | 5.60 | 25.00 | 297 | 0.06 |
| 53 | 13.86 | 33.39 | 5.57 | 297 | 30 | 13.84 | 33.34 | 5.58 | 24.96 | 300 | 0.09 |
| 63 | 13.26 | 33.53 | 5.12 | 275 | 50 | 13.88 | 33.38 | 5.57 | 24.98 | 298 | 0.15 |
| 72 | 11.62 | 33.58 | 3.76 | 242 | 75 | 11.49 | 33.59 | 3.70 | 25.61 | 239 | 0.22 |
| 82 | 11.22 | 33.60 | 3.59 | 233 | 100 | 10.53 | 33.66 | 3.02 | 25.84 | 217 | 0.27 |
| 96 | 10.68 | 33.64 | 3.05 | 221 | 150 | 9.73 | 33.88 | 2.54 | 26.16 | 187 | 0.38 |
| 109 | 10.32 | 33.68 | 3.02 | 212 | 200 | 9.02 | 34.03 | 2.02 | 26.38 | 166 | 0.47 |
| 127 | 10.09 | 33.73 | 2.95 | 205 | 250 | 8.36 | 34.10 | 1.78 | 26.54 | 151 | 0.55 |
| 145 | 9.84 | 33.83 | 2.73 | 194 | 300 | 7.87 | 34.15 | 1.34 | 26.65 | 140 | 0.62 |
| 168 | 9.40 | 33.96 | 2.17 | 177 | 400 | 6.98 | 34.26 | 0.83 | 26.86 | 120 | 0.76 |
| 191 | 9.12 | 34.02 | 2.06 | 168 | 500 | 5.94 | 34.24 | 0.50 | 26.98 | 109 | 0.88 |
| 236 | 8.54 | 34.08 | 1.88 | 155 | | | | | | | |
| 309 | 7.81 | 34.16 | 1.26 | 139 | | | | | | | |
| 402 | 6.95 | 34.26 | 0.83 | 120 | | | | | | | |
| 525 | 5.64 | 34.22 | 0.42 | 106 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

70.80 BLACK DOUGLAS; March 2, 1958; 1532 GCT; 35°13'N, 123°48'W; sounding, 2200 fm; wind, 360°, force 4; weather, partly cloudy; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.99 | 33.27 | 5.82 | 308 | 0 | 13.99 | 33.27 | 5.82 | 24.88 | 308 | 0.00 |
| 10 | 14.00 | 33.24 | 5.84 | 311 | 10 | 14.00 | 33.24 | 5.84 | 24.85 | 311 | 0.03 |
| 29 | 14.14 | 33.39 | 5.94 | 303 | 20 | 14.10 | 33.34 | 5.91 | 24.90 | 306 | 0.06 |
| 53 | 14.02 | 33.42 | 5.81 | 299 | 30 | 14.14 | 33.39 | 5.93 | 24.94 | 303 | 0.09 |
| 63 | 13.06 | 33.48 | 5.34 | 275 | 50 | 14.04 | 33.41 | 5.81 | 24.97 | 300 | 0.15 |
| 72 | 11.89 | 33.42 | 4.90 | 258 | 75 | 11.65 | 33.42 | 4.79 | 25.45 | 254 | 0.22 |
| 81 | 11.28 | 33.43 | 4.60 | 247 | 100 | 10.00 | 33.46 | 4.40 | 25.78 | 223 | 0.28 |
| 94 | 10.34 | 33.44 | 4.50 | 230 | 150 | 8.93 | 33.81 | 2.97 | 26.22 | 181 | 0.38 |
| 108 | 9.69 | 33.51 | 4.06 | 215 | 200 | 8.23 | 33.94 | 2.47 | 26.44 | 160 | 0.47 |
| 125 | 9.34 | 33.65 | 3.44 | 199 | 250 | 7.68 | 34.01 | 1.95 | 26.57 | 148 | 0.55 |
| 144 | 9.02 | 33.77 | 3.08 | 186 | 300 | 7.13 | 34.06 | 1.75 | 26.68 | 137 | 0.62 |
| 166 | 8.60 | 33.89 | 2.77 | 170 | 400 | 6.50 | 34.14 | 0.96 | 26.84 | 122 | 0.76 |
| 188 | 8.37 | 33.91 | 2.57 | 165 | 500 | 6.00 | 34.18 | 0.60 | 26.94 | 113 | 0.88 |
| 233 | 7.87 | 33.99 | 2.10 | 152 | | | | | | | |
| 305 | 7.05 | 34.07 | 1.72 | 135 | | | | | | | |
| 398 | 6.53 | 34.14 | 0.98 | 123 | | | | | | | |
| 521 | 5.90 | 34.19 | 0.54 | 112 | | | | | | | |

70.90 BLACK DOUGLAS; March 2, 1958; 2122, 2147 GCT; 34°53'N, 124°30'W; sounding, 2150 fm; wind, 040°, force 5; weather, partly cloudy; sea, high; wire angle, 25°, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.00 | 33.12 | 5.97 | 320 | 0 | 14.00 | 33.12 | 5.97 | 24.76 | 320 | 0.00 |
| 8 | 14.03 | 33.11 | 5.87 | 321 | 10 | 14.03 | 33.12 | 5.87 | 24.75 | 321 | 0.03 |
| 26 | 14.00 | 33.15 | 5.95 | 318 | 20 | 14.01 | 33.14 | 5.93 | 24.77 | 319 | 0.06 |
| 53 | 13.82 | 33.22 | 5.88 | 309 | 30 | 13.99 | 33.16 | 5.94 | 24.80 | 316 | 0.10 |
| 61 | 13.45 | 33.24 | 5.78 | 300 | 50 | 13.84 | 33.21 | 5.88 | 24.86 | 310 | 0.16 |
| 69 | 12.04 | 33.30 | 5.65 | 270 | 75 | 11.60 | 33.30 | 5.64 | 25.37 | 262 | 0.23 |
| 82 | 11.22 | 33.30 | 5.61 | 255 | 100 | 9.88 | 33.33 | 4.74 | 25.69 | 231 | 0.29 |
| 94 | 10.22 | 33.31 | 4.93 | 238 | 150 | 8.80 | 33.69 | 3.73 | 26.15 | 188 | 0.40 |
| 105 | 9.72 | 33.35 | 4.67 | 227 | 200 | 8.11 | 33.92 | 3.46 | 26.44 | 160 | 0.48 |
| 121 | 9.48 | 33.56 | 3.92 | 208 | 250 | 7.43 | 34.05 | 1.90 | 26.63 | 142 | 0.56 |
| 137 | 9.02 | 33.68 | 3.54 | 192 | 300 | 7.25 | 34.13 | 1.28 | 26.72 | 133 | 0.63 |
| 161 | 8.62 | 33.71 | 3.82 | 184 | 400 | 6.42 | 34.14 | 0.93 | 26.84 | 122 | 0.77 |
| 181 | 8.37 | 33.86 | 3.77 | 169 | 500 | 6.02 | 34.17 | 0.73 | 26.92 | 115 | 0.89 |
| 241 | 7.54 | 34.02 | 2.19 | 145 | | | | | | | |
| 310 | 7.22 | 34.14 | 1.25 | 132 | | | | | | | |
| 411 | 6.30 | 34.14a) | 0.89 | 120 | | | | | | | |
| 542 | 5.90 | 34.26 | 0.52 | 106 | | | | | | | |

73.55 BLACK DOUGLAS; March 1, 1958; 1300, 1340 GCT; 35°27.5'N, 121°37.5'W; sounding, 530 fm; wind, calm; weather, clear; sea, rough; wire angle, 08°, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.86 | 33.31 | | 303 | 0 | 13.86 | 33.31 | | 24.94 | 303 | 0.00 |
| 9 | 13.90 | 33.31 | | 304 | 10 | 13.91 | 33.31 | | 24.93 | 304 | 0.03 |
| 29 | 13.93 | 33.33 | | 303 | 20 | 13.93 | 33.32 | | 24.93 | 304 | 0.06 |
| 58 | 13.24 | 33.55b) | | 274 | 30 | 13.93 | 33.34 | | 24.94 | 303 | 0.09 |
| 67 | 11.58 | 33.51 | | 246 | 50 | 13.82 | 33.44 | | 25.04 | 293 | 0.15 |
| 75 | 11.04 | 33.53 | | 235 | 75 | 11.04 | 33.53 | | 25.65 | 235 | 0.22 |
| 88 | 10.63 | 33.59 | | 224 | 100 | 10.30 | 33.74 | | 25.94 | 207 | 0.27 |
| 101 | 10.26 | 33.75 | | 206 | 150 | 9.40 | 33.95 | | 26.25 | 178 | 0.37 |
| 114 | 9.88 | 33.80 | | 196 | 200 | 8.55 | 34.04 | | 26.46 | 158 | 0.46 |
| 131 | 9.64 | 33.86 | | 188 | 250 | 8.14 | 34.10 | | 26.58 | 147 | 0.53 |
| 148 | 9.43 | 33.93 | | 180 | 300 | 7.78 | 34.15 | | 26.66 | 139 | 0.61 |
| 174 | 9.06 | 34.02 | | 168 | 400 | 6.88 | 34.22 | | 26.84 | 122 | 0.74 |
| | | | | | 500 | 6.08 | 34.27 | | 26.99 | 108 | 0.86 |
| 200 | 8.55 | 34.04 | | 158 | | | | | | | |
| 248 | 8.14 | 34.10 | | 148 | | | | | | | |
| 324 | 7.57 | 34.17 | | 134 | | | | | | | |
| 423 | 6.66 | 34.23 | | 118 | | | | | | | |
| 553 | 5.86 | 34.29 | | 104 | | | | | | | |

a) Possible evaporation; value falls on property curve.

b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; March 1, 1958; 0615 GCT; 35°18'N, 121°58.5'W; sounding, 1300 fm; wind, 360°, force 7; weather, partly cloudy; sea, high; wire angle, 32°. | | | | | | | | | | | 73.60 |
| 0 | 14.10 | 33.46 | | 297 | 0 | 14.10 | 33.46 | | 25.00 | 297 | 0.00 |
| 8 | 14.07 | 33.40 | | 300 | 10 | 14.07 | 33.40 | | 24.96 | 300 | 0.03 |
| 29 | 14.10 | 33.41 | | 300 | 20 | 14.08 | 33.41 | | 24.96 | 300 | 0.06 |
| 53 | 14.08 | 33.44 | | 298 | 30 | 14.10 | 33.41 | | 24.96 | 300 | 0.09 |
| 61 | 13.17 | 33.53 | | 273 | 50 | 14.09 | 33.43 | | 24.98 | 299 | 0.15 |
| 72 | 12.04 | 33.53 | | 253 | 75 | 11.83 | 33.55 | | 25.51 | 248 | 0.22 |
| 78 | 11.76 | 33.57 | | 244 | 100 | 10.33 | 33.61 | | 25.83 | 218 | 0.28 |
| 92 | 10.68 | 33.65 | | 221 | 150 | 9.62 | 33.90 | | 26.17 | 186 | 0.38 |
| 102 | 10.26 | 33.60 | | 217 | 200 | 9.02 | 34.04 | | 26.39 | 165 | 0.47 |
| 115 | 10.16 | 33.73 | | 206 | 250 | 8.50 | 34.13 | | 26.54 | 151 | 0.55 |
| 132 | 9.97 | 33.84 | | 194 | 300 | 7.87 | 34.18 | | 26.67 | 138 | 0.62 |
| 152 | 9.60 | 33.91 | | 184 | 400 | 6.78 | 34.22 | | 26.86 | 120 | 0.76 |
| 172 | 9.36 | 33.98 | | 174 | 500 | (6.01) | (34.26) | | (26.99) | (108) | (0.88) |
| 214 | 8.90 | 34.06 | | 162 | | | | | | | |
| 278 | 8.16 | 34.17 | | 143 | | | | | | | |
| 364 | 7.16 | 34.20 | | 126 | | | | | | | |
| 486 | 6.14 | 34.25 | | 110 | | | | | | | |
| BLACK DOUGLAS; March 3, 1958; 0249 GCT; 34°19'N, 124°06'W; sounding, 2300 fm; wind, 020°, force 4; weather, clear; sea, high; wire angle, 05°. | | | | | | | | | | | 73.90 |
| 0 | 14.22 | 33.22 | 5.41a) | 317 | 0 | 14.22 | 33.22 | 5.41 | 24.79 | 317 | 0.00 |
| 10 | 14.21 | 33.21 | 5.31 | 317 | 10 | 14.21 | 33.21 | 5.31 | 24.79 | 317 | 0.03 |
| 34 | 14.14 | 33.22 | 5.27 | 315 | 20 | 14.18 | 33.22 | 5.30 | 24.80 | 316 | 0.06 |
| 44 | 14.13 | 33.24 | 5.49 | 314 | 30 | 14.16 | 33.22 | 5.28 | 24.80 | 316 | 0.10 |
| 58 | 13.10 | 33.31 | 3.93 | 288 | 50 | 13.99 | 33.26 | 5.40 | 24.86 | 310 | 0.16 |
| 68 | 11.56 | 33.32 | 5.43 | 260 | 75 | 10.98 | 33.31 | 5.01 | 25.48 | 251 | 0.23 |
| 77 | 10.82 | 33.31 | 4.87 | 248 | 100 | 9.87 | 33.58 | 3.18 | 25.88 | 213 | 0.29 |
| 94 | 10.14 | 33.57 | 3.04 | 217 | 150 | 8.94 | 33.80 | 3.26 | 26.21 | 182 | 0.39 |
| 113 | 9.40 | 33.58 | 3.93 | 205 | 200 | 8.45 | 34.02 | 1.44 | 26.46 | 158 | 0.47 |
| 126 | 9.29 | 33.69 | 3.76 | 195 | 250 | 7.82 | 34.09 | 1.29 | 26.61 | 144 | 0.55 |
| 148 | 8.98 | 33.78 | 3.31 | 183 | 300 | 7.30 | 34.14 | 1.83 | 26.72 | 133 | 0.62 |
| 184 | 8.64 | 33.98 | 2.18 | 164 | 400 | 6.42 | 34.22 | 1.23 | 26.90 | 116 | 0.75 |
| 220 | 8.19 | 34.05 | 0.77 | 152 | 500 | 5.85 | 34.27 | 0.80 | 27.02 | 105 | 0.87 |
| 274 | 7.56 | 34.12 | 1.83 | 138 | 600 | 5.28 | 34.33 | 0.53 | 27.13 | 94 | 0.97 |
| 356 | 6.74 | 34.19 | 1.47 | 122 | | | | | | | |
| 462 | 6.03 | 34.25 | 0.92 | 109 | | | | | | | |
| 602 | 5.24 | 34.33 | 0.51 | 94 | | | | | | | |
| BLACK DOUGLAS; February 28, 1958; 1837 GCT; 34°54.5'N, 121°13'W; sounding, 300 fm; wind, 360°, force 2; weather, clear; sea, very rough; wire angle, 15°. | | | | | | | | | | | 77.55 |
| 0 | 14.34 | 33.42 | 5.64 | 304 | 0 | 14.34 | 33.42 | 5.64 | 24.92 | 304 | 0.00 |
| 9 | 14.34 | 33.41 | 5.79 | 305 | 10 | 14.34 | 33.41 | 5.80 | 24.91 | 305 | 0.03 |
| 28 | 14.30 | 33.39 | 5.88 | 306 | 20 | 14.33 | 33.41 | 5.84 | 24.91 | 305 | 0.06 |
| 38 | 14.31 | 33.42 | 7.50u | 304 | 30 | 14.30 | 33.40 | 5.86 | 24.91 | 305 | 0.09 |
| 47 | 14.20 | 33.40 | 5.81 | 303 | 50 | 14.00 | 33.41 | 5.72 | 24.98 | 298 | 0.15 |
| 56 | 13.25 | 33.42 | 5.42 | 283 | 75 | 12.26 | 33.42 | 5.17 | 25.33 | 266 | 0.22 |
| 65 | 12.42 | 33.41 | 5.24 | 269 | 100 | 10.52 | 33.42 | 4.72 | 25.66 | 234 | 0.29 |
| 78 | 12.20 | 33.42 | 5.16 | 264 | 150 | 9.54 | 33.78 | 3.27 | 26.10 | 192 | 0.39 |
| 91 | 11.46 | 33.41 | 4.83 | 252 | 200 | 9.01 | 34.06 | 2.04 | 26.40 | 164 | 0.48 |
| 104 | 10.32 | 33.43 | 4.71 | 230 | 250 | 8.65 | 34.14 | 1.49 | 26.53 | 151 | 0.56 |
| 124 | 9.94 | 33.60 | 3.98 | 212 | 300 | 8.27 | 34.18 | 1.32 | 26.62 | 143 | 0.64 |
| 149 | 9.56 | 33.75 | 3.28 | 195 | 400 | 7.23 | 34.23 | 0.97 | 26.80 | 126 | 0.78 |
| 178 | 9.32 | 33.98 | 2.68 | 174 | 500 | (6.26) | (34.32) | (0.91) | (27.01) | (106) | (0.90) |
| 221 | 8.86 | 34.09 | 1.74 | 159 | | | | | | | |
| 289 | 8.37 | 34.18 | 1.36 | 145 | | | | | | | |
| 377 | 7.50 | 34.21 | 1.03 | 131 | | | | | | | |
| 495 | 6.33 | 34.31 | 0.91 | 108 | | | | | | | |

a) Unusual oxygen distribution on this station. Titration was checked carefully aboard ship. Compare with Station 77.90.

SIO

CCOFI 5803

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **77.60** | BLACK DOUGLAS; February 28, 1958; 2230 GCT; 34°44'N, 121°34'W; sounding, 550 fm; wind, 320°, force 7; weather, partly cloudy; sea, high; wire angle, 17°. | | | | | | | | | | |
| 0 | 14.29 | 33.36 | 5.76 | 308 | 0 | 14.29 | 33.36 | 5.76 | 24.88 | 308 | 0.00 |
| 9 | 14.28 | 33.37 | 5.86 | 307 | 10 | 14.28 | 33.37 | 5.86 | 24.89 | 307 | 0.03 |
| 33 | 14.24 | 33.33 | 5.87 | 309 | 20 | 14.25 | 33.35 | 5.86 | 24.87 | 309 | 0.06 |
| 61 | 13.98 | 33.43 | 5.80 | 296 | 30 | 14.24 | 33.35 | 5.86 | 24.87 | 309 | 0.09 |
| 70 | 13.37 | 33.44 | 5.44 | 284 | 50 | 14.20 | 33.37 | 5.85 | 24.90 | 306 | 0.15 |
| 84 | 12.02 | 33.42 | 5.02 | 261 | 75 | 12.96 | 33.43 | 5.26 | 25.22 | 276 | 0.23 |
| 92 | 10.88 | 33.40 | 4.64 | 242 | 100 | 10.63 | 33.46 | 4.37 | 25.67 | 233 | 0.29 |
| 110 | 10.44 | 33.55 | 4.13 | 224 | 150 | 9.43 | 33.80 | 3.11 | 26.12 | 190 | 0.40 |
| 123 | 10.00 | 33.64 | 3.68 | 210 | 200 | 9.04 | 34.03 | 2.24 | 26.38 | 166 | 0.49 |
| 141 | 9.62 | 33.77 | 3.27 | 195 | 250 | 8.48 | 34.13 | 1.62 | 26.54 | 150 | 0.57 |
| 163 | 9.15 | 33.84 | 3.02 | 182 | 300 | 8.00 | 34.19 | 1.27 | 26.66 | 139 | 0.64 |
| 190 | 9.15 | 34.00 | 2.47 | 170 | 400 | 6.83 | 34.19 | 0.99 | 26.82 | 124 | 0.78 |
| 216 | 8.84 | 34.06 | 2.06 | 161 | 500 | 6.25 | 34.22 | 0.71 | 26.93 | 113 | 0.90 |
| 269 | 8.30 | 34.18 | 1.40 | 144 | 600 | (5.80) | (34.30) | | (27.05) | (102) | (1.02) |
| 349 | 7.33 | 34.18 | 1.14 | 130 | | | | | | | |
| 453 | 6.50 | 34.20 | 0.85 | 118 | | | | | | | |
| 590 | 5.82 | 34.29 | 0.43 | 103 | | | | | | | |
| **77.90** | BLACK DOUGLAS; March 3, 1958; 0755, 0820 GCT; 33°49'N, 123°42'W; sounding, 2440 fm; wind, 360°, force 4; weather, clear; sea, high; wire angle, 08°, 08°. | | | | | | | | | | |
| 0 | 14.17 | 33.13 | 5.58a) | 322 | 0 | 14.17 | 33.13 | 5.58 | 24.74 | 322 | 0.00 |
| 10 | 14.16 | 33.14 | 5.56 | 321 | 10 | 14.16 | 33.14 | 5.56 | 24.75 | 321 | 0.03 |
| 29 | 14.16 | 33.21 | 5.56 | 316 | 20 | 14.16 | 33.18 | 5.56 | 24.77 | 318 | 0.06 |
| 56 | 13.51 | 33.44 | 5.56 | 286 | 30 | 14.16 | 33.22 | 5.56 | 24.80 | 316 | 0.10 |
| 64 | 12.77 | 33.42 | 5.12 | 274 | 50 | 13.97 | 33.35 | 5.56 | 24.95 | 302 | 0.16 |
| 74 | 11.39 | 33.37 | 4.66 | 253 | 75 | 11.25 | 33.37 | 4.63 | 25.47 | 252 | 0.23 |
| 87 | 9.84 | 33.37 | 4.45 | 228 | 100 | 9.88 | 33.55 | 3.64 | 25.86 | 215 | 0.29 |
| 100 | 9.88 | 33.55 | 3.64 | 215 | 150 | 9.12 | 33.83 | 2.45 | 26.20 | 182 | 0.39 |
| 113 | 9.22 | 33.55 | 3.63 | 205 | 200 | 8.00 | 33.94 | 3.05 | 26.47 | 157 | 0.47 |
| | | | | | 250 | 7.73 | 34.10 | 1.26 | 26.63 | 142 | 0.55 |
| 131 | 9.07 | 33.65 | 3.24 | 195 | 300 | 7.22 | 34.12 | 1.07 | 26.72 | 133 | 0.62 |
| 148 | 9.14 | 33.81 | 2.70 | 184 | 400 | 6.30 | 34.17 | 0.69 | 26.88 | 118 | 0.75 |
| 175 | 8.81 | 33.96 | 2.24 | 168 | 500 | 5.70 | 34.21 | 0.57 | 26.99 | 108 | 0.87 |
| 196 | 8.04 | 33.93 | 3.07 | 159 | | | | | | | |
| 245 | 7.76 | 34.09b) | 1.28 | 143 | | | | | | | |
| 322 | 6.96 | 34.13 | 0.96 | 129 | | | | | | | |
| 424 | 6.17 | 34.18 | 0.65 | 115 | | | | | | | |
| 556 | 5.34 | 34.25 | 0.56 | 101 | | | | | | | |
| **80.51** | BLACK DOUGLAS; March 4, 1958; 1637 GCT; 34°26.5'N, 120°32.5'W; sounding, 42 fm; wind, 030°, force 6; weather, clear; sea, rough; wire angle, 02°. | | | | | | | | | | |
| 0 | 14.15 | 33.57 | 5.49 | 290 | 0 | 14.15 | 33.57 | 5.49 | 25.07 | 290 | 0.00 |
| 10 | 14.13 | 33.57 | 5.48 | 289 | 10 | 14.13 | 33.57 | 5.48 | 25.08 | 289 | 0.03 |
| 29 | 14.03 | 33.57 | 5.33 | 287 | 20 | 14.12 | 33.57 | 5.45 | 25.08 | 289 | 0.06 |
| 49 | 13.42 | 33.58 | 4.87 | 275 | 30 | 14.02 | 33.57 | 5.30 | 25.10 | 287 | 0.09 |
| 68 | 11.70 | 33.62 | 3.99 | 240 | 50 | 13.32 | 33.58 | 4.83 | 25.25 | 273 | 0.14 |

a) Unusual oxygen distribution on this station. Titration was checked carefully aboard ship. Compare with Station 73.90.

b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; March 4, 1958; 1308 GCT; 34°19'N, 120°48'W; sounding, 414 fm; wind, 020°, force 5; weather, clear; sea, rough; wire angle, 23°. 80.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.26 | 33.50 | 5.91 | 297 | 0 | 14.26 | 33.50 | 5.91 | 25.00 | 297 | 0.00 |
| 8 | 14.26 | 33.53 | 5.94 | 295 | 10 | 14.26 | 33.52 | 5.94 | 25.02 | 295 | 0.03 |
| 27 | 14.26 | 33.48 | 5.97 | 298 | 20 | 14.26 | 33.50 | 5.95 | 25.00 | 297 | 0.06 |
| 54 | 13.46 | 33.54 | 5.12 | 278 | 30 | 14.26 | 33.48 | 5.95 | 24.98 | 298 | 0.09 |
| 63 | 12.50 | 33.54 | 4.62 | 261 | 50 | 13.95 | 33.51 | 5.59 | 25.06 | 290 | 0.15 |
| 72 | 11.74 | 33.53 | 4.43 | 247 | 75 | 11.41 | 33.54 | 4.30 | 25.58 | 241 | 0.22 |
| 84 | 10.82 | 33.58 | 3.93 | 228 | 100 | 10.62 | 33.72 | 3.34 | 25.86 | 215 | 0.27 |
| 97 | 10.70 | 33.71 | 3.38 | 216 | 150 | 9.59 | 33.87 | 2.77 | 26.16 | 186 | 0.37 |
| 109 | 10.39 | 33.73 | 3.24 | 210 | 200 | 9.02 | 34.08 | 1.92 | 26.42 | 162 | 0.46 |
| 126 | 10.14 | 33.78 | 2.99 | 202 | 250 | 8.23 | 34.14 | 1.59 | 26.58 | 146 | 0.54 |
| 142 | 9.76 | 33.85 | 2.83 | 190 | 300 | 7.42 | 34.11 | 1.47 | 26.68 | 137 | 0.62 |
| 167 | 9.24 | 33.95 | 2.50 | 175 | 400 | 6.88 | 34.22 | 0.77 | 26.84 | 122 | 0.75 |
| 188 | 9.18 | 34.04 | 2.17 | 168 | 500 | 6.26 | 34.28 | 0.45 | 26.97 | 109 | 0.87 |
| 233 | 8.54 | 34.14 | 1.66 | 150 | | | | | | | |
| 307 | 7.38 | 34.11 | 1.44 | 136 | | | | | | | |
| 401 | 6.88 | 34.22 | 0.77 | 122 | | | | | | | |
| 526 | 6.04 | 34.29 | 0.43 | 106 | | | | | | | |

BLACK DOUGLAS; March 4, 1958; 0902 GCT; 34°09'N, 121°09'W; sounding, 1200 fm; wind, 060°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°. 80.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.36 | 33.39 | 5.63 | 307 | 0 | 14.36 | 33.39 | 5.63 | 24.89 | 307 | 0.00 |
| 9 | 14.36 | 33.40 | 5.64 | 306 | 10 | 14.36 | 33.40 | 5.64 | 24.90 | 306 | 0.03 |
| 28 | 14.34 | 33.38 | 5.59 | 307 | 20 | 14.36 | 33.39 | 5.62 | 24.89 | 307 | 0.06 |
| 58 | 13.82 | 33.45 | 5.59 | 292 | 30 | 14.34 | 33.38 | 5.59 | 24.89 | 307 | 0.09 |
| 67 | 13.00 | 33.41 | 5.15 | 280 | 50 | 14.28 | 33.39 | 5.59 | 24.90 | 306 | 0.15 |
| 76 | 11.88 | 33.41 | 4.85 | 259 | 75 | 12.03 | 33.41 | 4.88 | 25.37 | 262 | 0.22 |
| 89 | 10.78 | 33.42 | 4.69 | 239 | 100 | 10.30 | 33.41 | 4.52 | 25.69 | 231 | 0.29 |
| 104 | 10.08 | 33.41 | 4.41 | 229 | 150 | 9.03 | 33.70 | 3.36 | 26.11 | 191 | 0.39 |
| 117 | 9.53 | 33.49 | 4.20 | 213 | 200 | 8.74 | 34.01 | 2.35 | 26.41 | 163 | 0.48 |
| 134 | 9.24 | 33.63 | 3.72 | 199 | 250 | 8.05 | 34.09 | 1.92 | 26.58 | 147 | 0.56 |
| 152 | 9.02 | 33.71 | 3.36 | 190 | 300 | 7.40 | 34.14 | 1.53 | 26.71 | 134 | 0.63 |
| 179 | 8.93 | 33.93 | 2.56 | 172 | 400 | 6.61 | 34.26 | 0.74 | 26.91 | 115 | 0.76 |
| 201 | 8.74 | 34.01 | 2.35 | 163 | 500 | 6.02 | 34.31 | 0.59 | 27.03 | 104 | 0.88 |
| 249 | 8.07 | 34.09 | 1.94 | 148 | | | | | | | |
| 326 | 7.09 | 34.16 | 1.28 | 129 | | | | | | | |
| 426 | 6.48 | 34.28 | 0.68 | 112 | | | | | | | |
| 556 | 5.64 | 34.33 | 0.58 | 98 | | | | | | | |

BLACK DOUGLAS; March 4, 1958; 0315 GCT; 33°49'N, 121°51'W; sounding, 2000 fm; wind, 160°, force 5; weather, rain; sea, very rough; wire angle, 07°. 80.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.28 | 33.21 | 5.55 | 319 | 0 | 14.28 | 33.21 | 5.55 | 24.77 | 319 | 0.00 |
| 10 | 14.28 | 33.22 | 5.60 | 318 | 10 | 14.28 | 33.22 | 5.60 | 24.78 | 318 | 0.03 |
| 29 | 14.28 | 33.24 | 5.58 | 317 | 20 | 14.28 | 33.22 | 5.59 | 24.78 | 318 | 0.06 |
| 58 | 14.20 | 33.26 | 5.58 | 313 | 30 | 14.28 | 33.24 | 5.58 | 24.80 | 316 | 0.10 |
| 68 | 13.76 | 33.34 | 5.58 | 299 | 50 | 14.25 | 33.25 | 5.58 | 24.81 | 315 | 0.16 |
| 78 | 12.86 | 33.36 | 5.56 | 280 | 75 | 13.15 | 33.36 | 5.57 | 25.10 | 287 | 0.23 |
| 92 | 11.50 | 33.33 | 5.14 | 258 | 100 | 10.76 | 33.34 | 4.93 | 25.54 | 245 | 0.30 |
| 106 | 10.39 | 33.35 | 4.86 | 238 | 150 | 8.94 | 33.70 | 3.88 | 26.14 | 188 | 0.41 |
| 120 | 9.54 | 33.42 | 4.44 | 219 | 200 | 8.62 | 34.00 | 2.26 | 26.42 | 162 | 0.50 |
| 138 | 9.02 | 33.58 | 4.11 | 200 | 250 | 7.82 | 34.09 | 1.95 | 26.61 | 144 | 0.58 |
| 156 | 8.89 | 33.78a) | 3.15 | 182 | 300 | 7.32 | 34.15 | 1.51 | 26.73 | 132 | 0.65 |
| 183 | 8.79 | 33.93 | 2.50 | 170 | 400 | 6.60 | 34.23 | 0.80 | 26.90 | 117 | 0.78 |
| 206 | 8.48 | 34.02 | 2.24 | 159 | 500 | 5.99 | 34.28 | 0.48 | 27.01 | 106 | 0.89 |
| 256 | 7.76 | 34.10 | 1.91 | 142 | | | | | | | |
| 333 | 7.06 | 34.19 | 1.23 | 126 | | | | | | | |
| 434 | 6.33 | 34.25 | 0.61 | 112 | | | | | | | |
| 566 | 5.64 | 34.31 | 0.39 | 100 | | | | | | | |

a) Possible evaporation; value falls on property curve.

SIO

CCOFI 5803

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| 80.80 | BLACK DOUGLAS; March 3, 1958; 2124 GCT; 33°29'N, 122°32'W; sounding, 2400 fm; wind, 270°, force 5; weather, rain; sea, very rough; wire angle, 18°. | | | | | | | | | | |
| 0 | 15.60 | 33.46 | 5.62 | 328 | 0 | 15.60 | 33.46 | 5.62 | 24.67 | 328 | 0.00 |
| 8 | 15.58 | 33.39 | 5.62 | 332 | 10 | 15.57 | 33.40 | 5.66 | 24.64 | 331 | 0.03 |
| 28 | 15.54 | 33.44 | 5.74 | 328 | 20 | 15.56 | 33.40 | 5.69 | 24.64 | 331 | 0.07 |
| 55 | 15.52 | 33.42 | 5.63 | 329 | 30 | 15.54 | 33.43 | 5.73 | 24.67 | 328 | 0.10 |
| 64 | 15.54 | 33.42 | 5.75 | 329 | 50 | 15.50 | 33.42 | 5.67 | 24.66 | 329 | 0.16 |
| 72 | 15.48 | 33.44 | 5.68 | 327 | 75 | 15.47 | 33.44 | 5.68 | 24.69 | 326 | 0.25 |
| 85 | 14.16 | 33.46 | 5.76 | 298 | 100 | 12.38 | 33.39 | 5.37 | 25.28 | 270 | 0.32 |
| 98 | 12.66 | 33.40 | 5.46 | 274 | 150 | 9.31 | 33.62 | 4.02 | 26.02 | 200 | 0.44 |
| 110 | 11.30 | 33.35 | 5.18 | 253 | 200 | 8.68 | 33.89 | 2.95 | 26.33 | 171 | 0.53 |
| 128 | 10.00 | 33.43 | 4.82 | 225 | 250 | 7.96 | 34.03 | 2.35 | 26.54 | 150 | 0.62 |
| 143 | 9.42 | 33.55 | 4.22 | 208 | 300 | 7.39 | 34.09 | 1.80 | 26.67 | 138 | 0.69 |
| 169 | 9.15 | 33.68 | 3.66 | 194 | 400 | 6.50 | 34.13 | 1.06 | 26.82 | 124 | 0.83 |
| 190 | 8.81 | 33.84 | 3.15 | 177 | 500 | 5.80 | 34.21 | 0.76 | 26.98 | 109 | 0.95 |
| 237 | 8.14 | 34.00 | 2.49 | 155 | | | | | | | |
| 310 | 7.32 | 34.10 | 1.72 | 136 | | | | | | | |
| 405 | 6.45 | 34.13 | 1.00 | 123 | | | | | | | |
| 531 | 5.69 | 34.23 | 0.74 | 106 | | | | | | | |
| 80.90 | BLACK DOUGLAS; March 3, 1958; 1355 GCT; 33°21.5'N, 133°21'W; sounding, 2400 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 14.55 | 33.06 | 5.91 | 335 | 0 | 14.55 | 33.06 | 5.91 | 24.60 | 335 | 0.00 |
| 10 | 14.54 | 33.06 | 5.88 | 335 | 10 | 14.54 | 33.06 | 5.88 | 24.60 | 335 | 0.03 |
| 29 | 14.56 | 33.05 | 6.05 | 336 | 20 | 14.55 | 33.06 | 6.00 | 24.60 | 335 | 0.07 |
| 57 | 14.52 | 33.12 | 5.94 | 330 | 30 | 14.56 | 33.06 | 6.04 | 24.60 | 335 | 0.10 |
| 66 | 13.52 | 33.20 | 5.91 | 304 | 50 | 14.54 | 33.10 | 5.99 | 24.63 | 332 | 0.17 |
| 76 | 12.83 | 33.30 | 5.79 | 284 | 75 | 12.90 | 33.30 | 5.80 | 25.12 | 286 | 0.24 |
| 89 | 11.95 | 33.32 | 5.67 | 266 | 100 | 10.62 | 33.28 | 5.35 | 25.52 | 247 | 0.31 |
| 103 | 10.26 | 33.28 | 5.25 | 241 | 150 | 8.98 | 33.66 | 3.95 | 26.10 | 192 | 0.42 |
| 116 | 9.48 | 33.35 | 4.85 | 223 | 200 | 8.28 | 33.95 | 2.63 | 26.43 | 161 | 0.51 |
| 134 | 9.26 | 33.51 | 4.35 | 208 | 250 | 7.59 | 34.04 | 2.14 | 26.60 | 145 | 0.59 |
| 153 | 8.94 | 33.68 | 3.90 | 190 | 300 | 7.13 | 34.09 | 1.71 | 26.70 | 135 | 0.66 |
| 180 | 8.57 | 33.84 | 3.01 | 173 | 400 | 6.29 | 34.17 | 0.92 | 26.89 | 117 | 0.79 |
| 202 | 8.25 | 33.96 | 2.61 | 160 | 500 | 5.57 | 34.25 | 0.54 | 27.04 | 103 | 0.91 |
| 252 | 7.58 | 34.04 | 2.13 | 144 | | | | | | | |
| 330 | 6.88 | 34.12 | 1.41 | 129 | | | | | | | |
| 432 | 6.00 | 34.20 | 0.70 | 112 | | | | | | | |
| 564 | 5.18 | 34.29 | 0.42 | 96 | | | | | | | |
| 83.80 | BLACK DOUGLAS; March 6, 1958; 0247 GCT; 32°54.5'N, 122°07.5'W; sounding, 2200 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 14.49 | 33.37 | 5.81 | 311 | 0 | 14.49 | 33.37 | 5.81 | 24.85 | 311 | 0.00 |
| 9 | 14.49 | 33.37 | 5.91 | 311 | 10 | 14.48 | 33.37 | 5.90 | 24.85 | 311 | 0.03 |
| 28 | 14.46 | 33.37 | 5.76 | 311 | 20 | 14.47 | 33.37 | 5.83 | 24.85 | 311 | 0.06 |
| 56 | 14.37 | 33.40 | 5.76 | 306 | 30 | 14.45 | 33.38 | 5.76 | 24.86 | 310 | 0.09 |
| 64 | 14.22 | 33.40 | 5.84 | 304 | 50 | 14.38 | 33.40 | 5.76 | 24.89 | 307 | 0.16 |
| 73 | 13.62 | 33.40 | 5.58 | 292 | 75 | 13.59 | 33.40 | 5.57 | 25.06 | 291 | 0.23 |
| 86 | 13.32 | 33.44 | 5.55 | 283 | 100 | 11.92 | 33.40 | 5.02 | 25.39 | 260 | 0.30 |
| 99 | 12.10 | 33.40 | 5.15 | 264 | 150 | 9.03 | 33.68 | 3.53 | 26.10 | 192 | 0.41 |
| 112 | 10.59 | 33.44 | 4.46 | 234 | 200 | 8.22 | 33.95 | 2.58 | 26.44 | 160 | 0.50 |
| 128 | 9.76 | 33.53 | 4.11 | 214 | 250 | 7.51 | 34.01 | 2.02 | 26.60 | 145 | 0.58 |
| 145 | 9.20 | 33.64 | 3.68 | 198 | 300 | 7.00 | 34.09 | 1.58 | 26.73 | 132 | 0.65 |
| 170 | 8.66 | 33.78 | 3.28 | 179 | 400 | 6.32 | 34.14 | 0.86 | 26.85 | 121 | 0.78 |
| 192 | 8.36 | 33.93 | 2.72 | 163 | 500 | 5.88 | 34.18 | 0.50 | 26.94 | 112 | 0.90 |
| 239 | 7.63 | 34.00 | 2.12 | 148 | | | | | | | |
| 312 | 6.91 | 34.11 | 1.50 | 130 | | | | | | | |
| 408 | 6.24 | 34.14 | 0.77 | 120 | | | | | | | |
| 535 | 5.64 | 34.25 | 0.42 | 104 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

BLACK DOUGLAS; March 6, 1958; 0912 GCT; 32°19.5'N, 121°43'W; sounding, 2100 fm; wind, 290°, force 7; weather, rain; sea, high; wire angle, 28°. 87.80

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.92 | 33.40 | | 318 | 0 | 14.92 | 33.40 | 24.78 | 318 | 0.00 |
| 8 | 14.93 | 33.40 | | 317 | 10 | 14.95 | 33.41 | 24.79 | 317 | 0.03 |
| 26 | 14.96 | 33.44 | | 315 | 20 | 14.96 | 33.43 | 24.80 | 316 | 0.06 |
| 52 | 14.89 | 33.40 | | 317 | 30 | 14.96 | 33.43 | 24.80 | 316 | 0.10 |
| 60 | 14.10 | 33.44 | | 298 | 50 | 14.90 | 33.41 | 24.79 | 317 | 0.16 |
| 68 | 13.92 | 33.52 | | 289 | 75 | 13.77 | 33.52 | 25.12 | 286 | 0.23 |
| 80 | 13.64 | 33.51 | | 284 | 100 | 12.04 | 33.44 | 25.38 | 260 | 0.30 |
| 92 | 12.93 | 33.45 | | 275 | 150 | 9.17 | 33.65 | 26.06 | 196 | 0.42 |
| 103 | 11.71 | 33.44 | | 253 | 200 | 8.61 | 33.89 | 26.34 | 170 | 0.51 |
| 120 | 10.00 | 33.50 | | 220 | 250 | 7.88 | 34.03 | 26.55 | 149 | 0.59 |
| 135 | 9.49 | 33.54 | | 210 | 300 | 7.41 | 34.08 | 26.66 | 139 | 0.66 |
| 157 | 9.08 | 33.67 | | 194 | 400 | 6.56 | 34.24 | 26.91 | 116 | 0.80 |
| 178 | 8.87 | 33.79 | | 182 | 500 | 5.91 | 34.33 | 27.05 | 102 | 0.91 |
| 221 | 8.22 | 33.98 | | 158 | | | | | | |
| 291 | 7.49 | 34.07 | | 141 | | | | | | |
| 384 | 6.70 | 34.22 | | 119 | | | | | | |
| 507 | 5.89 | 34.33 | | 101 | | | | | | |

BLACK DOUGLAS; March 7, 1958; 2145 GCT; 33°24.5'N, 117°55'W; sounding, 341 fm; wind, 140°, force 4; weather, partly cloudy; sea, rough; wire angle, 12°. 90.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.44 | 33.58 | 5.80 | 316 | 0 | 15.44 | 33.58 | 5.80 | 24.80 | 316 | 0.00 |
| 9 | 15.41 | 33.54 | 5.85 | 318 | 10 | 15.41 | 33.55 | 5.85 | 24.79 | 317 | 0.03 |
| 28 | 15.30 | 33.58 | 5.83 | 312 | 20 | 15.37 | 33.57 | 5.84 | 24.82 | 314 | 0.06 |
| 56 | 14.68 | 33.55 | 5.37 | 302 | 30 | 15.30 | 33.58 | 5.83 | 24.84 | 312 | 0.09 |
| 64 | 13.26 | 33.55 | 4.89 | 274 | 50 | 15.24 | 33.58 | 5.79 | 24.85 | 311 | 0.16 |
| 74 | 12.12 | 33.55 | 4.40 | 252 | 75 | 12.03 | 33.55 | 4.37 | 25.48 | 252 | 0.23 |
| 87 | 11.22 | 33.62 | 4.07 | 232 | 100 | 10.59 | 33.73 | 3.55 | 25.88 | 213 | 0.29 |
| 100 | 10.59 | 33.73 | 3.55 | 213 | 150 | 9.66 | 33.96 | 2.58 | 26.22 | 181 | 0.39 |
| 114 | 10.26 | 33.82 | 3.22 | 201 | 200 | 9.05 | 34.17 | 1.99 | 26.48 | 156 | 0.47 |
| 131 | 9.96 | 33.87 | 2.86 | 192 | 250 | 8.72 | 34.28 | 1.44 | 26.62 | 143 | 0.55 |
| 149 | 9.68 | 33.96 | 2.59 | 181 | 300 | 8.34 | 34.30 | 1.20 | 26.70 | 135 | 0.62 |
| 176 | 9.36 | 34.06 | 2.38 | 169 | 400 | 7.33 | 34.29 | 0.79 | 26.84 | 122 | 0.75 |
| 198 | 9.07 | 34.16 | 2.01 | 157 | 500 | 6.52 | 34.31 | 0.53 | 26.96 | 110 | 0.87 |
| 247 | 8.76 | 34.27 | 1.48 | 144 | | | | | | | |
| 324 | 8.12 | 34.30 | 1.09 | 132 | | | | | | | |
| 424 | 7.04 | 34.29 | 0.70 | 119 | | | | | | | |
| 555 | 6.16 | 34.35 | 0.43 | 103 | | | | | | | |

BLACK DOUGLAS; March 7, 1958; 1703 GCT; 33°11'N, 118°23.5'W; sounding, 645 fm; wind, 330°, force 3; weather, partly cloudy; sea, very rough; wire angle, 08°. 90.37

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 33.57 | 5.29 | 311 | 0 | 15.20 | 33.57 | 5.29 | 24.85 | 311 | 0.00 |
| 10 | 15.18 | 33.55 | 5.29 | 312 | 10 | 15.18 | 33.55 | 5.29 | 24.84 | 312 | 0.03 |
| 29 | 15.19 | 33.59 | 5.29 | 309 | 20 | 15.18 | 33.57 | 5.29 | 24.85 | 311 | 0.06 |
| 53 | 14.60 | 33.56 | 5.26 | 300 | 30 | 15.19 | 33.59 | 5.29 | 24.87 | 309 | 0.09 |
| 63 | 13.16 | 33.48 | 5.03 | 277 | 50 | 14.86 | 33.57 | 5.27 | 24.93 | 304 | 0.15 |
| 72 | 11.80 | 33.48 | 4.71 | 252 | 75 | 11.58 | 33.50 | 4.52 | 25.53 | 247 | 0.22 |
| 81 | 11.32 | 33.63 | 3.91 | 232 | 100 | 10.85 | 33.67 | 3.48 | 25.79 | 222 | 0.28 |
| 95 | 10.98 | 33.66 | 3.58 | 224 | 150 | 9.79 | 34.00 | 2.37 | 26.23 | 180 | 0.39 |
| 107 | 10.74 | 33.68 | 3.42 | 219 | 200 | 9.05 | 34.10 | 2.13 | 26.43 | 161 | 0.47 |
| 125 | 10.33 | 33.75 | 3.21 | 207 | 250 | 8.55 | 34.19 | 1.61 | 26.58 | 146 | 0.55 |
| 143 | 9.88 | 33.93 | 2.59 | 186 | 300 | 8.12 | 34.23 | 1.41 | 26.67 | 138 | 0.62 |
| 170 | 9.60 | 34.05 | 2.25 | 173 | 400 | 7.27 | 34.31 | 0.61 | 26.86 | 120 | 0.76 |
| 187 | 9.24 | 34.07 | 2.34 | 167 | 500 | 6.35 | 34.33 | 0.61 | 27.00 | 107 | 0.88 |
| 232 | 8.74 | 34.17 | 1.76 | 151 | | | | | | | |
| 304 | 8.08 | 34.23 | 1.40 | 137 | | | | | | | |
| 394 | 7.32 | 34.31 | 0.61 | 120 | | | | | | | |
| 515 | 6.20 | 34.33 | 0.61 | 105 | | | | | | | |

SIO

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5803

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

90.45 BLACK DOUGLAS; March 12, 1958; 1915 GCT; 32°54.5'N, 118°56'W; sounding, 900 fm; wind, 240°, force 3; weather, partly cloudy; sea, rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.17 | 33.57 | 5.78 | 310 | 0 | 15.17 | 33.57 | 5.78 | 24.86 | 310 | 0.00 |
| 9 | 15.12 | 33.57 | 5.76 | 310 | 10 | 15.10 | 33.57 | 5.76 | 24.86 | 310 | 0.03 |
| 28 | 15.08 | 33.57 | 5.80 | 310 | 20 | 15.09 | 33.57 | 5.78 | 24.86 | 310 | 0.06 |
| 38 | 15.03 | 33.57 | 5.80 | 308 | 30 | 15.08 | 33.57 | 5.80 | 24.88 | 308 | 0.09 |
| 48 | 12.97 | 33.45 | 5.36 | 275 | 50 | 12.90 | 33.45 | 5.32 | 25.24 | 274 | 0.15 |
| 58 | 12.46 | 33.44 | 4.79 | 267 | 75 | 11.45 | 33.50 | 4.63 | 25.54 | 246 | 0.22 |
| 67 | 12.16 | 33.46 | 4.98 | 260 | 100 | 10.59 | 33.60 | 3.87 | 25.78 | 222 | 0.28 |
| 80 | 11.11 | 33.51 | 4.29 | 238 | 150 | 9.62 | 33.94 | 2.44 | 26.21 | 182 | 0.38 |
| 94 | 10.62 | 33.58 | 3.96 | 225 | 200 | 9.04 | 34.11 | 1.87 | 26.44 | 160 | 0.46 |
| 108 | 10.46 | 33.72 | 3.38 | 212 | 250 | 8.57 | 34.18 | 1.48 | 26.57 | 147 | 0.54 |
| 129 | 9.92 | 33.87 | 2.72 | 192 | 300 | 8.09 | 34.23 | 1.17 | 26.67 | 138 | 0.62 |
| 156 | 9.57 | 33.96 | 2.36 | 179 | 400 | 7.29 | 34.26 | 0.69 | 26.82 | 124 | 0.75 |
| 187 | 9.20 | 34.07 | 2.01 | 166 | 500 | 6.43 | 34.30 | 0.46 | 26.96 | 110 | 0.87 |
| 232 | 8.76 | 34.16 | 1.63 | 152 | | | | | | | |
| 303 | 8.06 | 34.23 | 1.17 | 137 | | | | | | | |
| 393 | 7.39 | 34.25 | 0.74 | 126 | | | | | | | |
| 513 | 6.36 | 34.31 | 0.44 | 108 | | | | | | | |

90.55 BLACK DOUGLAS; March 12, 1958; 1308 GCT; 32°35'N, 119°37'W; sounding, 550 fm; wind, 320°, force 2; weather, rain; sea, moderate; wire angle, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.12 | 33.50 | 5.67 | 294 | 0 | 14.12 | 33.50 | 5.67 | 25.03 | 294 | 0.00 |
| 9 | 14.10 | 33.51 | 5.83 | 293 | 10 | 14.10 | 33.51 | 5.82 | 25.04 | 293 | 0.03 |
| 28 | 14.11 | 33.53 | 5.81 | 293 | 20 | 14.10 | 33.51 | 5.81 | 25.04 | 293 | 0.06 |
| 55 | 14.10 | 33.51 | 5.83 | 293 | 30 | 14.10 | 33.52 | 5.82 | 25.04 | 293 | 0.09 |
| 63 | 14.11 | 33.54 | 5.66 | 291 | 50 | 14.10 | 33.51 | 5.83 | 25.04 | 293 | 0.15 |
| 72 | 14.11 | 33.52 | 5.77 | 293 | 75 | 14.10 | 33.52 | 5.60 | 25.04 | 293 | 0.22 |
| 84 | 12.93 | 33.44 | 5.04 | 276 | 100 | 10.76 | 33.49 | 4.43 | 25.66 | 234 | 0.29 |
| 96 | 11.22 | 33.47 | 4.63 | 243 | 150 | 9.80 | 33.82 | 2.86 | 26.09 | 193 | 0.40 |
| 108 | 10.32 | 33.55 | 4.10 | 222 | 200 | 8.86 | 34.03 | 2.23 | 26.40 | 164 | 0.48 |
| 125 | 10.20 | 33.71 | 3.55 | 208 | 250 | 8.48 | 34.16 | 1.69 | 26.57 | 148 | 0.56 |
| 141 | 9.98 | 33.79 | 3.02 | 198 | 300 | 7.99 | 34.21 | 1.32 | 26.68 | 138 | 0.64 |
| 166 | 9.50 | 33.86 | 2.71 | 186 | 400 | 7.06 | 34.27 | 0.73 | 26.86 | 120 | 0.77 |
| 187 | 9.08 | 33.96 | 2.46 | 172 | 500 | 6.35 | 34.32 | 0.69 | 26.99 | 108 | 0.89 |
| 232 | 8.62 | 34.12 | 1.87 | 153 | | | | | | | |
| 305 | 7.97 | 34.22 | 1.30 | 136 | | | | | | | |
| 400 | 7.06 | 34.27 | 0.73 | 120 | | | | | | | |
| 528 | 6.12 | 34.33 | 0.69 | 104 | | | | | | | |

90.60 BLACK DOUGLAS; March 12, 1958; 0914, missing GCT; 32°26.5'N, 119°58'W; sounding, 800 fm; wind, 300°, force 5; weather, rain; sea, very rough; wire angle, 19°, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.62 | 33.51 | 5.54 | 304 | 0 | 14.62 | 33.51 | 5.54 | 24.92 | 304 | 0.00 |
| 7 | 14.63 | 33.51 | 5.66 | 304 | 10 | 14.62 | 33.52 | 5.64 | 24.93 | 303 | 0.03 |
| 24 | 14.60 | 33.52 | 5.61 | 302 | 20 | 14.60 | 33.52 | 5.62 | 24.93 | 303 | 0.06 |
| 49 | 14.56 | 33.51 | 5.54 | 303 | 30 | 14.59 | 33.51 | 5.60 | 24.94 | 302 | 0.09 |
| 57 | 14.52 | 33.51 | 5.53 | 302 | 50 | 14.54 | 33.51 | 5.54 | 24.94 | 302 | 0.15 |
| 66 | 12.76 | 33.46 | 5.12 | 270 | 75 | 12.17 | 33.43 | 5.08 | 25.36 | 262 | 0.22 |
| 79 | 12.00 | 33.42 | 5.04 | 260 | 100 | 11.00 | 33.46 | 4.55 | 25.60 | 239 | 0.29 |
| 91 | 11.66 | 33.42 | 4.88 | 254 | 150 | 9.39 | 33.76 | 3.44 | 26.11 | 191 | 0.39 |
| 104 | 10.70 | 33.49 | 4.44 | 233 | 200 | 8.78 | 34.05 | 2.28 | 26.43 | 161 | 0.48 |
| | | | | | 250 | 8.41 | 34.10 | 1.95 | 26.53 | 152 | 0.56 |
| 121 | 10.05 | 33.58 | 4.01 | 216 | 300 | 8.00 | 34.18 | 1.42 | 26.66 | 140 | 0.64 |
| 139 | 9.58 | 33.70 | 3.67 | 199 | 400 | 7.13 | 34.25 | 0.92 | 26.83 | 123 | 0.78 |
| 165 | 9.18 | 33.82 | 3.09 | 184 | 500 | 6.42 | 34.29 | 0.80 | 26.96 | 110 | 0.90 |
| 187 | 8.91 | 34.01 | 2.48 | 166 | | | | | | | |
| 235 | 8.53 | 34.09 | 2.05 | 154 | | | | | | | |
| 310 | 7.94 | 34.20 | 1.32 | 137 | | | | | | | |
| 409 | 7.02 | 34.25 | 0.90 | 122 | | | | | | | |
| 538 | 6.16 | 34.32 | 0.77 | 105 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; March 12, 1958; 0250 GCT; 32°04.5'N, 120°39'W; sounding, 2100 fm; wind, 310°, force 5; weather, rain; sea, high; wire angle, 09°. 90.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.39 | 33.59 | 5.36 | 314 | 0 | 15.39 | 33.59 | 5.36 | 24.82 | 314 | 0.00 |
| 10 | 15.38 | 33.58 a) | 5.52 | 314 | 10 | 15.38 | 33.58 | 5.52 | 24.82 | 314 | 0.03 |
| 34 | 15.36 | 33.59 | 5.50 | 313 | 20 | 15.38 | 33.58 | 5.51 | 24.82 | 314 | 0.06 |
| 63 | 15.38 | 33.58 | 5.37 | 314 | 30 | 15.37 | 33.58 | 5.51 | 24.82 | 314 | 0.09 |
| 73 | 15.32 | 33.60 | 5.37 | 312 | 50 | 15.36 | 33.59 | 5.42 | 24.83 | 313 | 0.16 |
| 87 | 12.29 | 33.41 | 5.04 | 266 | 75 | 15.26 | 33.60 | 5.35 | 24.85 | 311 | 0.23 |
| 96 | 11.86 | 33.41 | 4.92 | 258 | 100 | 11.62 | 33.42 | 4.82 | 25.46 | 254 | 0.31 |
| 114 | 10.56 | 33.48 | 4.16 | 230 | 150 | 9.32 | 33.72 | 3.40 | 26.09 | 193 | 0.42 |
| 128 | 10.19 | 33.58 | 3.66 | 217 | 200 | 9.00 | 34.10 | 2.08 | 26.44 | 160 | 0.51 |
| 145 | 9.48 | 33.70 | 3.42 | 197 | 250 | 8.37 | 34.16 | 1.52 | 26.59 | 146 | 0.59 |
| 168 | 9.10 | 33.78 | 3.38 | 186 | 300 | 7.79 | 34.20 | 1.16 | 26.70 | 136 | 0.66 |
| 195 | 9.04 | 34.08 | 2.28 | 162 | 400 | 6.86 | 34.25 | 0.77 | 26.86 | 120 | 0.79 |
| 222 | 8.74 | 34.14 | 1.73 | 153 | 500 | 6.03 | 34.28 | 0.58 | 27.00 | 107 | 0.91 |
| 276 | 8.02 | 34.18 | 1.32 | 140 | 600 | 5.47 | 34.33 | 0.48 | 27.10 | 97 | 1.02 |
| 358 | 7.22 | 34.23 | 0.90 | 126 | | | | | | | |
| 463 | 6.27 | 34.27 | 0.61 | 110 | | | | | | | |
| 603 | 5.44 | 34.33 | 0.48 | 96 | | | | | | | |

BLACK DOUGLAS; March 11, 1958; 1950 GCT; 31°45'N, 121°19'W; sounding, 2000 fm; wind, 320°, force 5; weather, rain; sea, high; wire angle, 10°. 90.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.05 | 33.58 | 5.63 | 308 | 0 | 15.05 | 33.58 | 5.63 | 24.88 | 308 | 0.00 |
| 10 | 15.02 | 33.55 | 5.59 | 309 | 10 | 15.02 | 33.55 | 5.59 | 24.87 | 309 | 0.03 |
| 34 | 15.04 | 33.56 | 5.26 | 309 | 20 | 15.02 | 33.55 | 5.46 | 24.87 | 309 | 0.06 |
| 62 | 15.00 | 33.55 | 5.22 | 309 | 30 | 15.03 | 33.55 | 5.35 | 24.87 | 309 | 0.09 |
| 71 | 14.99 | 33.55 | - | 309 | 50 | 15.01 | 33.55 | 5.23 | 24.87 | 309 | 0.15 |
| 84 | 13.02 | 33.37 | 5.32 | 283 | 75 | 14.40 | 33.48 | 5.22 | 24.96 | 301 | 0.23 |
| 94 | 12.00 | 33.37 | 5.27 | 264 | 100 | 11.58 | 33.38 | 5.18 | 25.43 | 256 | 0.30 |
| 112 | 10.75 | 33.40 | 4.93 | 240 | 150 | 9.12 | 33.69 | 3.43 | 26.09 | 193 | 0.42 |
| 125 | 9.96 | 33.48 | 4.26 | 221 | 200 | 8.32 | 33.98 | 2.52 | 26.44 | 160 | 0.50 |
| 142 | 9.32 | 33.62 | 3.66 | 201 | 250 | 7.51 | 34.08 | 1.90 | 26.65 | 140 | 0.58 |
| 164 | 8.84 | 33.80 | 3.01 | 180 | | | | | | | |
| 191 | 8.42 | 33.93 | 2.62 | 165 | | | | | | | |
| 217 | 8.01 | 34.04 | 2.14 | 150 | | | | | | | |
| 272 | 7.22 | 34.09 | 1.81 | 136 | | | | | | | |
| 385p | 6.46 | 34.17 | 0.96 | | | | | | | | |

BLACK DOUGLAS; March 11, 1958; 1110 GCT; 31°18'N, 121°42.5'W; sounding, 2000 fm; wind, 300°, force 6; weather, partly cloudy; sea, very rough; wire angle, 35°. 90.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.12 | 33.47 | 5.46 | 317 | 0 | 15.12 | 33.47 | 5.46 | 24.79 | 317 | 0.00 |
| 8 | 15.10 | 33.40 | 5.42 | 322 | 10 | 15.10 | 33.39 | 5.42 | 24.74 | 322 | 0.03 |
| 25 | 15.10 | 33.38 | 5.40 | 323 | 20 | 15.10 | 33.39 | 5.41 | 24.74 | 322 | 0.06 |
| 50 | 14.98 | 33.39 | 5.46 | 320 | 30 | 15.09 | 33.38 | 5.41 | 24.74 | 322 | 0.10 |
| 58 | 14.81 | 33.31 | 5.38 | 322 | 50 | 14.98 | 33.39 | 5.46 | 24.76 | 320 | 0.16 |
| 66 | 14.66 | 33.31 | 5.43 | 319 | 75 | 14.54 | 33.30 | 5.45 | 24.79 | 317 | 0.24 |
| 78 | 14.49 | 33.30 | 5.46 | 316 | 100 | 12.37 | 33.44 | 5.18 | 25.33 | 265 | 0.31 |
| 90 | 14.04 | 33.43 | 5.34 | 298 | 150 | 9.46 | 33.56 | 3.98 | 25.94 | 208 | 0.44 |
| 102 | 12.21 | 33.44 | 5.18 | 263 | 200 | 8.58 | 33.89 | 2.93 | 26.34 | 170 | 0.53 |
| 117 | 11.40 | 33.40 | 5.04 | 251 | 250 | 7.92 | 33.97 | 2.36 | 26.50 | 154 | 0.62 |
| 133 | 10.24 | 33.43 | 4.62 | 230 | 300 | 7.29 | 34.03 | 1.97 | 26.64 | 141 | 0.69 |
| 157 | 9.28 | 33.59 | 3.86 | 203 | 400 | 6.40 | 34.16 | 0.76 | 26.86 | 120 | 0.83 |
| 178 | 8.87 | 33.75 | 3.31 | 184 | 500 | 5.76 | 34.25 | 0.73 | 27.01 | 106 | 0.94 |
| 222 | 8.28 | 33.94 | 2.68 | 162 | | | | | | | |
| 292 | 7.37 | 34.02 | 2.02 | 143 | | | | | | | |
| 384 | 6.47 | 34.14 | 0.80 | 122 | | | | | | | |
| 504 | 5.74 | 34.25 | 0.73 | 105 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

SIO

CCOFI 5803

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 107.50 | BLACK DOUGLAS; March 20, 1958; 0315 GCT; 29°50.5'N, 117°23.5'W; sounding, 1350 fm; wind, 300°, force 3; weather, partly cloudy; sea, rough; wire angle, 17°. | | | | | | | | | | |
| 0 | 16.26 | 33.61 | 5.70 | 331 | 0 | 16.26 | 33.61 | 5.70 | 24.64 | 331 | 0.00 |
| 9 | 16.26 | 33.64 | 5.71 | 329 | 10 | 16.25 | 33.63 | 5.69 | 24.66 | 329 | 0.03 |
| 28 | 16.14 | 33.61 | 5.68 | 328 | 20 | 16.18 | 33.62 | 5.68 | 24.66 | 329 | 0.06 |
| 51 | 15.96 | 33.58 | 5.68 | 326 | 30 | 16.10 | 33.60 | 5.68 | 24.68 | 327 | 0.10 |
| 60 | 15.99 | 33.63 | 5.62 | 323 | 50 | 15.97 | 33.59 | 5.68 | 24.68 | 327 | 0.16 |
| 68 | 15.99 | 33.62 | 5.60 | 324 | 75 | 15.97 | 33.59 | 5.63 | 24.72 | 324 | 0.24 |
| 78 | 15.92 | 33.59 | 5.66 | 324 | 100 | 13.23 | 33.48 | 5.44 | 25.20 | 278 | 0.32 |
| 90 | 14.35 | 33.55 | 5.66 | 295 | 150 | 11.01 | 33.82 | 3.40 | 25.88 | 214 | 0.45 |
| 102 | 13.16 | 33.48 | 5.42 | 277 | 200 | 9.78 | 34.02 | 2.51 | 26.25 | 178 | 0.55 |
| 119 | 11.86 | 33.46 | 5.17 | 255 | 250 | 8.56 | 34.08 | 2.14 | 26.49 | 155 | 0.63 |
| 135 | 10.86 | 33.44 | 4.94 | 239 | 300 | 7.62 | 34.13 | 1.51 | 26.67 | 138 | 0.71 |
| 154 | 11.02 | 33.84 | 3.24 | 212 | 400 | 6.55 | 34.16 | 0.97 | 26.84 | 122 | 0.84 |
| 176 | 10.60 | 34.00 | 2.57 | 193 | 500 | (6.20) | (34.38) | | (27.05) | (101) | (0.96) |
| 218 | 9.22 | 34.04 | 2.46 | 168 | | | | | | | |
| 284 | 7.90 | 34.13 | 1.68 | 142 | | | | | | | |
| 370 | 6.74 | 34.13 | 1.15 | 126 | | | | | | | |
| 484 | 6.28 | 34.32 | 0.44 | 106 | | | | | | | |
| 107.60 | BLACK DOUGLAS; March 19, 1958; 2145 GCT; 29°31'N, 118°03'W; sounding, 1800 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.94 | 33.75 | 5.67 | 336 | 0 | 16.94 | 33.75 | 5.67 | 24.59 | 336 | 0.00 |
| 4 | 16.93 | - | 5.39 | | 10 | 16.63 | 33.73 | 5.22 | 24.63 | 332 | 0.03 |
| 8 | 16.69 | 33.73 | 5.32 | 332 | 20 | 16.60 | 33.75 | 5.23 | 24.67 | 328 | 0.07 |
| 12 | 16.62 | - | 5.21 | | 30 | 16.58 | 33.73 | 5.49 | 24.66 | 329 | 0.10 |
| 16 | 16.60 | 33.71 | 5.23 | 331 | 50 | 16.60 | 33.73 | 5.54 | 24.65 | 330 | 0.16 |
| 20 | 16.60 | 33.75 | 5.23 | 328 | 75 | 16.60 | 33.73 | 5.38 | 24.65 | 330 | 0.25 |
| 24 | 16.61 | 33.75 | 5.37 | 328 | 100 | 16.43 | 33.72 | 5.22 | 24.68 | 327 | 0.33 |
| 27 | 16.62 | 33.73 | 5.44 | 330 | 150 | (11.00) | (33.71) | (3.60) | (25.79) | (222) | (0.47) |
| 31 | 16.58 | 33.73 | 5.50 | 329 | | | | | | | |
| 35 | 16.60 | 33.73 | 5.53 | 330 | | | | | | | |
| 38 | 16.60 | 33.75 | 5.56 | 328 | | | | | | | |
| 42 | 16.60 | 33.73 | 5.59 | 330 | | | | | | | |
| 45 | - | 33.75 | 5.59 | | | | | | | | |
| 49 | - | 33.75 | 5.56 | | | | | | | | |
| 83 | - | 33.84 | 5.52 | | | | | | | | |
| 126 | 12.70 | 33.51 | 5.05 | 266 | | | | | | | |
| 148 | 11.02 | 33.70 | 3.64 | 223 | | | | | | | |
| 110.50 | STRANGER; March 19, 1958; 1106 GCT; 29°20.5'N, 117°05'W; sounding, 2000 fm; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 16.44 | 33.71 | 5.64 | 327 | 0 | 16.44 | 33.71 | 5.64 | 24.68 | 327 | 0.00 |
| 10 | 16.46 | 33.70 | 5.61 | 328 | 10 | 16.46 | 33.70 | 5.61 | 24.67 | 328 | 0.03 |
| 30 | 16.42 | 33.75 | 5.61 | 324 | 20 | 16.43 | 33.73 | 5.61 | 24.69 | 326 | 0.06 |
| 59 | 16.21 | 33.68 | 5.65 | 325 | 30 | 16.42 | 33.75 | 5.61 | 24.72 | 324 | 0.10 |
| 69 | 16.00 | 33.68 | 5.61 | 320 | 50 | 16.34 | 33.72 | 5.62 | 24.70 | 325 | 0.16 |
| 78 | 15.82 | 33.60 | 5.64 | 322 | 75 | 15.92 | 33.63 | 5.61 | 24.74 | 322 | 0.24 |
| 93 | 14.08 | 33.55 | 5.54 | 290 | 100 | 13.30 | 33.52 | 5.38 | 25.22 | 276 | 0.32 |
| 107 | 12.86 | 33.51 | 5.23 | 269 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_{T}{}^{-5}{}_{3}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_{T}{}^{-5}{}_{3}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

STRANGER; March 19, 1958; 0558 GCT; 29°02.5'N, 117°40.5'W; sounding, 2000 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 15°. 110.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.60 | 33.66 | 5.60 | 335 | 0 | 16.60 | 33.66 | 5.60 | 24.60 | 335 | 0.00 |
| 10 | 16.66 | 33.70 | 5.58 | 333 | 10 | 16.66 | 33.70 | 5.58 | 24.62 | 333 | 0.03 |
| 29 | 16.43 | 33.65 | 5.57 | 332 | 20 | 16.57 | 33.68 | 5.58 | 24.63 | 332 | 0.07 |
| 58 | 16.40 | 33.64 | 5.54 | 331 | 30 | 16.43 | 33.65 | 5.57 | 24.64 | 331 | 0.10 |
| 68 | 16.40 | 33.64 | 5.49 | 332 | 50 | 16.40 | 33.65 | 5.55 | 24.64 | 331 | 0.17 |
| 77 | 16.36 | 33.68 | 5.55 | 328 | 75 | 16.38 | 33.67 | 5.54 | 24.66 | 329 | 0.25 |
| 91 | 15.30 | 33.57 | 5.49 | 313 | 100 | 14.46 | 33.52 | 5.40 | 24.98 | 299 | 0.33 |
| 105 | 14.02 | 33.51 | 5.33 | 292 | 150 | 11.26 | 33.66 | 3.98 | 25.70 | 230 | 0.46 |
| 119 | 12.66 | 33.53 | 4.66 | 264 | 200 | 9.15 | 33.84 | 3.29 | 26.21 | 182 | 0.56 |
| 138 | 11.78 | 33.61 | 4.24 | 242 | 250 | 8.38 | 33.99 | 2.43 | 26.45 | 159 | 0.65 |
| 156 | 11.00 | 33.68 | 3.75 | 224 | 300 | 7.98 | 34.12 | 1.77 | 26.61 | 144 | 0.73 |
| 181 | 9.60 | 33.70 | 3.59 | 199 | 400 | 7.24 | 34.27 | 0.76 | 26.83 | 123 | 0.87 |
| 203 | 9.10 | 33.86 | 3.18 | 180 | 500 | 6.50 | 34.33 | 0.46 | 26.98 | 108 | 0.99 |
| 251 | 8.35 | 33.99 | 2.41 | 158 | | | | | | | |
| 326 | 7.81 | 34.18 | 1.48 | 137 | | | | | | | |
| 425 | 7.04 | 34.29 | 0.67 | 119 | | | | | | | |
| 554 | 6.04 | 34.36 | 0.34 | 101 | | | | | | | |

STRANGER; March 17, 1958; 2030, 2104 GCT; 28°42'N, 116°40'W; sounding, 2000 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°, 08°. 113.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.85 | 33.70 | 5.50 | 337 | 0 | 16.85 | 33.70 | 5.50 | 24.58 | 337 | 0.00 |
| 10 | 16.58 | 33.68 | 5.56 | 332 | 10 | 16.58 | 33.68 | 5.56 | 24.63 | 332 | 0.03 |
| 30 | 16.26 | 33.66 | 5.52 | 327 | 20 | 16.37 | 33.67 | 5.54 | 24.66 | 329 | 0.07 |
| 55 | 16.24 | 33.68 | 5.55 | 325 | 30 | 16.26 | 33.66 | 5.52 | 24.68 | 327 | 0.10 |
| 64 | 16.19 | 33.65 | 5.63 | 326 | 50 | 16.24 | 33.67 | 5.54 | 24.69 | 326 | 0.16 |
| 73 | 16.16 | 33.67 | 5.53 | 324 | 75 | 16.02 | 33.66 | 5.55 | 24.74 | 322 | 0.24 |
| 83 | 14.72 | 33.57 | 5.57 | 301 | 100 | 13.59 | 33.65 | 5.02 | 25.25 | 273 | 0.32 |
| | | | | | 150 | 11.06 | 33.88 | 3.13 | 25.92 | 210 | 0.44 |
| 101 | 13.58 | 33.66 | 4.56 | 272 | 200 | 10.06 | 34.19 | 1.95 | 26.32 | 171 | 0.54 |
| 115 | 12.96 | 33.75 | 3.79 | 253 | 250 | 9.36 | 34.30 | 1.35 | 26.54 | 151 | 0.62 |
| 133 | 11.86 | 33.86 | 3.14 | 225 | 300 | 8.95 | 34.42 | 0.85 | 26.70 | 136 | 0.70 |
| 149 | 11.20 | 33.88 | 3.17 | 212 | 400 | 7.82 | 34.41 | 0.36 | 26.86 | 120 | 0.83 |
| 171 | 10.42 | 33.94 | 2.72 | 195 | 500 | 6.73 | 34.39 | 0.36 | 27.00 | 107 | 0.95 |
| 193 | 10.13 | 34.13 | 2.00 | 176 | | | | | | | |
| 236 | 9.44 | 34.27 | 1.42 | 155 | | | | | | | |
| 307 | 8.89 | 34.42 | 0.75 | 135 | | | | | | | |
| 397 | 7.85 | 34.41 | 0.37 | 120 | | | | | | | |
| 517 | 6.56 | 34.38 | 0.36 | 105 | | | | | | | |

STRANGER; March 18, 1958; 0154 GCT; 28°24'N, 117°16'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 03°. 113.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.54 | 34.00 | 5.39 | 331 | 0 | 17.54 | 34.00 | 5.39 | 24.64 | 331 | 0.00 |
| 10 | 17.51 | 34.02 | 5.47 | 329 | 10 | 17.51 | 34.02 | 5.47 | 24.66 | 329 | 0.03 |
| 30 | 17.22 | 34.03 | 5.42 | 322 | 20 | 17.38 | 34.03 | 5.44 | 24.70 | 326 | 0.06 |
| 60 | 17.36 | 34.13 | 5.35 | 317 | 30 | 17.22 | 34.03 | 5.42 | 24.74 | 322 | 0.10 |
| 70 | 17.37 | 34.12 | 5.30 | 318 | 50 | 17.36 | 34.09 | 5.36 | 24.77 | 319 | 0.16 |
| 80 | 17.28 | 34.07 | 5.31 | 320 | 75 | 17.34 | 34.09 | 5.31 | 24.77 | 319 | 0.24 |

S10

CCOFI 5803

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_T$ $^{-5}_{10}$ $^{3}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ $^{-5}_{10}$ $^{3}$ cm/g | ΔD dyn. m |

117.50 STRANGER; March 16, 1958; 1602 GCT; 28°08'N, 116°15'W; sounding, 2000+ fm; wind, 320°, force 2; weather, cloudy; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.66 | 33.69 | 5.46 | 334 | 0 | 16.66 | 33.69 | 5.46 | 24.61 | 334 | 0.00 |
| 10 | 16.63 | 33.75 | 5.47 | 329 | 10 | 16.63 | 33.75 | 5.47 | 24.66 | 329 | 0.03 |
| 30 | 16.56 | 33.69 | 5.47 | 330 | 20 | 16.60 | 33.72 | 5.47 | 24.65 | 330 | 0.07 |
| 55 | 16.52 | 33.69 | 5.46 | 330 | 30 | 16.56 | 33.69 | 5.47 | 24.65 | 330 | 0.10 |
| 66p | 16.56 | 33.73 | 5.52 | 328 | 50 | 16.50 | 33.69 | 5.46 | 24.65 | 330 | 0.16 |
| 71p | 16.48 | 33.75 | 5.56 | 326 | 75 | 16.27 | 33.77 | 5.55 | 24.76 | 319 | 0.25 |
| 82p | 15.69 | 33.82 | 5.42 | 303 | 100 | 13.40 | 33.65 | 5.17 | 25.29 | 269 | 0.32 |
| 93p | 14.16 | 33.68 | 5.37 | 282 | 150 | 10.81 | 33.94 | 2.81 | 26.00 | 202 | 0.44 |
| 106p | 12.92 | 33.64 | 4.96 | 261 | 200 | 10.09 | 34.21 | 1.98 | 26.34 | 169 | 0.54 |
| 120p | 11.73 | 33.57 | 4.73 | 244 | 250 | 9.20 | 34.33 | 1.23 | 26.59 | 146 | 0.62 |
| 137p | 11.12 | 33.76 | 3.66 | 220 | 300 | 8.66 | 34.40 | 0.86 | 26.72 | 133 | 0.69 |
| 155p | 10.42 | 33.94 | 2.77 | 194 | 400 | 7.58 | 34.40 | 0.44 | 26.88 | 118 | 0.82 |
| 190p | 10.10 | 34.15 | 1.99 | 174 | | | | | | | |
| 249p | 9.20 | 34.33 | 1.23 | 146 | | | | | | | |
| 321p | 8.48 | 34.42 | 0.72 | 129 | | | | | | | |
| 423p | 7.22 | 34.38 | 0.38 | 114 | | | | | | | |

120.50 STRANGER; March 15, 1958; 0615 GCT; 27°34.5'N, 115°53.5'W; sounding, 2000+ fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.60 | 33.79 | 5.57 | 325 | 0 | 16.60 | 33.79 | 5.57 | 24.70 | 325 | 0.00 |
| 10 | 16.58 | 33.85 | 5.44 | 320 | 10 | 16.58 | 33.85 | 5.44 | 24.76 | 320 | 0.03 |
| 28 | 16.80 | 34.00 | 5.34 | 314 | 20 | 16.70 | 33.92 | 5.37 | 24.78 | 318 | 0.06 |
| 57 | 16.40 | 34.02 | 5.04 | 304 | 30 | 16.78 | 34.00 | 5.29 | 24.83 | 313 | 0.10 |
| 66 | 15.90 | 33.95 | 4.84 | 298 | 50 | 16.53 | 34.02 | 5.10 | 24.90 | 306 | 0.16 |
| 75 | 14.86 | 33.87 | 4.16 | 282 | 75 | 14.86 | 33.87 | 4.16 | 25.16 | 282 | 0.23 |
| 89 | 12.84 | 33.73 | 3.73 | 252 | 100 | 12.42 | 33.81 | 3.27 | 25.60 | 239 | 0.30 |
| 102 | 12.38 | 33.82 | 3.23 | 238 | 150 | 10.30 | 34.03 | 2.38 | 26.17 | 186 | 0.40 |
| 115 | 11.78 | 33.95 | 2.66 | 217 | 200 | 9.55 | 34.23 | 1.55 | 26.45 | 159 | 0.49 |
| 131 | 11.44 | 34.06 | 2.19 | 203 | 250 | 9.10 | 34.36 | 0.97 | 26.62 | 142 | 0.57 |
| 147 | 10.43 | 34.03 | 2.39 | 188 | 300 | 8.55 | 34.39 | 0.74 | 26.73 | 132 | 0.64 |
| 171 | 9.82 | 34.07 | 2.26 | 176 | 400 | 7.56 | 34.39 | 0.37 | 26.88 | 118 | 0.77 |
| 190 | 9.61 | 34.18 | 1.84 | 164 | 500 | 6.53 | 34.40 | 0.32 | 27.04 | 104 | 0.89 |
| 234 | 9.26 | 34.34 | 1.09 | 146 | | | | | | | |
| 304 | 8.52 | 34.39 | 0.73 | 132 | | | | | | | |
| 396 | 7.60 | 34.39 | 0.39 | 119 | | | | | | | |
| 519 | 6.31 | 34.40 | 0.32 | 101 | | | | | | | |

120.80 STRANGER; March 15, 1958; 1955 GCT; 26°39'N, 117°51'W; sounding, 2000+ fm; wind, calm; weather, clear; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.06 | 33.94 | 5.77 | 372 | 0 | 19.06 | 33.94 | 5.77 | 24.21 | 372 | 0.00 |
| 10 | 17.50 | 33.91 | 5.53 | 337 | 10 | 17.50 | 33.91 | 5.53 | 24.58 | 337 | 0.04 |
| 30 | 17.36 | 33.91 | 5.42 | 333 | 20 | 17.41 | 33.91 | 5.52 | 24.60 | 335 | 0.07 |
| 55 | 17.35 | 33.91 | 5.41 | 332 | 30 | 17.36 | 33.91 | 5.42 | 24.62 | 333 | 0.10 |
| 64 | 17.31 | 33.93 | 5.44 | 331 | 50 | 17.35 | 33.91 | 5.41 | 24.63 | 332 | 0.17 |
| 74 | 17.31 | 33.89 | 5.42 | 333 | 75 | 17.30 | 33.89 | 5.42 | 24.61 | 334 | 0.25 |
| 83 | 17.30 | 33.88 | 5.44 | 334 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |
| STRANGER; March 10, 1958; 0532, 0612 GCT; 24°55'N, 113°30.5'W; sounding, 2100 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 03°, 04°. | | | | | | | | | | | 137.40 |
| 0 | 19.32 | 34.57 | 5.52 | 332 | 0 | 19.32 | 34.57 | 5.52 | 24.64 | 332 | 0.00 |
| 10 | 19.36 | 34.56 | 5.04 | 333 | 10 | 19.36 | 34.56 | 5.04 | 24.62 | 333 | 0.03 |
| 30 | 19.26 | 34.57 | 5.09 | 330 | 20 | 19.30 | 34.56 | 5.06 | 24.64 | 332 | 0.07 |
| 59 | 19.16 | 34.55 | 5.00 | 329 | 30 | 19.26 | 34.57 | 5.09 | 24.65 | 330 | 0.10 |
| 68 | 16.91 | 34.19 | 4.18 | 303 | 50 | 19.18 | 34.56 | 5.04 | 24.66 | 329 | 0.16 |
| 78 | 14.33 | 33.89 | 3.77 | 270 | 75 | 15.38 | 33.99 | 3.92 | 25.13 | 284 | 0.24 |
| 92 | 12.88 | 33.87 | 3.12 | 243 | 100 | 12.78 | 33.94 | 2.95 | 25.64 | 236 | 0.31 |
| 106 | 12.68 | 34.15 | 1.94 | 219 | 150 | 11.27 | 34.28 | 1.24 | 26.19 | 184 | 0.41 |
| 119 | 12.04 | 34.23 | 1.58 | 202 | 200 | 11.03 | 34.58 | 0.48 | 26.45 | 159 | 0.50 |
| 138 | 11.96 | 34.34 | 1.09 | 191 | 250 | 10.70 | 34.60 | 0.28 | 26.54 | 151 | 0.58 |
| 155 | 11.25 | 34.34 | 1.22 | 179 | 300 | 10.00 | 34.59 | 0.26 | 26.66 | 140 | 0.66 |
| 183 | 10.20 | 34.27 | 1.62 | 167 | 400 | 8.42 | 34.54 | 0.20 | 26.86 | 120 | 0.79 |
| | | | | | 500 | 7.22 | 34.48 | 0.12 | 27.00 | 107 | 0.91 |
| 205 | 11.14 | 34.60 | 0.38 | 158 | | | | | | | |
| 255 | 10.66 | 34.60 | 0.28 | 150 | | | | | | | |
| 334 | 9.44 | 34.58 | 0.26 | 132 | | | | | | | |
| 437 | 7.99 | 34.51 | 0.17 | 115 | | | | | | | |
| 571 | 6.37 | 34.45 | 0.11 | 97 | | | | | | | |
| STRANGER; March 7, 1958; 2109 GCT; 23°04.5'N, 111°02'W; sounding, 800 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 07°. | | | | | | | | | | | 150.25 |
| 0 | 22.44 | 34.71 | 5.29 | 402 | 0 | 22.44 | 34.71 | 5.29 | 23.90 | 402 | 0.00 |
| 10 | 22.12 | 34.72 | 5.04 | 393 | 10 | 22.12 | 34.72 | 5.04 | 23.99 | 393 | 0.04 |
| 30 | 21.78 | 34.71 | 5.02 | 384 | 20 | 21.97 | 34.72 | 5.02 | 24.04 | 388 | 0.08 |
| 45 | 20.64 | 34.63 | 5.56 | 360 | 30 | 21.78 | 34.71 | 5.02 | 24.08 | 384 | 0.12 |
| 55 | 20.39 | 34.70 | 3.61 | 349 | 50 | 20.52 | 34.64 | 4.26 | 24.38 | 356 | 0.19 |
| 65 | 20.05 | 34.85 | 3.31 | 330 | 75 | 19.68 | 34.83 | 2.95 | 24.74 | 322 | 0.28 |
| 75 | 19.68 | 34.83a) | 2.95 | 322 | 100 | 15.40 | 34.34 | 1.92 | 25.40 | 259 | 0.35 |
| 95 | 16.14 | 34.27 | 2.23 | 280 | 150 | 12.25 | 34.43 | 1.08 | 26.11 | 191 | 0.46 |
| 109 | 14.72 | 34.41 | 1.50 | 240 | 200 | 11.50 | 34.61 | 0.52 | 26.40 | 164 | 0.55 |
| 123 | 13.96 | 34.43 | 1.15 | 222 | 250 | 10.81 | 34.61 | 0.30 | 26.52 | 152 | 0.64 |
| 148 | 12.72 | 34.48 | 0.86 | 195 | 300 | 10.13 | 34.60 | 0.23 | 26.64 | 141 | 0.71 |
| 175 | 11.84 | 34.52 | 0.65 | 176 | 400 | 9.01 | 34.58 | 0.19 | 26.81 | 125 | 0.85 |
| 211 | 11.39 | 34.63 | 0.47 | 160 | 500 | 7.63 | 34.53 | 0.13 | 26.98 | 108 | 0.97 |
| 262 | 10.61 | 34.60 | 0.24 | 149 | | | | | | | |
| 339 | 9.76 | 34.61 | 0.23 | 134 | | | | | | | |
| 435 | 8.56 | 34.56 | 0.14 | 120 | | | | | | | |
| 570 | 6.65 | 34.52 | 0.13 | 96 | | | | | | | |
| STRANGER; March 7, 1958; 1408 GCT; 22°35'N, 111°59'W; sounding, 1900 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 06°. | | | | | | | | | | | 150.40 |
| 0 | 22.10 | 34.66 | 6.38u | 397 | 0 | 22.10 | 34.66 | (5.01) | 23.95 | 397 | 0.00 |
| 10 | 22.10 | 34.65 | 5.01 | 398 | 10 | 22.10 | 34.65 | 5.01 | 23.94 | 398 | 0.04 |
| 30 | 21.14 | 34.70 | 4.92 | 368 | 20 | 22.03 | 34.66 | 5.01 | 23.97 | 395 | 0.08 |
| 55 | 20.63 | 34.69 | 4.87 | 356 | 30 | 21.14 | 34.70 | 4.92 | 24.25 | 368 | 0.12 |
| 69p | 20.39 | 34.65 | 5.09 | 353 | 50 | 20.73 | 34.70 | 4.87 | 24.36 | 358 | 0.19 |
| 91p | 19.70 | 34.54 | 4.66 | 344 | 75 | 20.22 | 34.62 | 5.03 | 24.43 | 351 | 0.28 |
| 114p | 15.91 | 34.29 | 2.18 | 273 | 100 | 18.22 | 34.42 | 3.64 | 24.79 | 317 | 0.36 |
| 142p | 14.19 | 34.62 | 0.53 | 213 | 150 | 13.78 | 34.62 | 0.54 | 25.96 | 206 | 0.49 |
| 188p | 12.42 | 34.58 | 0.69 | 182 | 200 | 12.22 | 34.59 | 0.63 | 26.25 | 178 | 0.59 |
| 234p | 11.60 | 34.70 | 0.34 | 159 | 250 | 11.34 | 34.70 | 0.27 | 26.50 | 154 | 0.68 |
| 310p | 10.40 | 34.66 | 0.14 | 141 | 300 | 10.56 | 34.67 | 0.16 | 26.62 | 143 | 0.76 |
| 403p | 8.80 | 34.56 | 0.22 | 123 | 400 | 8.84 | 34.57 | 0.23 | 26.82 | 124 | 0.89 |
| 528p | 7.24 | 34.52 | 0.22 | 104 | 500 | 7.56 | 34.53 | 0.22 | 26.98 | 108 | 1.02 |

a) Possible evaporation; value falls on property curve.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.47-B | III-4 | 2035 | 34°15.0' | 119°58.0' | 300 | 300° | 4 | clear | rough | 14.90 | 33.57 | 14.96 | 33.58 |
| 83.40-B | 5 | 0035 | 34°14.0' | 119°22.0' | 12 | 280° | 3 | clear | moderate | 15.40 | 33.57 | - | - |
| 83.43-B | 5 | 0227 | 34°08.0' | 119°34.0' | 120 | 240° | 3 | partly cloudy | moderate | 15.36 | 33.57 | 14.24 | 33.58 |
| 83.51-B | 5 | 0758 | 33°52.0' | 120°08.5' | 65 | 290° | 6 | clear | rough | 14.96 | 33.58 | 14.60 | 33.58 |
| 83.55-B | 5 | 1023 | 33°44.0' | 120°24.5' | 800 | 280° | 6 | clear | high | 14.02 | 33.58 | 12.58 | 33.58 |
| 83.60-B | 5 | 1330 | 33°34.0' | 120°45.0' | 800 | 320° | 4 | partly cloudy | rough | 14.34 | 33.48 | 13.97 | 33.53 |
| 83.70-B | 5 | 1938 | 33°14.5' | 121°26.0' | 2100 | 300° | 5 | partly cloudy | rough | 14.77 | 33.42 | 14.70 | 33.42 |
| 87.35-B | 8 | 0550 | 33°50.0' | 118°37.0' | 300 | calm | | clear | rough | 15.48 | 33.62 | 12.91 | 33.55 |
| 87.40-B | 8 | 0835 | 33°40.0' | 118°58.5' | 460 | var. | 1 | partly cloudy | moderate | 14.60 | 33.60 | 14.32 | 33.58 |
| 87.45-B | 8 | 1140 | 33°32.0' | 119°19.0' | 917 | 270° | 2 | partly cloudy | moderate | 14.66 | 33.58 | 12.56 | 33.57 |
| 87.50-B | 8 | 1443 | 33°20.0' | 119°39.5' | 42 | 320° | 4 | partly cloudy | rough | 13.96 | 33.58 | 12.06 | 33.55 |
| 87.55-B | 8 | 1757 | 33°10.0' | 120°00.5' | 650 | 300° | 4 | partly cloudy | moderate | 13.88 | 33.58 | 13.61 | 33.56 |
| 87.60-B | 8 | 2053 | 33°00.0' | 120°21.5' | 395 | 290° | 7 | partly cloudy | rough | 14.78 | 33.48 | 14.61 | 33.49 |
| 87.70-B | 6 | 1625 | 32°39.5' | 121°02.0' | 2098 | 310° | 7 | cloudy | very rough | 15.34 | 33.55 | 15.29 | 33.57 |
| 90.28-B | 7 | 2318 | 33°28.5' | 117°46.5' | 250 | 070° | 4 | partly cloudy | rough | 15.24 | 33.51 | 13.19 | 33.52 |
| 90.50-B | 12 | 1618 | 32°44.5' | 119°16.5' | 160 | 340° | 4 | partly cloudy | rough | 14.38 | 33.55 | 14.20 | 33.55 |
| 93.27-B | 9 | 1520 | 32°56.0' | 117°19.0' | 50 | 100° | 4 | partly cloudy | moderate | 15.28 | 33.59 | 12.46 | 33.58 |
| 93.30-B | 9 | 1710 | 32°50.0' | 117°31.5' | 460 | 300° | 1 | partly cloudy | moderate | 15.70 | 33.64 | 13.68 | 33.54 |
| 93.35-B | 9 | 2035 | 32°40.0' | 117°52.0' | 350 | 280° | 3 | cloudy | rough | 15.46 | 33.60 | 15.35 | 33.58 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.40-B | III-9 | 2335 | 32°30.0' | 118°12.5' | 925 | 280° | 5 | partly cloudy | very rough | 15.82 | 33.64 | 15.72 | 33.66 |
| 93.45-B | 10 | 0215 | 32°20.0' | 118°32.5' | 900 | 330° | 4 | partly cloudy | rough | 15.56 | 33.59 | 14.52 | 33.55 |
| 93.50-B | 10 | 0525 | 32°10.0' | 118°53.5' | 730 | 320° | 5 | clear | very rough | 14.91 | 33.56 | 14.84 | 33.53 |
| 93.60-B | 10 | 1211 | 31°52.0' | 119°26.0' | 1200 | 300° | 5 | partly cloudy | very rough | 15.20 | 33.55 | 15.21 | 33.56 |
| 93.70-B | 10 | 1941 | 31°29.0' | 120°14.0' | 2000 | 300° | 5 | overcast | high | 15.28 | 33.55 | 15.30 | 33.57 |
| 93.80-B | 11 | 0200 | 31°10.0' | 120°54.5' | 2000 | 300° | 7 | rain | very rough | 15.40 | 33.55 | 15.22 | 33.55 |
| 97.30-B | 15 | 0505 | 32°15.5' | 117°09.0' | 33 | calm | | partly cloudy | slight | 15.62 | - | 13.96 | 33.58 |
| 97.32-B | 15 | 0625 | 32°11.5' | 117°17.0' | 750 | calm | | partly cloudy | slight | 15.56 | 33.66 | 13.74 | 33.58 |
| 97.40-B | 15 | 1028 | 31°55.5' | 117°50.0' | 700 | 090° | 1 | partly cloudy | smooth | 15.64 | 33.53 | 15.53 | 33.58 |
| 97.45-B | 15 | 1340 | 31°45.0' | 118°10.0' | 700 | 160° | 2 | partly cloudy | slight | 15.66 | 33.53 | 15.50 | 33.55 |
| 97.50-B | 15 | 1653 | 31°35.5' | 118°30.5' | 1300 | 180° | 3 | partly cloudy | moderate | 15.46 | 33.51 | 15.31 | - |
| 97.60-B | 15 | 2222 | 31°15.5' | 119°10.5' | 1900 | 200° | 3 | cloudy | moderate | 15.58 | 33.48 | 15.46a) | 33.51 |
| 97.70-B | 16 | 0435 | 30°55.0' | 119°50.5' | 2000 | 170° | 4 | missing | moderate | 15.26 | 33.48 | 15.22 | 33.53 |
| 97.80-B | 16 | 1055 | 30°35.5' | 120°31.0' | 2100 | 180° | 4 | rain | rough | 14.85b) | 33.34 | 14.52c) | 33.30 |
| 100.30-B | 18 | 0540 | 31°40.5' | 116°46.5' | 220 | 320° | 4 | partly cloudy | moderate | 15.64 | 33.59 | 12.89 | 33.55 |

a) Mean value of 15.37 and 15.55°C.

b) Mean value of 14.77 and 14.93°C.

c) Mean value of 14.57 and 14.46°C.



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## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.32-B | III-18 | 0345 | 31°35.5' | 116°54.5' | 600 | 320° | 4 | partly cloudy | moderate | 15.98 | 33.57 | 13.28 | 33.49 |
| 100.40-B | 17 | 2210 | 31°19.0' | 117°29.0' | 1050 | 320° | 4 | partly cloudy | moderate | 16.76 | 33.71 | 16.60 | 33.73 |
| 100.45-B | 17 | 1925 | 31°10.5' | 117°47.0' | 650 | 310° | 4 | cloudy | moderate | 16.60 | 33.71 | 16.42 | 33.72 |
| 100.50-B | 17 | 1645 | 31°01.0' | 118°07.0' | 925 | 320° | 3 | cloudy | moderate | 16.73 | 33.87 | 16.78 | 33.78 |
| 100.60-B | 17 | 1110 | 30°37.5' | 118°47.5' | 1550 | 200° | 2 | missing | slight | 16.22 | 33.60 | 16.48 | 33.75 |
| 100.70-B | 17 | 0550 | 30°19.0' | 119°27.0' | 2000 | 270° | 1 | missing | slight | 15.42 | 33.33 | 14.98 | 33.40 |
| 100.80-B | 17 | 0028 | 30°01.0' | 120°07.0' | 2000 | 220° | 2 | cloudy | moderate | 15.91 | 33.55 | 14.98 | - |
| 100.90-B | 16 | 1940 | 29°40.5' | 120°47.0' | 2100 | 200° | 2 | cloudy | moderate | 16.26 | 33.58 | 16.05 | 33.60 |
| 103.30-B | 18 | 1055 | 31°05.0' | 116°25.0' | 40 | 290° | 5 | clear | very rough | 15.58 | 33.60 | 12.85 | 33.54 |
| 103.35-B | 18 | 1355 | 30°55.5' | 116°45.0' | 1000 | 320° | 5 | clear | rough | 15.74 | 33.55 | 14.21 | 33.46 |
| 103.40-B | 18 | 1655 | 30°45.5' | 117°05.5' | 900 | 300° | 5 | cloudy | rough | 15.98 | 33.60 | 15.94 | 33.62 |
| 103.45-B | 18 | 2015 | 30°36.5' | 117°25.0' | 1100 | 320° | 4 | cloudy | rough | 16.47 | 33.74 | 16.34 | 33.58 |
| 103.50-B | 18 | 2310 | 30°25.5' | 117°45.5' | 1400 | 330° | 4 | cloudy | moderate | 16.36 | 33.67 | 15.81 | 33.60 |
| 103.60-B | 19 | 0440 | 30°06.0' | 118°25.5' | 2100 | 320° | 3 | clear | moderate | 16.02 | 33.56 | 16.06 | 33.62 |
| 103.70-B | 19 | 0955 | 29°45.0' | 119°10.0' | 1800 | 320° | 2 | clear | moderate | 15.40 | 33.28 | 15.05 | 33.30 |
| 107.32-B | 20 | 1405 | 30°26.0' | 116°11.0' | 300 | missing | | fog | slight | 16.21 | 33.58 | 15.88 | 33.51 |
| 107.35-B | 20 | 1200 | 30°20.0' | 116°23.0' | 900 | calm | | cloudy | slight | 15.90 | 33.62 | 15.01 | 33.59 |
| 107.40-B | 20 | 0905 | 30°10.5' | 116°43.5' | 1500 | 010° | 3 | missing | slight | 16.02 | 33.62 | 15.84 | 33.62 |
| 107.45-B | 20 | 0620 | 30°00.0' | 117°03.0' | 850 | 010° | 2 | missing | slight | 16.08 | 33.60 | 15.56 | 33.58 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.70-B | III-19 | 1600 | 29°11.0' | 118°43.0' | 1800 | 360° | 3 | cloudy | moderate | 16.65 | 33.73 | 16.59 | 33.81 |
| 110.33-S | 19 | 2100 | 29°57.0' | 115°55.0' | 68 | 340° | 4 | clear | rough | 15.94 | 33.63 | 11.89 | 33.56 |
| 110.35-S | 19 | 1900 | 29°49.0' | 116°11.0' | 700 | 320° | 4 | clear | rough | 16.06 | 33.64 | 15.94 | 33.62 |
| 110.40-S | 19 | 1630 | 29°39.0' | 116°30.0' | 1150 | 350° | 4 | partly cloudy | rough | 16.35 | 33.68 | 16.08 | 33.60 |
| 110.45-S | 19 | 1415 | 29°29.0' | 116°48.0' | 550 | 350° | 4 | cloudy | rough | 16.04 | 33.62 | 16.04 | 33.62 |
| 110.70-S | 19 | 0130 | 28°41.0' | 118°21.0' | 2000 | 340° | 4 | cloudy | moderate | 17.56 | 34.02 | 17.26 | 34.03 |
| 110.80-S | 18 | 2100 | 28°20.0' | 119°00.0' | 2000+ | 350° | 3 | cloudy | rough | 17.82 | 34.02 | 17.72 | 34.07 |
| 110.90-S | 18 | 1600 | 28°00.0' | 119°36.0' | 2000+ | 360° | 3 | overcast | moderate | 17.06 | 33.85 | 16.79 | 33.84 |
| 113.30-S | 17 | 1030 | 29°22.5' | 115°17.5' | 30 | 260° | 1 | overcast | slight | 16.62 | 34.02 | 15.00 | 33.93 |
| 113.35-S | 17 | 1310 | 29°12.0' | 115°39.0' | 500 | 320° | 3 | drizzle | moderate | 16.28 | 33.68 | 15.99 | 33.65 |
| 113.40-S | 17 | 1540 | 29°02.0' | 115°58.5' | 950 | 300° | 3 | drizzle | moderate | 16.50 | 33.66 | 16.28 | 33.69 |
| 113.45-S | 17 | 1800 | 28°52.0' | 116°18.0' | 1200 | 290° | 2 | cloudy | moderate | 16.55 | 33.66 | 16.16 | 33.64 |
| 113.70-S | 18 | 0730 | 28°05.0' | 117°56.0' | 2000+ | 320° | 3 | clear | moderate | 17.68 | 33.96 | 17.29 | 33.94 |
| 117.26-S | 17 | 0615 | 28°56.0' | 114°41.0' | 36 | calm | | drizzle | slight | 16.80 | 33.93 | 15.42 | 33.87 |
| 117.30-S | 17 | 0430 | 28°48.0' | 114°56.5' | 52 | 250° | 2 | overcast | slight | 16.00 | 33.84 | 14.26 | 33.85 |
| 117.35-S | 17 | 0200 | 28°38.0' | 115°16.0' | 95 | 320° | 2 | overcast | slight | 16.18 | 33.62 | 15.90 | 33.63 |
| 117.40-S | 16 | 2145 | 28°28.0' | 115°35.5' | 500 | 270° | 1 | overcast | slight | 16.38 | 33.68 | 16.23 | 33.66 |
| 117.45-S | 16 | 1930 | 28°18.0' | 115°55.0' | 1700 | 260° | 2 | cloudy | slight | 16.58 | 33.68 | 16.46 | 33.68 |
| 117.60-S | 16 | 1140 | 27°47.5' | 116°54.0' | 2000+ | calm | | cloudy | slight | 16.64 | 33.70 | 16.50 | 33.68 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.70-S | III-16 | 0730 | 27°27.5' | 117°32.5' | 2000+ | 320° | 1 | cloudy | slight | 17.40 | 33.98 | 17.04 | 33.96 |
| 118.39-S | 16 | 2330 | 28°18.5' | 115°24.0' | 135 | 270° | 1 | overcast | slight | 16.31 | 33.73 | 16.48 | 33.93 |
| 119.33-S | 14 | 1515 | 28°19.0' | 114°53.0' | 55 | 320° | 3 | clear | moderate | 16.44 | 33.91 | 16.71 | 34.06 |
| 120.25-S | 14 | 1845 | 28°23.0' | 114°14.5' | 26 | 300° | 2 | clear | moderate | 17.07 | 34.11 | - | - |
| 120.30-S | 14 | 2100 | 28°13.0' | 114°34.0' | 48 | 320° | 3 | clear | moderate | 16.11 | 33.73 | 15.24 | 33.68 |
| 120.35-S | 14 | 2315 | 28°03.0' | 114°54.0' | 42 | 330° | 4 | clear | moderate | 16.84 | 33.89 | 16.63 | 33.92 |
| 120.40-S | 15 | 0120 | 27°56.5' | 115°14.0' | 20 | 320° | 6 | clear | rough | 16.46 | 34.01 | - | - |
| 120.45-S | 15 | 0345 | 27°45.0' | 115°34.0' | 1100 | 320° | 3 | clear | rough | 16.64 | 34.00 | 14.32 | 33.87 |
| 120.60-S | 15 | 1115 | 27°19.0' | 116°34.0' | 2000+ | 320° | 2 | clear | moderate | 17.70 | 34.07 | 17.04 | 33.94 |
| 120.70-S | 15 | 1540 | 26°59.0' | 117°13.5' | 2000+ | calm | | partly cloudy | moderate | 17.30 | 33.93 | 16.87 | 33.87 |
| 120.90-S | 15 | 2330 | 26°25.0' | 118°18.0' | 2000+ | 320° | 1 | cloudy | slight | 18.58 | 34.17 | 18.36 | 34.17 |
| 123.37-S | 13 | 1045 | 27°24.0' | 114°39.5' | 38 | 330° | 2 | cloudy | slight | 16.24 | 33.90 | 13.87 | 34.00 |
| 123.42-S | 13 | 0800 | 27°13.5' | 114°59.5' | 700 | 330° | 3 | cloudy | rough | 16.66 | 33.93 | 16.64 | 33.95 |
| 123.50-S | 13 | 0420 | 26°53.5' | 115°34.0' | 2000 | 310° | 2 | partly cloudy | rough | 16.76 | 33.89 | 16.70 | 33.89 |
| 123.60-S | 12 | 2345 | 26°34.0' | 116°12.0' | 2000 | 310° | 3 | cloudy | very rough | 16.96 | 33.86 | 16.76 | 33.86 |
| 127.34-S | 12 | 0715 | 26°55.5' | 114°06.0' | 43 | 300° | 3 | partly cloudy | rough | 17.29 | 34.23 | 17.09 | 34.21 |
| 127.40-S | 12 | 1000 | 26°43.5' | 114°29.5' | 1700 | 260° | 3 | rain | rough | 17.00 | 34.27 | 16.94 | 34.22 |
| 127.45-S | 12 | 1230 | 26°33.0' | 114°50.0' | 2000 | 320° | 3 | cloudy | moderate | 16.68 | 33.91 | 16.92 | 34.04 |
| 127.50-S | 12 | 1500 | 26°20.0' | 115°09.0' | 2050 | 320° | 3 | partly cloudy | rough | 17.34 | 34.02 | 17.35 | 34.01 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 127.60-S | III-12 | 1920 | 26°00.0' | 115°47.0' | 2000 | 300° | 3 | overcast | very rough | 19.05 | 34.51 | 18.62 | 34.43 |
| 130.30-S | 12 | 0230 | 26°26.0' | 113°29.0' | 40 | 320° | 4 | cloudy | rough | 18.14 | 34.42 | 17.73 | 34.34 |
| 130.35-S | 12 | 0015 | 26°16.0' | 113°45.0' | 600 | 320° | 3 | partly cloudy | rough | 18.06 | 34.33 | 17.98a) | 34.33 |
| 130.40-S | 11 | 2145 | 26°04.0' | 114°03.0' | 1250 | 290° | 3 | partly cloudy | rough | 18.14 | 34.35 | 17.65 | 34.33 |
| 130.45-S | 11 | 1915 | 25°53.0' | 114°20.5' | 2150 | 300° | 3 | partly cloudy | rough | 18.16 | 34.33 | 18.13 | 34.33 |
| 130.50-S | 11 | 1700 | 25°41.5' | 114°38.5' | 2200 | 300° | 3 | cloudy | very rough | 18.47 | 34.43 | 18.49 | 34.43 |
| 130.60-S | 11 | 1220 | 25°27.0' | 115°16.0' | 2100 | 320° | 5 | overcast | high | 19.38 | 34.46 | 19.37 | 34.47 |
| 133.25-S | 10 | 1845 | 25°55.5' | 112°48.5' | 50 | 300° | 1 | partly cloudy | moderate | 18.66 | 34.52 | 18.25 | 34.47 |
| 133.30-S | 10 | 2045 | 25°49.0' | 113°01.0' | 110 | 290° | 2 | clear | moderate | 19.26 | 34.60 | 19.18 | 34.60 |
| 133.35-S | 10 | 2315 | 25°39.0' | 113°24.0' | 370 | 310° | 4 | partly cloudy | rough | 19.71 | 34.54 | 19.54 | 34.53 |
| 133.40-S | 11 | 0145 | 25°31.0' | 113°44.0' | 800 | 320° | 4 | partly cloudy | rough | 18.82 | 34.47 | 18.38 | 34.42 |
| 133.50-S | 11 | 0615 | 25°14.5' | 114°24.0' | 2100 | 320° | 4 | partly cloudy | rough | 19.22 | 34.45 | 18.78 | 34.36 |
| 137.23-S | 10 | 1430 | 25°26.0' | 112°26.5' | 45 | 330° | 3 | partly cloudy | rough | 19.45 | 34.62 | 18.84b) | 34.56 |
| 137.30-S | 10 | 1145 | 25°14.0' | 112°50.5' | 210 | 340° | 4 | partly cloudy | rough | 19.42 | 34.61 | 19.18 | 34.63 |
| 137.35-S | 10 | 0915 | 25°04.0' | 113°11.0' | 900 | 330° | 4 | cloudy | rough | 19.94 | 34.56 | 19.73 | 34.61 |

a) Mean value of 17.91 and 18.04°C.

b) Mean value of 18.79 and 18.90°C.



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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 137.50-S | III-10 | 0100 | 24°40.0' | 114°02.0' | 1900 | 320° | 5 | partly cloudy | very rough | 19.94 | 34.52 | 19.76 | 34.49 |
| 140.30-S | 9 | 0940 | 24°43.5' | 112°26.0' | 65 | 320° | 3 | partly cloudy | rough | 20.08 | 34.54 | 19.59 | 34.52 |
| 140.35-S | 9 | 1200 | 24°36.0' | 112°43.0' | 700 | 320° | 3 | clear | rough | 19.94 | 34.51 | 18.08 | 34.16 |
| 140.40-S | 9 | 1435 | 24°25.0' | 113°04.0' | 2000 | 320° | 5 | cloudy | rough | 19.84 | 34.49 | 19.45 | 34.57 |
| 140.50-S | 9 | 1930 | 24°04.0' | 113°42.0' | 1950 | 320° | 4 | partly cloudy | rough | 19.17 | 34.44 | 18.94 | 34.46 |
| 143.26-S | 9 | 0440 | 24°19.0' | 111°48.0' | 45 | 340° | 3 | partly cloudy | rough | 19.89 | 34.64 | 18.85 | 34.54 |
| 143.30-S | 9 | 0245 | 24°11.0' | 112°03.0' | 110 | 320° | 4 | partly cloudy | rough | 20.25 | 34.60 | 19.98 | 34.64 |
| 143.35-S | 8 | 2345 | 24°00.0' | 112°23.0' | 1300 | 320° | 3 | partly cloudy | rough | 20.76 | 34.62 | 20.48 | 34.60 |
| 143.40-S | 8 | 2115 | 23°51.0' | 112°40.5' | 1850 | 320° | 3 | partly cloudy | rough | 20.72 | 34.66 | 20.36a) | 34.61 |
| 147.20-S | 8 | 0610 | 23°56.0' | 111°03.5' | 80 | 360° | 4 | clear | rough | 21.62 | 34.70 | 19.21 | 34.52 |
| 147.25-S | 8 | 0830 | 23°46.5' | 111°22.5' | 250 | 340° | 4 | clear | rough | 20.51 | 34.67 | 20.28 | 34.64 |
| 147.40-S | 8 | 1600 | 23°17.0' | 112°20.0' | 1900 | 320° | 3 | partly cloudy | moderate | 20.86 | 34.69 | 20.86 | 34.66 |
| 150.19-S | 8 | 0125 | 23°23.5' | 110°39.0' | 225 | 310° | 4 | partly cloudy | moderate | 22.27 | 34.68 | 21.97 | 34.66 |
| 150.30-S | 7 | 1840 | 22°54.5' | 111°21.0' | 1700 | - | 1 | partly cloudy | rough | 21.21 | 34.67 | 20.45 | 34.59 |

a) Mean value of 20.30 and 20.42°C.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| SPENCER F. BAIRD; March 31, 1958; 1432 GCT; 40°14.5'N, 124°31.5'W; sounding, 105 fm; wind, 200°, force 4; weather, showers; sea, very high; wire angle, 24°. | | | | | | | | | | | | 47.50 |
| 0 | 11.92 | 32.88 | | 298 | 0 | 11.92 | 32.88 | | 24.99 | 298 | 0.00 | |
| 9 | 12.04 | 32.89 | | 300 | 10 | 12.04 | 32.89 | | 24.97 | 300 | 0.03 | |
| 27 | 12.03 | 32.92 | | 298 | 20 | 12.04 | 32.90 | | 24.97 | 300 | 0.06 | |
| 46 | 11.18 | 33.26 | | 257 | 30 | 12.03 | 32.93 | | 25.00 | 297 | 0.09 | |
| 70 | 9.80 | 33.56 | | 213 | 50 | 10.85 | 33.33 | | 25.53 | 246 | 0.14 | |
| 91 | 9.23 | 33.72 | | 192 | 75 | 9.63 | 33.59 | | 25.93 | 208 | 0.20 | |
| 113 | 9.02 | 33.78 | | 185 | 100 | 9.20 | 33.77 | | 26.14 | 188 | 0.25 | |
| SPENCER F. BAIRD; March 31, 1958; 1813 GCT; 40°04.5'N, 124°55'W; sounding, 670 fm; wind, 160°, force 6; weather, showers; sea, very high; wire angle, 35°. | | | | | | | | | | | | 47.55 |
| 0 | 11.82 | 32.86 | 5.70 | 298 | 0 | 11.82 | 32.86 | 5.70 | 24.98 | 298 | 0.00 | |
| 8 | 11.82 | 32.89 | 5.93 | 297 | 10 | 11.82 | 32.88 | 5.93 | 25.00 | 297 | 0.03 | |
| 29 | 11.83 | 32.86 | 5.94 | 298 | 20 | 11.82 | 32.87 | 5.93 | 24.98 | 298 | 0.06 | |
| 37 | 11.81 | 32.88 | 5.87 | 296 | 30 | 11.82 | 32.87 | 5.91 | 24.98 | 298 | 0.09 | |
| 49 | 11.23 | 33.24 | 5.08 | 260 | 50 | 11.18 | 33.25 | 5.02 | 25.40 | 258 | 0.14 | |
| 56 | 10.77 | 33.32 | 4.75 | 246 | 75 | 8.91 | 33.28 | 4.40 | 25.81 | 220 | 0.20 | |
| 63 | 10.15 | 33.33 | 4.37 | 235 | 100 | 8.56 | 33.51 | 3.95 | 26.05 | 197 | 0.26 | |
| 77 | 8.91 | 33.34 | 4.34 | 215 | 150 | 8.42 | 33.88 | 2.68 | 26.35 | 168 | 0.35 | |
| 90 | 8.74 | 33.45 | 4.14 | 204 | 200 | 7.96 | 33.99 | 2.08 | 26.51 | 153 | 0.43 | |
| 100 | 8.56 | 33.51 | 3.95 | 197 | 250 | 7.56 | 34.02 | 1.87 | 26.59 | 146 | 0.51 | |
| 116 | 8.40 | 33.54 | 3.94 | 193 | 300 | 7.09 | 34.09 | 1.45 | 26.71 | 134 | 0.58 | |
| 142 | 8.55 | 33.82 | 2.90 | 174 | 400 | 6.25 | 34.18 | 0.79 | 26.90 | 117 | 0.71 | |
| 170 | 8.18 | 33.95 | 2.31 | 159 | | | | | | | | |
| 214 | 7.88 | 34.00 | 2.03 | 152 | | | | | | | | |
| 282 | 7.25 | 34.04 | 1.67 | 140 | | | | | | | | |
| 316p | 6.98 | 34.13 | 1.30 | 129 | | | | | | | | |
| 440p | 5.90 | 34.19 | 0.61 | 112 | | | | | | | | |
| BLACK DOUGLAS; April 17, 1958; 0713 GCT; 37°47.5'N, 123°15'W; sounding, 65 fm; wind, 340°, force 5; weather, cloudy; sea, high; wire angle, 13°. | | | | | | | | | | | | 60.55 |
| 0 | 13.20 | 31.83 | 6.19 | 399 | 0 | 13.20 | 31.83 | 6.19 | 23.92 | 399 | 0.00 | |
| 10 | 13.12 | 31.90 | 6.15 | 393 | 10 | 13.12 | 31.90 | 6.15 | 23.99 | 393 | 0.04 | |
| 29 | 10.94 | 33.21 | 4.98 | 257 | 20 | 12.80 | 32.53 | 6.04 | 24.54 | 340 | 0.08 | |
| 48 | 10.74 | 33.42 | 4.14 | 238 | 30 | 10.93 | 33.21 | 4.94 | 25.42 | 257 | 0.11 | |
| 72 | 9.90 | 33.64 | 3.35 | 208 | 50 | 10.73 | 33.42 | 4.14 | 25.62 | 238 | 0.16 | |
| 95 | 9.16 | 33.84 | 2.59 | 182 | 75 | 9.80 | 33.67 | 3.22 | 25.97 | 205 | 0.21 | |
| | | | | | 100 | (9.10) | (33.86) | (2.55) | (26.24) | (179) | (0.26) | |
| BLACK DOUGLAS; April 17, 1958; 1039, 1054 GCT; 37°37'N, 123°37'W; sounding, 1700 fm; wind, 280°, force 4; weather, drizzle; sea, very rough; wire angle, 04°, 05°. | | | | | | | | | | | | 60.60 |
| 0 | 13.37 | 32.28 | 6.12 | 369 | 0 | 13.37 | 32.28 | 6.12 | 24.24 | 369 | 0.00 | |
| 10 | 13.35 | 32.29 | 6.13 | 368 | 10 | 13.35 | 32.29 | 6.13 | 24.25 | 368 | 0.04 | |
| 29 | 13.00 | 32.82 | 5.78 | 322 | 20 | 13.22 | 32.52 | 6.02 | 24.46 | 348 | 0.07 | |
| 43 | 12.42 | 33.21 | 5.20 | 284 | 30 | 12.97 | 32.83 | 5.76 | 24.74 | 322 | 0.11 | |
| 51 | 11.98 | 33.34 | 4.65 | 266 | 50 | 12.02 | 33.34 | 4.65 | 25.32 | 267 | 0.16 | |
| 60 | 11.34 | 33.35 | 4.80 | 253 | 75 | 10.31 | 33.49 | 4.31 | 25.74 | 226 | 0.23 | |
| 69 | 10.58 | 33.42 | 4.57 | 236 | 100 | 9.26 | 33.63 | 3.74 | 26.03 | 199 | 0.28 | |
| 86 | 9.67 | 33.59 | 3.79 | 209 | 150 | 8.69 | 33.89 | 2.68 | 26.32 | 171 | 0.37 | |
| | | | | | 200 | 8.04 | 34.02 | 2.14 | 26.53 | 152 | 0.46 | |
| 100 | 9.26 | 33.63 | 3.74 | 199 | 250 | 7.59 | 34.12 | 1.60 | 26.66 | 139 | 0.53 | |
| 113 | 9.01 | 33.75 | 3.21 | 187 | 300 | 7.14 | 34.13 | 1.36 | 26.74 | 131 | 0.60 | |
| 135 | 8.77 | 33.87 | 2.78 | 173 | 400 | 6.32 | 34.21 | 0.60 | 26.91 | 115 | 0.73 | |
| 162 | 8.60 | 34.01 | 2.32 | 161 | 500 | 5.80 | 34.23 | 0.60 | 27.00 | 107 | 0.84 | |
| 197 | 8.04 | 34.02 | 2.14 | 152 | | | | | | | | |
| 251 | 7.59 | 34.12 | 1.60 | 139 | | | | | | | | |
| 323 | 6.91 | 34.14 | 1.20 | 128 | | | | | | | | |
| 420 | 6.22 | 34.22 | 0.59 | 115 | | | | | | | | |
| 556 | 5.50 | 34.23 | 0.63 | 104 | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

60.70 BLACK DOUGLAS; April 17, 1958; 1815, 1832 GCT; 37°17'N, 124°21.5'W; sounding, 2170 fm; wind, 270°, force 3; weather, cloudy; sea, very rough; wire angle, 15°, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.31 | 33.05 | 6.08 | 312 | 0 | 13.31 | 33.05 | 6.08 | 24.84 | 312 | 0.00 |
| 9 | 13.24 | 33.06 | 6.14 | 310 | 10 | 13.23 | 33.06 | 6.15 | 24.87 | 309 | 0.03 |
| 28 | 13.06 | 33.06 | 6.22 | 306 | 20 | 13.08 | 33.06 | 6.21 | 24.89 | 307 | 0.06 |
| 52 | 13.05 | 33.06 | 6.33 | 306 | 30 | 13.06 | 33.06 | 6.22 | 24.91 | 306 | 0.09 |
| 61 | 12.89 | 33.06 | 6.04 | 303 | 50 | 13.05 | 33.06 | 6.31 | 24.91 | 306 | 0.15 |
| 70 | 12.85 | 33.03 | 6.07 | 304 | 75 | 12.76 | 33.03 | 6.02 | 24.94 | 303 | 0.23 |
| 79 | 12.62 | 33.04 | 5.92 | 299 | 100 | 10.40 | 33.22 | 5.50 | 25.51 | 248 | 0.30 |
| 92 | 10.87 | 33.16 | 5.56 | 260 | 150 | 9.15 | 33.68 | 3.46 | 26.08 | 194 | 0.41 |
| | | | | | 200 | 8.40 | 33.94 | 2.35 | 26.41 | 163 | 0.50 |
| 107p | 10.52 | 33.42 | 4.45 | 234 | 250 | 7.30 | 33.97 | 2.97 | 26.59 | 146 | 0.58 |
| 124p | 9.85 | 33.61 | 3.65 | 210 | 300 | 6.57 | 34.00 | 2.34 | 26.71 | 134 | 0.65 |
| 139p | 9.54 | 33.63 | 3.59 | 204 | 400 | (6.00) | (34.09) | (0.65) | (26.86) | (120) | (0.78) |
| 158p | 9.08 | 33.73 | 3.27 | 189 | | | | | | | |
| 175p | 8.80 | 33.85 | 2.62 | 176 | | | | | | | |
| 220p | 8.11 | 33.96 | 2.28 | 158 | | | | | | | |
| 260p | 6.97 | 33.97 | 3.20 | 141 | | | | | | | |
| 312p | 6.52 | 34.00 | 2.21 | 133 | | | | | | | |
| 390p | 6.12 | 34.07 | 1.35 | 123 | | | | | | | |

60.80 BLACK DOUGLAS; April 18, 1958; 0044 GCT; 36°57'N, 125°04'W; sounding, 2300 fm; wind, 270°, force 3; weather, drizzle; sea, high; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.71 | 33.04 | 6.08 | 320 | 0 | 13.71 | 33.04 | 6.08 | 24.76 | 320 | 0.00 |
| 9 | 13.59 | 33.07 | 6.11 | 315 | 10 | 13.58 | 33.07 | 6.11 | 24.81 | 315 | 0.03 |
| 29 | 13.37 | 33.02 | 6.15 | 315 | 20 | 13.43 | 33.04 | 6.14 | 24.81 | 315 | 0.06 |
| 53 | 13.27 | 33.04 | 6.18 | 312 | 30 | 13.37 | 33.02 | 6.15 | 24.81 | 315 | 0.10 |
| 62 | 13.12 | 33.04 | 6.10 | 309 | 50 | 13.30 | 33.04 | 6.17 | 24.83 | 313 | 0.16 |
| 72 | 13.04 | 33.03 | 5.97 | 308 | 75 | 12.95 | 33.04 | 5.91 | 24.90 | 306 | 0.24 |
| 81 | 12.48 | 33.09 | 5.82 | 294 | 100 | 10.55 | 33.25 | 5.45 | 25.52 | 248 | 0.30 |
| 94 | 11.08 | 33.22 | 5.56 | 259 | 150 | 8.84 | 33.58 | 4.70 | 26.06 | 196 | 0.42 |
| 107 | 10.07 | 33.28 | 5.37 | 238 | 200 | 8.18 | 33.88 | 4.04 | 26.39 | 164 | 0.51 |
| 124 | 9.28 | 33.47 | 5.19 | 211 | 250 | 7.32 | 33.97 | 3.28 | 26.57 | 147 | 0.59 |
| 142 | 8.96 | 33.55 | 4.96 | 200 | 300 | 6.58 | 33.99 | 2.34 | 26.70 | 135 | 0.66 |
| 164 | 8.62 | 33.66 | 4.28 | 188 | 400 | 5.72 | 34.04 | 1.28 | 26.86 | 120 | 0.79 |
| 186 | 8.40 | 33.80 | 4.18 | 174 | 500 | 5.18 | 34.11 | 0.74 | 26.97 | 109 | 0.91 |
| 229 | 7.64 | 33.93 | 3.65 | 154 | | | | | | | |
| 300 | 6.58 | 33.99 | 2.34 | 135 | | | | | | | |
| 390 | 5.76 | 34.04 | 1.32 | 121 | | | | | | | |
| 510 | 5.14 | 34.14 | 0.71 | 106 | | | | | | | |

60.90 BLACK DOUGLAS; April 18, 1958; 0701 GCT; 36°37'N, 125°47'W; sounding, 2300 fm; wind, 270°, force 3; weather, overcast; sea, high; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.21 | 33.00 | 6.14 | 314 | 0 | 13.21 | 33.00 | 6.14 | 24.82 | 314 | 0.00 |
| 10 | 13.20 | 33.04 | 6.14 | 310 | 10 | 13.20 | 33.04 | 6.14 | 24.86 | 310 | 0.03 |
| 29 | 12.84 | 32.96 | 6.18 | 310 | 20 | 13.02 | 33.00 | 6.17 | 24.86 | 310 | 0.06 |
| 52 | 12.80 | 32.99 | 6.13 | 306 | 30 | 12.83 | 32.97 | 6.18 | 24.87 | 309 | 0.09 |
| 62 | 12.60 | 33.03 | 5.95 | 300 | 50 | 12.80 | 32.98 | 6.13 | 24.89 | 307 | 0.15 |
| 70 | 11.58 | 33.08 | 5.55 | 278 | 75 | 10.50 | 33.16 | 5.22 | 25.45 | 254 | 0.22 |
| 80 | 9.66 | 33.25 | 4.96 | 234 | 100 | 8.97 | 33.43 | 4.47 | 25.92 | 209 | 0.28 |
| 93 | 9.20 | 33.38 | 4.50 | 217 | 150 | 8.30 | 33.84 | 3.20 | 26.34 | 170 | 0.38 |
| 106 | 8.76 | 33.46 | 4.44 | 204 | 200 | 8.00 | 34.00 | 2.28 | 26.51 | 153 | 0.46 |
| 124 | 8.53 | 33.58 | 4.17 | 192 | 250 | 7.25 | 34.03 | 2.04 | 26.65 | 140 | 0.54 |
| 141 | 8.34 | 33.71 | 3.46 | 180 | 300 | 6.81 | 34.04 | 1.61 | 26.71 | 134 | 0.61 |
| 164 | 8.28 | 33.91 | 2.94 | 164 | 400 | 5.65 | 34.01 | 1.35 | 26.84 | 122 | 0.74 |
| 186 | 8.18 | 33.97 | 2.36 | 158 | 500 | 5.00 | 34.09 | 0.80 | 26.98 | 109 | 0.86 |
| 231 | 7.48 | 34.02 | 2.16 | 145 | | | | | | | |
| 303 | 6.79 | 34.04 | 1.59 | 134 | | | | | | | |
| 395 | 5.70 | 34.01 | 1.37 | 123 | | | | | | | |
| 516 | 4.98 | 34.10 | 0.72 | 108 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; April 18, 1958; 1311 GCT; 36°17'N, 126°27'W; sounding, 2400 fm; wind, 270°, force 3; weather, partly cloudy; sea, high; wire angle, 05°. | | | | | | | | | | | 60.100 |
| 0 | 13.39 | 32.99 | 6.09 | 318 | 0 | 13.39 | 32.99 | 6.09 | 24.78 | 318 | 0.00 |
| 10 | 13.40 | 33.02 | 6.10 | 316 | 10 | 13.40 | 33.02 | 6.10 | 24.80 | 316 | 0.03 |
| 29 | 13.10 | 33.03 | 6.07 | 309 | 20 | 13.26 | 33.03 | 6.08 | 24.84 | 312 | 0.06 |
| 53 | 13.06 | 33.04 | 6.08 | 308 | 30 | 13.09 | 33.03 | 6.07 | 24.87 | 309 | 0.09 |
| 63 | 13.06 | 33.03 | 6.08 | 308 | 50 | 13.06 | 33.04 | 6.07 | 24.88 | 308 | 0.16 |
| 72 | 13.08 | 33.04 | 6.03 | 308 | 75 | 13.10 | 33.07 | 6.02 | 24.90 | 306 | 0.23 |
| 80 | 13.12 | 33.10 | 6.00 | 304 | 100 | 11.30 | 33.28 | 5.60 | 25.41 | 258 | 0.30 |
| 94 | 12.00 | 33.22 | 5.73 | 275 | 150 | 9.02 | 33.61 | 5.05 | 26.05 | 197 | 0.42 |
| 107 | 10.48 | 33.31 | 5.45 | 242 | 200 | 8.30 | 33.90 | 4.25 | 26.39 | 165 | 0.51 |
| 124 | 9.79 | 33.40 | 5.32 | 224 | 250 | 7.72 | 33.98 | 3.40 | 26.53 | 151 | 0.59 |
| 141 | 9.17 | 33.55 | 5.17 | 204 | 300 | 7.00 | 34.03 | 2.50 | 26.68 | 137 | 0.67 |
| 169 | 8.86 | 33.68 | 4.66 | 189 | 400 | 6.20 | 34.11 | 1.28 | 26.85 | 121 | 0.80 |
| 186 | 8.52 | 33.84 | 4.40 | 172 | 500 | 5.33 | 34.16 | 0.87 | 27.00 | 107 | 0.92 |
| 230 | 7.95 | 33.96 | 3.66 | 155 | | | | | | | |
| 302 | 6.98 | 34.04 | 2.38 | 136 | | | | | | | |
| 393 | 6.23 | 34.11 | 1.30 | 122 | | | | | | | |
| 515 | 5.18 | 34.17 | 0.83 | 104 | | | | | | | |
| BLACK DOUGLAS; April 18, 1958; 2014 GCT; 35°55'N, 127°15'W; sounding, 2400 fm; wind, 280°, force 2; weather, overcast; sea, high; wire angle, 06°. | | | | | | | | | | | 60.110 |
| 0 | 14.68 | 33.26 | 5.89 | 323 | 0 | 14.68 | 33.26 | 5.89 | 24.73 | 323 | 0.00 |
| 10 | 14.57 | 33.30 | 5.92 | 318 | 10 | 14.57 | 33.30 | 5.92 | 24.78 | 318 | 0.03 |
| 29 | 14.54 | 33.36a) | 5.84 | | 20 | 14.55 | 33.31 | 5.86 | 24.80 | 316 | 0.06 |
| 53 | 14.46 | 33.34 | 5.87 | 313 | 30 | 14.54 | 33.32 | 5.84 | 24.81 | 315 | 0.10 |
| 63 | 14.42 | 33.35 | 5.84 | 311 | 50 | 14.48 | 33.33 | 5.86 | 24.82 | 314 | 0.16 |
| 72 | 14.40 | 33.34 | 5.87 | 311 | 75 | 14.38 | 33.34 | 5.88 | 24.85 | 311 | 0.24 |
| 81 | 14.34 | 33.34 | 5.90 | 310 | 100 | 12.00 | 33.30 | 5.58 | 25.29 | 270 | 0.31 |
| 94 | 13.54 | 33.32 | 5.74 | 296 | 150 | 9.18 | 33.45 | 4.92 | 25.90 | 211 | 0.43 |
| 108 | 10.67 | 33.28 | 5.46 | 248 | 200 | 8.55 | 33.82 | 3.45 | 26.29 | 174 | 0.53 |
| 126 | 9.79 | 33.31 | 5.21 | 231 | 250 | 8.00 | 33.94 | 2.66 | 26.47 | 157 | 0.61 |
| 144 | 9.33 | 33.40 | 5.03 | 217 | 300 | 7.30 | 34.01 | 2.42 | 26.62 | 143 | 0.69 |
| 166 | 8.96 | 33.57 | 4.50 | 199 | 400 | 6.32 | 34.05 | 1.42 | 26.79 | 127 | 0.83 |
| 189 | 8.68 | 33.77 | 3.85 | 180 | 500 | 5.60 | 34.16 | 0.76 | 26.97 | 110 | 0.95 |
| 233 | 8.20 | 33.91 | 2.78 | 163 | | | | | | | |
| 305 | 7.24 | 34.02 | 2.37 | 141 | | | | | | | |
| 397 | 6.36 | 34.05 | 1.45 | 127 | | | | | | | |
| 517 | 5.45 | 34.20 | 0.64 | 106 | | | | | | | |
| BLACK DOUGLAS; April 16, 1958; 2136 GCT; 37°19'N, 122°36'W; sounding, 45 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 15°. | | | | | | | | | | | 63.52 |
| 0 | 13.92 | 32.10 | 6.34 | 393 | 0 | 13.92 | 32.10 | 6.34 | 23.99 | 393 | 0.00 |
| 10 | 13.16 | 32.61 | 6.11 | 341 | 10 | 13.16 | 32.61 | 6.11 | 24.54 | 341 | 0.04 |
| 29 | 12.50 | 32.62 | 5.32 | 328 | 20 | 12.78 | 32.61 | 5.68 | 24.62 | 333 | 0.07 |
| 48 | 11.62 | 33.32 | 4.66 | 261 | 30 | 12.48 | 32.62 | 5.31 | 24.68 | 328 | 0.10 |
| 72 | 9.77 | 33.60 | 3.75 | 209 | 50 | 11.55 | 33.32 | 4.64 | 25.38 | 260 | 0.16 |
| | | | | | 75 | (9.64) | (33.62) | (3.53) | (26.04) | (198) | (0.22) |

a) Possible evaporation; value does not fall on property curve.

SIO

CCOFI 5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **63.110** | BLACK DOUGLAS; April 19, 1958; 0223 GCT; 35°21.5'N, 126°46'W; sounding, 2400 fm; wind, 270°, force 2; weather, overcast; sea, high; wire angle, 11°. | | | | | | | | | | |
| 0 | 14.94 | 33.34 | 5.84 | 322 | 0 | 14.94 | 33.34 | 5.84 | 24.74 | 322 | 0.00 |
| 10 | 14.86 | 33.37 | 5.89 | 319 | 10 | 14.86 | 33.37 | 5.89 | 24.77 | 319 | 0.03 |
| 28 | 14.50 | 33.34 | 5.90 | 314 | 20 | 14.64 | 33.36 | 5.90 | 24.80 | 315 | 0.06 |
| 51 | 14.49 | 33.34 | 5.92 | 314 | 30 | 14.50 | 33.34 | 5.90 | 24.82 | 314 | 0.10 |
| 60 | 14.48 | 33.34 | 5.82 | 314 | 50 | 14.49 | 33.34 | 5.91 | 24.82 | 314 | 0.16 |
| 69 | 14.48 | 33.38 | 5.81 | 310 | 75 | 14.46 | 33.40 | 5.80 | 24.87 | 309 | 0.24 |
| 78 | 14.42 | 33.40 | 5.78 | 308 | 100 | 11.90 | 33.38 | 5.55 | 25.37 | 262 | 0.31 |
| 91 | 13.34 | 33.44 | 5.67 | 283 | 150 | 9.24 | 33.54 | 4.74 | 25.96 | 206 | 0.43 |
| 105 | 11.12 | 33.36 | 5.48 | 249 | 200 | 8.52 | 33.76 | 3.57 | 26.25 | 178 | 0.52 |
| 122 | 10.31 | 33.40 | 5.30 | 233 | 250 | 7.84 | 33.94 | 3.02 | 26.49 | 155 | 0.61 |
| 140 | 9.78 | 33.46 | 5.16 | 220 | 300 | 7.00 | 33.97 | 2.30 | 26.63 | 142 | 0.68 |
| 162 | 9.13 | 33.55 | 4.59 | 203 | 400 | 6.30 | 34.10 | 1.32 | 26.84 | 122 | 0.82 |
| 185 | 8.72 | 33.66 | 3.88 | 189 | 500 | 5.58 | 34.15 | 0.70 | 26.96 | 111 | 0.94 |
| 229 | 8.17 | 33.93 | 3.22 | 160 | | | | | | | |
| 302 | 6.99 | 33.97 | 2.29 | 142 | | | | | | | |
| 393 | 6.34 | 34.10 | 1.36 | 123 | | | | | | | |
| 513 | 5.48 | 34.16 | 0.65 | 109 | | | | | | | |
| **67.55** | BLACK DOUGLAS; April 16, 1958; 1148 GCT; 36°38.5'N, 122°24.5'W; sounding, 1200 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 13.83 | 32.51 | 6.04 | 361 | 0 | 13.83 | 32.51 | 6.04 | 24.32 | 361 | 0.00 |
| 10 | 13.82 | 32.47 | 6.13 | 364 | 10 | 13.82 | 32.47 | 6.13 | 24.29 | 364 | 0.04 |
| 28 | 13.34 | 32.93 | 6.08 | 320 | 20 | 13.80 | 32.57 | 6.15 | 24.38 | 356 | 0.07 |
| 42 | 12.55 | 33.17 | 5.68 | 288 | 30 | 13.23 | 32.98 | 6.05 | 24.81 | 315 | 0.10 |
| 51 | 11.37 | 33.22 | 5.55 | 264 | 50 | 11.48 | 33.22 | 5.55 | 25.33 | 266 | 0.16 |
| 60 | 10.23 | 33.26 | 5.32 | 242 | 75 | 9.82 | 33.43 | 4.30 | 25.78 | 222 | 0.22 |
| 69 | 9.82 | 33.40 | 4.55 | 255 | 100 | 9.82 | 33.68 | 3.35 | 25.97 | 205 | 0.28 |
| 85 | 9.92 | 33.58 | 3.93 | 213 | 150 | 8.98 | 33.90 | 2.68 | 26.28 | 175 | 0.37 |
| 98 | 9.84 | 33.66 | 3.46 | 206 | 200 | 8.25 | 33.99 | 2.40 | 26.46 | 158 | 0.46 |
| 111 | 9.68 | 33.83 | 2.98 | 191 | 250 | 7.62 | 34.07 | 1.83 | 26.62 | 143 | 0.54 |
| 132 | 9.45 | 33.89 | 2.69 | 183 | 300 | 7.20 | 34.10 | 1.36 | 26.70 | 135 | 0.61 |
| 158 | 8.80 | 33.90 | 2.68 | 172 | 400 | 6.46 | 34.20 | 0.95 | 26.88 | 118 | 0.74 |
| 193 | 8.33 | 33.98 | 2.46 | 159 | 500 | 5.82 | 34.26 | 0.60 | 27.01 | 106 | 0.86 |
| 240 | 7.78 | 34.05 | 1.96 | 146 | | | | | | | |
| 314 | 7.12 | 34.12 | 1.30 | 132 | | | | | | | |
| 408 | 6.39 | 34.21 | 0.90 | 116 | | | | | | | |
| 539 | 5.74 | 34.27 | 0.52 | 104 | | | | | | | |
| **67.60** | BLACK DOUGLAS; April 16, 1958; 0740 GCT; 36°28.5'N, 122°46'W; sounding, 1600 fm; wind, 330°, force 6; weather, clear; sea, high; wire angle, 23°. | | | | | | | | | | |
| 0 | 14.13 | 32.83 | 5.93 | 343 | 0 | 14.13 | 32.83 | 5.93 | 24.51 | 343 | 0.00 |
| 9 | 14.10 | 32.84 | 5.95 | 342 | 10 | 14.10 | 32.84 | 5.96 | 24.52 | 342 | 0.03 |
| 27 | 13.40 | 33.01 | 6.07 | 316 | 20 | 14.06 | 32.87 | 5.98 | 24.55 | 339 | 0.07 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; April 15, 1958; 2228 GCT; 36°08'N, 123°29.5'W; sounding, 1971 fm; wind, 330°, force 6; weather, partly cloudy; sea, high; wire angle, 12°. | | | | | | | | | | | 67.70 |
| 0 | 13.22 | 33.03 | 6.05 | 312 | 0 | 13.22 | 33.03 | 6.05 | 24.84 | 312 | 0.00 |
| 10 | 13.22 | 33.04 | 6.14 | 311 | 10 | 13.22 | 33.04 | 6.14 | 24.85 | 311 | 0.03 |
| 29 | 13.10 | 33.05 | 6.14 | 308 | 20 | 13.19 | 33.05 | 6.14 | 24.86 | 310 | 0.06 |
| 57 | 12.78 | 33.04 | 5.99 | 302 | 30 | 13.09 | 33.05 | 6.14 | 24.89 | 307 | 0.09 |
| 67 | 11.79 | 33.22 | 5.36 | 271 | 50 | 12.85 | 33.04 | 6.05 | 24.93 | 303 | 0.15 |
| 76 | 11.02 | 33.30 | 4.95 | 252 | 75 | 11.03 | 33.30 | 4.95 | 25.46 | 253 | 0.22 |
| 89 | 9.74 | 33.39 | 4.72 | 224 | 100 | 8.95 | 33.38 | 4.69 | 25.88 | 213 | 0.28 |
| 103 | 8.81 | 33.38 | 4.68 | 211 | 150 | 8.63 | 33.87 | 3.18 | 26.32 | 172 | 0.38 |
| 116 | 8.68 | 33.55 | 4.64 | 196 | 200 | 8.26 | 34.00 | 2.51 | 26.48 | 156 | 0.46 |
| 134 | 9.13 | 33.78 | 3.30 | 186 | 250 | 7.94 | 34.08 | 1.96 | 26.59 | 146 | 0.54 |
| 151 | 8.63 | 33.88 | 3.18 | 171 | 300 | 7.63 | 34.12 | 1.66 | 26.66 | 139 | 0.61 |
| 177 | 8.62 | 33.96 | 2.52 | 165 | 400 | 6.76 | 34.18 | 1.03 | 26.83 | 123 | 0.75 |
| 199 | 8.28 | 34.00 | 2.51 | 157 | 500 | 5.92 | 34.24 | 0.54 | 26.98 | 108 | 0.87 |
| 247 | 7.98 | 34.08 | 2.01 | 146 | | | | | | | |
| 323 | 7.44 | 34.14 | 1.51 | 135 | | | | | | | |
| 421 | 6.58 | 34.19 | 0.90 | 120 | | | | | | | |
| 551 | 5.70 | 34.28 | 0.43 | 102 | | | | | | | |
| BLACK DOUGLAS; April 15, 1958; 1521 GCT; 35°47.5'N, 124°12'W; sounding, 2150 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 08°. | | | | | | | | | | | 67.80 |
| 0 | 13.78 | 33.22 | 6.01 | 308 | 0 | 13.78 | 33.22 | 6.01 | 24.88 | 308 | 0.00 |
| 10 | 13.76 | 33.21 | 6.02 | 308 | 10 | 13.76 | 33.21 | 6.02 | 24.88 | 308 | 0.03 |
| 29 | 13.76 | 33.18 | 6.00 | 310 | 20 | 13.76 | 33.19 | 6.01 | 24.86 | 310 | 0.06 |
| 57 | 13.44 | 33.17 | 5.92 | 305 | 30 | 13.76 | 33.18 | 6.00 | 24.86 | 310 | 0.09 |
| 66 | 13.16 | 33.22 | 5.77 | 296 | 50 | 13.68 | 33.18 | 5.98 | 24.87 | 309 | 0.15 |
| 75 | 12.28 | 33.40a) | 5.24 | 267 | 75 | 12.28 | 33.40 | 5.24 | 25.31 | 267 | 0.23 |
| 88 | 11.56 | 33.39 | 5.00 | 255 | 100 | 10.60 | 33.50 | 4.51 | 25.70 | 230 | 0.29 |
| 102 | 10.56 | 33.51 | 4.48 | 228 | 150 | 9.28 | 33.78 | 3.20 | 26.14 | 188 | 0.40 |
| 115 | 10.18 | 33.58 | 4.11 | 217 | 200 | 8.36 | 33.98 | 2.60 | 26.45 | 159 | 0.48 |
| 132 | 9.42 | 33.63 | 3.87 | 202 | 250 | 7.68 | 34.08 | 2.16 | 26.61 | 144 | 0.56 |
| 150 | 9.28 | 33.78 | 3.20 | 188 | 300 | 7.15 | 34.06 | 1.83 | 26.67 | 138 | 0.63 |
| 176 | 8.68 | 33.84 | 3.14 | 175 | 400 | 6.28 | 34.12 | 1.05 | 26.85 | 121 | 0.77 |
| 198 | 8.38 | 33.98 | 2.61 | 160 | 500 | 5.66 | 34.19 | 0.78 | 26.97 | 110 | 0.89 |
| 247 | 7.76 | 34.08 | 2.19 | 144 | | | | | | | |
| 323 | 6.92 | 34.04 | 1.66 | 135 | | | | | | | |
| 422 | 6.13 | 34.15 | 0.93 | 117 | | | | | | | |
| 551 | 5.39 | 34.22 | 0.70 | 103 | | | | | | | |
| BLACK DOUGLAS; April 15, 1958; 0746 GCT; 35°28'N, 124°55'W; sounding, 2440 fm; wind, 320°, force 6; weather, cloudy; sea, high; wire angle, 20°. | | | | | | | | | | | 67.90 |
| 0 | 13.99 | 33.17 | 5.86 | 316 | 0 | 13.99 | 33.17 | 5.86 | 24.80 | 316 | 0.00 |
| 10 | 14.00 | 33.20 | 5.96 | 314 | 10 | 14.00 | 33.20 | 5.96 | 24.82 | 314 | 0.03 |
| 28 | 13.97 | 33.19 | 5.88 | 314 | 20 | 13.98 | 33.20 | 5.94 | 24.82 | 314 | 0.06 |
| 55 | 13.76 | 33.24 | 5.96 | 306 | 30 | 13.97 | 33.19 | 5.88 | 24.83 | 313 | 0.09 |
| 64 | 12.99 | 33.31 | 5.45 | 286 | 50 | 13.85 | 33.22 | 5.93 | 24.86 | 310 | 0.16 |
| 73 | 11.37 | 33.37 | 4.92 | 253 | 75 | 11.23 | 33.38 | 4.72 | 25.50 | 249 | 0.23 |
| 85 | 10.32 | 33.44 | 4.35 | 230 | 100 | 9.82 | 33.48 | 4.22 | 25.82 | 219 | 0.29 |
| 98 | 9.83 | 33.48 | 4.24 | 219 | 150 | 9.10 | 33.83 | 2.68 | 26.21 | 182 | 0.39 |
| 111 | 9.71 | 33.58 | 3.91 | 210 | 200 | 8.26 | 34.01 | 2.20 | 26.48 | 156 | 0.47 |
| 126 | 9.33 | 33.68 | 3.40 | 196 | 250 | 7.70 | 34.05 | 2.05 | 26.60 | 145 | 0.55 |
| 143 | 9.22 | 33.78 | 2.72 | 188 | 300 | 7.25 | 34.10 | 1.62 | 26.70 | 136 | 0.62 |
| 167 | 8.77 | 33.93 | 2.55 | 169 | 400 | 6.54 | 34.18 | 0.80 | 26.86 | 120 | 0.75 |
| 187 | 8.58 | 34.00 | 2.31 | 162 | 500 | 5.93 | 34.23 | 0.52 | 26.97 | 109 | 0.87 |
| 232 | 7.92 | 34.02 | 2.13 | 151 | | | | | | | |
| 303 | 7.21 | 34.11 | 1.55 | 134 | | | | | | | |
| 398 | 6.56 | 34.18 | 0.81 | 120 | | | | | | | |
| 523 | 5.80 | 34.23 | 0.47 | 107 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

67.110 BLACK DOUGLAS; April 19, 1958; 0830 GCT; 34°46'N, 126°19'W; sounding, 2400 fm; wind, 330°, force 4; weather, drizzle; sea, high; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.40 | 33.19 | 5.78 | 332 | 0 | 14.40 | 33.19 | 5.78 | 24.74 | 322 | 0.00 |
| 10 | 14.40 | 33.22 | 5.92 | 320 | 10 | 14.40 | 33.22 | 5.92 | 24.76 | 320 | 0.03 |
| 28 | 14.33 | 33.19 | 5.96 | 321 | 20 | 14.39 | 33.22 | 5.93 | 24.75 | 321 | 0.06 |
| 53 | 14.13 | 33.19 | 5.92 | 317 | 30 | 14.32 | 33.19 | 5.95 | 24.76 | 320 | 0.10 |
| 62 | 14.10 | 33.18 | 5.94 | 317 | 50 | 14.14 | 33.19 | 5.93 | 24.77 | 319 | 0.16 |
| 71 | 14.09 | 33.22 | 5.91 | 314 | 75 | 14.09 | 33.21 | 5.93 | 24.81 | 315 | 0.24 |
| 80 | 14.10 | 33.19 | 5.94 | 316 | 100 | 13.90 | 33.23 | 5.74 | 24.86 | 310 | 0.32 |
| 94 | 14.02 | 33.21 | 5.82 | 312 | 150 | 9.59 | 33.51 | 4.93 | 25.88 | 214 | 0.45 |
| 107 | 12.38 | 33.31 | 5.52 | 275 | 200 | 8.56 | 33.74 | 3.94 | 26.23 | 180 | 0.55 |
| 124 | 10.46 | 33.30 | 5.17 | 242 | 250 | 7.90 | 33.98 | 3.05 | 26.51 | 153 | 0.63 |
| 141 | 9.83 | 33.45 | 4.93 | 222 | 300 | 7.01 | 34.03 | 2.42 | 26.67 | 138 | 0.71 |
| 163 | 9.20 | 33.58 | 4.91 | 202 | 400 | 6.07 | 34.03 | 1.72 | 26.80 | 126 | 0.84 |
| 185 | 8.74 | 33.69 | 4.22 | 187 | 500 | 5.40 | 34.11 | 1.08 | 26.95 | 112 | 0.97 |
| 229 | 8.20 | 33.93 | 3.40 | 161 | | | | | | | |
| 300 | 7.01 | 34.03 | 2.42 | 138 | | | | | | | |
| 390 | 6.15 | 34.03 | 1.76 | 127 | | | | | | | |
| 509 | 5.34 | 34.13 | 1.01 | 110 | | | | | | | |

70.52 SPENCER F. BAIRD; April 9, 1958; 0905 GCT; 36°06.5'N, 121°49.5'W; sounding, 590 fm; wind, 320°, force 7; weather, clear; sea, very rough; wire angle, 47°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.42 | 33.04 | 5.78 | 314 | 0 | 13.42 | 33.04 | 5.78 | 24.82 | 314 | 0.00 |
| 8 | 13.47 | 33.04 | 5.78 | 315 | 10 | 13.46 | 33.04 | 5.75 | 24.81 | 315 | 0.03 |
| 25 | 13.46 | 33.04 | 5.67 | 315 | 20 | 13.46 | 33.04 | 5.68 | 24.81 | 315 | 0.06 |
| 32 | 13.44 | 33.10 | 5.63 | 310 | 30 | 13.44 | 33.08 | 5.63 | 24.84 | 312 | 0.09 |
| 42 | 13.02 | 33.23 | 5.26 | 293 | | | | | | | |
| 49 | 11.90 | 33.42 | 4.56 | 258 | | | | | | | |
| 121a) | 9.84 | 33.77 | 2.90 | | | | | | | | |
| 145a) | 8.95 | 33.99 | 2.12 | | | | | | | | |
| 184a) | 8.50 | 34.01 | 1.90 | | | | | | | | |
| 245a) | 7.68 | 34.09 | 1.53 | | | | | | | | |
| 412a) | 6.54 | 34.16 | 0.83 | | | | | | | | |
| 576a) | 5.57 | 34.24 | 0.39 | | | | | | | | |

70.60 BLACK DOUGLAS; April 14, 1958; 0629 GCT; 35°53'N, 122°23'W; sounding, 1650 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.36 | 33.12 | 6.38 | 327 | 0 | 14.36 | 33.12 | 6.38 | 24.68 | 327 | 0.00 |
| 10 | 13.58 | 33.18 | 6.19 | 307 | 10 | 13.58 | 33.18 | 6.19 | 24.89 | 307 | 0.03 |
| 29 | 13.56 | 33.26 | 6.14 | 301 | 20 | 13.57 | 33.23 | 6.18 | 24.94 | 303 | 0.06 |
| 38 | 13.54 | 33.26 | 6.04 | 300 | 30 | 13.56 | 33.26 | 6.14 | 24.96 | 300 | 0.09 |
| 48 | 13.50 | 33.26 | 5.92 | 300 | 50 | 13.46 | 33.27 | 5.86 | 24.98 | 298 | 0.15 |
| 57 | 12.68 | 33.40 | 5.24 | 274 | 75 | 10.65 | 33.48 | 4.60 | 25.68 | 232 | 0.22 |
| 66 | 11.74 | 33.47 | 4.75 | 252 | 100 | 9.38 | 33.55 | 4.06 | 25.94 | 207 | 0.27 |
| 79 | 10.16 | 33.48 | 4.55 | 224 | 150 | 8.68 | 33.90 | 2.72 | 26.33 | 170 | 0.37 |
| 92 | 9.44 | 33.52 | 4.25 | 210 | 200 | 8.12 | 34.07 | 2.25 | 26.56 | 149 | 0.45 |
| 106 | 9.35 | 33.57 | 4.00 | 205 | 250 | 7.72 | 34.14 | 1.66 | 26.66 | 139 | 0.52 |
| 128 | 8.74 | 33.74 | 3.52 | 183 | 300 | 7.18 | 34.16 | 1.43 | 26.76 | 130 | 0.59 |
| 155 | 8.66 | 33.95 | 2.68 | 166 | 400 | 6.25 | 34.23 | 0.85 | 26.94 | 113 | 0.72 |
| 186 | 8.24 | 34.04 | 2.47 | 154 | 500 | 5.72 | 34.28 | 0.54 | 27.05 | 102 | 0.83 |
| 230 | 7.92 | 34.12 | 1.81 | 143 | | | | | | | |
| 302 | 7.17 | 34.16 | 1.42 | 129 | | | | | | | |
| 393 | 6.31 | 34.22 | 0.88 | 114 | | | | | | | |
| 513 | 5.70 | 34.29 | 0.52 | 102 | | | | | | | |

a) Pretrip; depth too uncertain for interpolation.

SIO
CCOFI
5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}_{10}{}^{3}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}_{10}{}^{3}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; April 14, 1958; 1122 GCT; 35°32.5'N, 123°07.5'W; sounding, 2000 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 17°. 70.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.83 | 33.08 | 5.96 | 320 | 0 | 13.83 | 33.08 | 5.96 | 24.76 | 320 | 0.00 |
| 10 | 13.80 | 33.04 | 5.91 | 322 | 10 | 13.80 | 33.04 | 5.91 | 24.74 | 322 | 0.03 |
| 28 | 13.50 | 33.11 | 5.94 | 310 | 20 | 13.67 | 33.07 | 5.91 | 24.79 | 317 | 0.06 |
| 55 | 13.02 | 33.07 | 6.02 | 305 | 30 | 13.45 | 33.11 | 5.96 | 24.86 | 310 | 0.10 |
| 64 | 12.93 | 33.07 | 5.95 | 303 | 50 | 13.16 | 33.07 | 6.00 | 24.90 | 306 | 0.16 |
| 73 | 11.26 | 33.22 | 5.42 | 262 | 75 | 11.22 | 33.23 | 5.40 | 25.38 | 261 | 0.23 |
| 85 | 10.42 | 33.45 | 4.54 | 231 | 100 | 9.72 | 33.63 | 3.95 | 25.96 | 206 | 0.29 |
| 98 | 9.72 | 33.62 | 3.95 | 207 | 150 | 8.90 | 33.86 | 2.77 | 26.27 | 176 | 0.38 |
| 111 | 9.62 | 33.71 | 3.68 | 199 | 200 | 8.46 | 34.08 | 1.96 | 26.51 | 153 | 0.47 |
| 127 | 9.22 | 33.78 | 2.89 | 188 | 250 | 7.85 | 34.11 | 1.74 | 26.63 | 142 | 0.54 |
| 144 | 8.93 | 33.84 | 2.78 | 178 | 300 | 7.42 | 34.13 | 1.35 | 26.70 | 135 | 0.62 |
| 170 | 8.82 | 33.96 | 2.23 | 168 | 400 | 6.60 | 34.18 | 0.99 | 26.85 | 121 | 0.75 |
| 191 | 8.60 | 34.07 | 2.01 | 157 | 500 | 5.88 | 34.21 | 0.80 | 26.97 | 110 | 0.87 |
| 238 | 7.98 | 34.11 | 1.78 | 144 | | | | | | | |
| 312 | 7.33 | 34.14 | 1.19 | 133 | | | | | | | |
| 409 | 6.52 | 34.19 | 0.98 | 119 | | | | | | | |
| 535 | 5.62 | 34.22 | 0.65 | 106 | | | | | | | |

BLACK DOUGLAS; April 14, 1958; 1825 GCT; 35°12'N, 123°55'W; sounding, 2300 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 10°. 70.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.87 | - | 5.61 | | 0 | 13.87 | (33.15) | 5.61 | (24.81) | (315) | (0.00) |
| 11 | 13.79 | 33.15 | 5.84 | 314 | 10 | 13.80 | 33.15 | 5.83 | 24.82 | 314 | 0.03 |
| 30 | 13.80 | 33.15 | 5.99 | 314 | 20 | 13.80 | 33.15 | 5.90 | 24.82 | 314 | 0.06 |
| 59 | 13.58 | 33.20 | 5.83 | 306 | 30 | 13.80 | 33.15 | 5.99 | 24.82 | 314 | 0.09 |
| 69 | 11.32 | 33.33 | 5.06 | 255 | 50 | 13.60 | 33.18 | 5.85 | 24.88 | 308 | 0.16 |
| 77 | 10.94 | 33.38 | 4.53 | 244 | 75 | 11.20 | 33.38 | 4.50 | 24.50 | 249 | 0.23 |
| 91 | 9.97 | 33.43 | 4.51 | 225 | 100 | 9.74 | 33.49 | 4.30 | 24.84 | 217 | 0.28 |
| 105 | 9.64 | 33.51 | 4.18 | 214 | 150 | 8.52 | 33.78 | 3.72 | 26.25 | 178 | 0.39 |
| 118 | 8.88 | 33.50 | 4.54 | 203 | 200 | 8.56 | 34.05 | 2.17 | 26.46 | 158 | 0.47 |
| 136 | 8.52 | 33.64 | 4.35 | 187 | 250 | 7.80 | 34.07 | 2.09 | 26.60 | 145 | 0.55 |
| 153 | 8.59 | 33.83 | 3.56 | 174 | 300 | 7.40 | 34.17 | 1.80 | 26.73 | 132 | 0.62 |
| 179 | 8.74 | 34.00 | 2.39 | 164 | 400 | 6.75 | 34.27 | 0.80 | 26.90 | 116 | 0.75 |
| 201 | 8.56 | 34.05 | 2.17 | 157 | 500 | 5.58 | 34.26 | 0.54 | 27.02 | 105 | 0.86 |
| 250 | 7.80 | 34.07 | 2.09 | 145 | | | | | | | |
| 326 | 7.27 | 34.20 | 1.22 | 128 | | | | | | | |
| 424 | 6.55 | 34.28 | 0.72 | 113 | | | | | | | |
| 524 | 5.40 | 34.24 | 0.51 | 102 | | | | | | | |

BLACK DOUGLAS; April 15, 1958; 0013 GCT; 34°53'N, 124°30'W; sounding, 2260 fm; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 00°. 70.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.15 | 33.26 | 5.94 | 312 | 0 | 14.15 | 33.26 | 5.94 | 24.84 | 312 | 0.00 |
| 10 | 14.16 | 33.23 | 5.90 | 315 | 10 | 14.16 | 33.23 | 5.90 | 24.81 | 315 | 0.03 |
| 30 | 14.13 | 33.26 | 5.90 | 312 | 20 | 14.14 | 33.25 | 5.90 | 24.83 | 313 | 0.06 |
| 59 | 13.74 | 33.29 | 5.89 | 302 | 30 | 14.13 | 33.26 | 5.90 | 24.84 | 312 | 0.09 |
| 68 | 13.55 | 33.28 | 5.80 | 299 | 50 | 13.78 | 33.29 | 5.90 | 24.94 | 303 | 0.16 |
| 78 | 11.73 | 33.44 | 4.69 | 254 | 75 | 11.74 | 33.42 | 5.71 | 25.43 | 256 | 0.22 |
| 92 | 10.43 | 33.47 | 4.43 | 230 | 100 | 9.93 | 33.49 | 4.32 | 25.81 | 220 | 0.29 |
| 106 | 9.68 | 33.51 | 4.21 | 215 | 150 | 8.88 | 33.79 | 3.00 | 26.21 | 182 | 0.39 |
| 119 | 9.44 | 33.60 | 3.79 | 204 | 200 | 8.35 | 33.97 | 2.42 | 26.44 | 160 | 0.47 |
| 137 | 9.08 | 33.70 | 3.31 | 191 | 250 | 7.74 | 34.04 | 2.08 | 26.58 | 147 | 0.55 |
| 156 | 8.81 | 33.83 | 2.88 | 178 | 300 | 7.28 | 34.11 | 1.75 | 26.70 | 135 | 0.62 |
| 183 | 8.46 | 33.94 | 2.53 | 164 | 400 | 6.46 | 34.21 | 0.95 | 26.89 | 117 | 0.76 |
| 204 | 8.30 | 33.98 | 2.31 | 159 | 500 | 5.80 | 34.22 | 0.64 | 26.98 | 108 | 0.87 |
| 254 | 7.66 | 34.04 | 2.06 | 146 | | | | | | | |
| 331 | 7.01 | 34.16 | 1.40 | 128 | | | | | | | |
| 432 | 6.20 | 34.22 | 0.79 | 113 | | | | | | | |
| 563 | 5.41 | 34.21 | 0.53 | 104 | | | | | | | |

SIO

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

70.100 BLACK DOUGLAS; April 19, 1958; 2141 GCT; 34°31'N, 125°14'W; sounding, 2400 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 26°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.09 | 33.17 | 5.93 | 318 | 0 | 14.09 | 33.17 | 5.93 | 24.78 | 318 | 0.00 |
| 8 | 14.06 | 33.15 | 5.96 | 319 | 10 | 14.04 | 33.15 | 5.96 | 24.78 | 318 | 0.03 |
| 26 | 13.88 | 33.14 | 5.96 | 316 | 20 | 13.95 | 33.14 | 5.96 | 24.79 | 317 | 0.06 |
| 53 | 13.58 | 33.07 | 6.06 | 316 | 30 | 13.83 | 33.13 | 5.97 | 24.80 | 316 | 0.10 |
| 61 | 13.56 | 33.08 | 6.01 | 314 | 50 | 13.62 | 33.08 | 6.03 | 24.80 | 316 | 0.16 |
| 69 | 13.56 | 33.06 | 6.01 | 315 | 75 | 13.56 | 33.06 | 5.97 | 24.81 | 315 | 0.24 |
| 80 | 13.52 | 33.06 | 5.91 | 315 | 100 | 10.82 | 33.13 | 5.58 | 25.38 | 261 | 0.31 |
| 92 | 11.78 | 33.12a) | 5.65 | 278 | 150 | 8.92 | 33.60 | 4.70 | 26.06 | 196 | 0.42 |
| 104 | 10.46 | 33.13 | 5.56 | 255 | 200 | 8.30 | 33.89 | 3.65 | 26.39 | 165 | 0.52 |
| 119 | 9.80 | 33.31 | 9.80 | 231 | 250 | 7.40 | 33.96 | 2.95 | 26.56 | 148 | 0.60 |
| 133 | 9.14 | 33.44 | 4.91 | 211 | 300 | 6.88 | 34.01 | 2.16 | 26.78 | 137 | 0.67 |
| 155 | 8.86 | 33.63 | 4.68 | 193 | 400 | 6.17 | 34.11 | 1.12 | 26.85 | 121 | 0.81 |
| 174 | 8.82 | 33.80 | 3.12 | 180 | 500 | (5.35) | (34.11) | (0.92) | (26.96) | (111) | (0.93) |
| 215 | 7.88 | 33.93 | 4.02 | 157 | | | | | | | |
| 283 | 7.04 | 33.98 | 2.35 | 142 | | | | | | | |
| 372 | 6.38 | 34.11 | 1.25 | 123 | | | | | | | |
| 492 | 5.42 | 34.11 | 0.92 | 112 | | | | | | | |

70.110 BLACK DOUGLAS; April 19, 1958; 1432 GCT; 34°13'N, 125°54'W; sounding, 2400+ fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.93 | 33.05 | 5.93 | 323 | 0 | 13.93 | 33.05 | 5.93 | 24.73 | 323 | 0.00 |
| 9 | 13.92 | 33.10 | 5.96 | 319 | 10 | 13.92 | 33.09 | 5.96 | 24.76 | 320 | 0.03 |
| 28 | 13.91 | 33.04 | 5.92 | 324 | 20 | 13.91 | 33.09 | 5.94 | 24.76 | 320 | 0.06 |
| 55 | 14.02 | 33.12 | 5.83 | 320 | 30 | 13.91 | 33.05 | 5.92 | 24.74 | 322 | 0.10 |
| 64 | 14.11 | 33.23 | 5.80 | 314 | 50 | 14.00 | 33.10 | 5.88 | 24.74 | 322 | 0.16 |
| 73 | 14.14 | 33.22 | 5.75 | 315 | 75 | 14.14 | 33.23 | 5.75 | 24.82 | 314 | 0.24 |
| 85 | 14.12 | 33.23 | 5.75 | 314 | 100 | 11.72 | 33.29 | 5.44 | 25.34 | 265 | 0.31 |
| 97 | 12.40 | 33.28 | - | 278 | 150 | 9.46 | 33.61 | 3.83 | 25.96 | 204 | 0.43 |
| 110 | 11.25 | 33.47 | 5.39 | 243 | 200 | 8.75 | 33.92 | 2.55 | 26.34 | 169 | 0.53 |
| 126 | 10.67 | 33.46 | 5.24 | 235 | 250 | 7.97 | 34.04 | 2.00 | 26.53 | 151 | 0.61 |
| 143 | 9.48 | 33.58 | 3.87 | 207 | 300 | 7.00 | 34.07 | 1.75 | 26.70 | 135 | 0.68 |
| 167 | 9.37 | 33.72 | 2.75 | 194 | 400 | 6.60 | 34.18 | 0.86 | 26.85 | 121 | 0.82 |
| 187 | 8.98 | 33.88 | 2.63 | 176 | 500 | 5.94 | 34.22 | 0.79 | 26.96 | 110 | 0.94 |
| 232 | 8.24 | 34.00 | 2.13 | 157 | | | | | | | |
| 302 | 6.99 | 34.07 | 1.75 | 134 | | | | | | | |
| 395 | 6.66 | 34.18 | 0.90 | 122 | | | | | | | |
| 516 | 5.78 | 34.22 | 0.79 | 108 | | | | | | | |

73.55 BLACK DOUGLAS; April 12, 1958; 2020 GCT; 35°27.5'N, 121°37.5'W; sounding, 550 fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.19 | 33.01 | 6.03 | 332 | 0 | 14.19 | 33.01 | 6.03 | 24.63 | 332 | 0.00 |
| 10 | 13.54 | 33.04 | 6.12 | 316 | 10 | 13.54 | 33.04 | 6.12 | 24.80 | 316 | 0.03 |
| 28 | 13.32 | 33.01a) | 6.04 | 315 | 20 | 13.40 | 33.02 | 6.10 | 24.81 | 315 | 0.06 |
| 38 | 12.68 | 33.14 | 5.68 | 293 | 30 | 13.22 | 33.02 | 5.98 | 24.84 | 312 | 0.10 |
| 48 | 11.93 | 33.21 | 5.42 | 274 | 50 | 11.68 | 33.20 | 5.44 | 25.27 | 271 | 0.15 |
| 57 | 11.34 | 33.26 | 5.26 | 260 | 75 | 10.38 | 33.50 | 4.24 | 25.73 | 227 | 0.22 |
| 66 | 10.77 | 33.43 | 4.63 | 238 | 100 | 9.66 | 33.58 | 3.88 | 25.92 | 209 | 0.27 |
| 79 | 10.27 | 33.51 | 4.15 | 224 | 150 | 8.64 | 33.86 | 2.94 | 26.31 | 172 | 0.37 |
| 93 | 9.92 | 33.58 | 3.82 | 213 | 200 | 8.08 | 34.01 | 2.23 | 26.50 | 154 | 0.45 |
| 106 | 9.32 | 33.58 | 4.12 | 204 | 250 | 7.60 | 34.13 | 1.65 | 26.68 | 138 | 0.52 |
| 128 | 8.82 | 33.69a) | 3.56 | 188 | 300 | 7.40 | 34.20 | 1.35 | 26.75 | 131 | 0.59 |
| 155 | 8.60 | 33.89 | 2.71 | 170 | 400 | 6.32 | 34.20 | 1.15 | 26.90 | 116 | 0.72 |
| 186 | 8.22 | 33.98 | 2.36 | 158 | 500 | 5.62 | 34.22 | 0.70 | 27.01 | 106 | 0.84 |
| 231 | 7.74 | 34.09 | 1.78 | 142 | | | | | | | |
| 303 | 7.40 | 34.20 | 1.33 | 130 | | | | | | | |
| 394 | 6.39 | 34.20 | 1.16 | 117 | | | | | | | |
| 515 | 5.55 | 34.23 | 0.66 | 104 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; April 12, 1958; 1647 GCT; 35°18'N, 121°58.5'W; sounding, 1200 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 00°. 73.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.06 | 32.97 | 5.90 | 332 | 0 | 14.06 | 32.97 | 5.90 | 24.63 | 332 | 0.00 |
| 10 | 13.72 | 33.02 | 6.00 | 321 | 10 | 13.72 | 33.02 | 6.00 | 24.75 | 321 | 0.03 |
| 30 | 13.60 | 32.99 | 5.98 | 321 | 20 | 13.65 | 33.00 | 5.99 | 24.75 | 321 | 0.06 |
| 40 | 13.44 | 33.04 | 6.04 | 315 | 30 | 13.60 | 32.99 | 5.98 | 24.75 | 321 | 0.10 |
| 49 | 12.88 | 33.14 | 5.71 | 296 | 50 | 12.78 | 33.15 | 5.68 | 25.02 | 295 | 0.16 |
| 59 | 11.19 | 33.22 | 5.57 | 260 | 75 | 10.15 | 33.25 | 5.40 | 25.58 | 241 | 0.22 |
| 68 | 10.22 | 33.20 | 5.56 | 246 | 100 | 9.04 | 33.35 | 4.87 | 25.84 | 216 | 0.28 |
| 82 | 9.55 | 33.21 | 5.41 | 235 | 150 | 8.34 | 33.78 | 3.49 | 26.28 | 174 | 0.38 |
| 95 | 9.12 | 33.31 | 5.00 | 221 | 200 | 7.83 | 33.98 | 3.08 | 26.52 | 152 | 0.46 |
| 109 | 8.86 | 33.46 | 4.69 | 206 | 250 | 7.20 | 34.02 | 1.95 | 26.64 | 141 | 0.54 |
| 131 | 8.60 | 33.65 | 3.94 | 188 | 300 | 6.70 | 34.02 | 1.63 | 26.71 | 134 | 0.61 |
| 158 | 8.27 | 33.81 | 3.47 | 171 | 400 | (6.20) | (34.20) | (0.72) | (26.92) | (115) | (0.74) |
| 190 | 7.94 | 33.95a) | 3.15 | 156 | | | | | | | |
| 235 | 7.34 | 34.02 | 2.15 | 142 | | | | | | | |
| 307 | 6.63 | 34.02 | 1.55 | 133 | | | | | | | |
| 398 | 6.22 | 34.18 | 0.74 | 116 | | | | | | | |

BLACK DOUGLAS; April 12, 1958; 1003 GCT; 34°58'N, 122°39'W; sounding, 2229 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 03°. 73.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.03 | 33.22 | 5.91 | 314 | 0 | 14.03 | 33.22 | 5.91 | 24.82 | 314 | 0.00 |
| 10 | 14.04 | 33.26 | 5.75 | 310 | 10 | 14.04 | 33.26 | 5.75 | 24.86 | 310 | 0.03 |
| 30 | 13.77 | 33.24 | 5.90 | 306 | 20 | 13.97 | 33.26 | 5.77 | 24.87 | 309 | 0.06 |
| 54 | 12.89 | 33.36 | 5.56 | 281 | 30 | 13.77 | 33.24 | 5.90 | 24.90 | 306 | 0.09 |
| 63 | 12.71 | 33.37a) | 5.51 | 266 | 50 | 13.62 | 33.26 | 5.76 | 24.95 | 302 | 0.15 |
| 73 | 11.59 | 33.36 | 5.09 | 257 | 75 | 11.48 | 33.36 | 5.04 | 25.44 | 255 | 0.22 |
| 83 | 11.04 | 33.40 | 4.70 | 245 | 100 | 9.30 | 33.33 | 4.91 | 25.79 | 222 | 0.28 |
| 96 | 9.43 | 33.30 | 4.92 | 227 | 150 | 8.39 | 33.70 | 3.87 | 26.23 | 180 | 0.39 |
| 110 | 9.08 | 33.47 | 4.34 | 208 | 200 | 7.88 | 33.98 | 3.28 | 26.51 | 153 | 0.47 |
| 128 | 8.96 | 33.64 | 3.69 | 194 | 250 | 7.14 | 34.01 | 2.53 | 26.65 | 140 | 0.54 |
| 146 | 8.43 | 33.69 | 3.89 | 183 | 300 | 6.68 | 34.06 | 1.70 | 26.74 | 132 | 0.62 |
| 168 | 8.22 | 33.81 | 3.80 | 171 | 400 | 6.04 | 34.15 | 0.86 | 26.90 | 116 | 0.74 |
| 191 | 8.03 | 33.96 | 3.49 | 157 | 500 | 5.60 | 34.21 | 0.36 | 27.00 | 106 | 0.86 |
| 235 | 7.30 | 34.00 | 2.76 | 143 | | | | | | | |
| 307 | 6.63 | 34.06 | 1.59 | 130 | | | | | | | |
| 398 | 6.07 | 34.14 | 0.89 | 118 | | | | | | | |
| 520 | 5.54 | 34.25 | 0.23 | 103 | | | | | | | |

BLACK DOUGLAS; April 12, 1958; 0253 GCT; 34°38'N, 123°21.5'W; sounding, 2150 fm; wind, 340°, force 4; weather, clear; sea, very rough; wire angle, 10°. 73.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.33 | 33.22 | 5.85 | 319 | 0 | 14.33 | 33.22 | 5.85 | 24.77 | 319 | 0.00 |
| 10 | 14.29 | 33.26 | 5.95 | 315 | 10 | 14.29 | 33.26 | 5.95 | 24.81 | 315 | 0.03 |
| 29 | 14.06 | 33.25 | 5.99 | 311 | 20 | 14.15 | 33.26 | 5.98 | 24.83 | 313 | 0.06 |
| 52 | 13.76 | 33.27 | 5.88 | 304 | 30 | 14.05 | 33.25 | 5.99 | 24.85 | 311 | 0.09 |
| 61 | 11.84 | 33.35 | 5.36 | 263 | 50 | 13.78 | 33.26 | 5.90 | 24.91 | 305 | 0.16 |
| 70 | 11.07 | 33.32 | 5.17 | 251 | 75 | 10.54 | 33.33 | 5.44 | 25.58 | 242 | 0.22 |
| 79 | 10.16 | 33.35 | 5.62 | 234 | 100 | 9.43 | 33.44 | 4.43 | 25.85 | 216 | 0.28 |
| 97 | 9.52 | 33.41 | 4.59 | 219 | 150 | 8.80 | 33.90 | 2.76 | 26.31 | 172 | 0.38 |
| 106 | 9.28 | 33.60 | 4.02 | 202 | 200 | 8.13 | 34.00 | 2.25 | 26.49 | 155 | 0.46 |
| 124 | 9.17 | 33.76 | 3.27 | 188 | 250 | 7.60 | 34.06 | 1.93 | 26.62 | 143 | 0.54 |
| 142 | 8.91 | 33.84 | 3.01 | 179 | 300 | 7.04 | 34.10 | 1.66 | 26.72 | 133 | 0.61 |
| 168 | 8.71 | 33.93 | 2.60 | 169 | 400 | 6.12 | 34.10 | 1.12 | 26.84 | 122 | 0.74 |
| 186 | 8.34 | 33.98 | 2.39 | 159 | 500 | 5.72 | 34.21 | 0.60 | 26.99 | 108 | 0.86 |
| 231 | 7.82 | 34.04 | 2.04 | 148 | | | | | | | |
| 304 | 7.00 | 34.10a) | 1.63 | 132 | | | | | | | |
| 396 | 6.16 | 34.09 | 1.15 | 122 | | | | | | | |
| 516 | 5.70 | 34.22 | 0.56 | 107 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

73.90 BLACK DOUGLAS; April 11, 1958; 2020 GCT; 34°18'N, 124°04'W; sounding, 2300 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.05 | 33.26 | 6.02 | 310 | 0 | 14.05 | 33.26 | 6.02 | 24.86 | 310 | 0.00 |
| 9 | 14.03 | 33.30 | 5.94 | 308 | 10 | 14.02 | 33.30 | 5.93 | 24.88 | 308 | 0.03 |
| 27 | 13.94 | 33.26 | 5.92 | 308 | 20 | 13.97 | 33.28 | 5.92 | 24.88 | 308 | 0.06 |
| 54 | 13.94 | 33.26 | 5.96 | 308 | 30 | 13.94 | 33.26 | 5.93 | 24.88 | 308 | 0.09 |
| 64 | 12.45 | 33.35 | 5.41 | 274 | 50 | 13.94 | 33.26 | 5.95 | 24.88 | 308 | 0.15 |
| 72 | 11.42 | 33.36 | 5.08 | 255 | 75 | 11.02 | 33.38 | 5.24 | 25.54 | 246 | 0.22 |
| 84 | 10.16 | 33.48 | 5.71 | 224 | 100 | 9.80 | 33.48 | 4.47 | 25.82 | 218 | 0.28 |
| 96 | 9.91 | 33.48 | 4.47 | 220 | 150 | 8.74 | 33.80 | 3.36 | 26.24 | 179 | 0.38 |
| 108 | 9.50 | 33.50 | 4.48 | 212 | 200 | 8.05 | 33.98 | 2.54 | 26.49 | 155 | 0.47 |
| 124 | 9.08 | 33.58 | 4.18 | 200 | 250 | 7.43 | 34.03 | 2.02 | 26.62 | 143 | 0.54 |
| 140 | 8.87 | 33.74 | 3.55 | 185 | 300 | 7.10 | 34.10 | 1.58 | 26.72 | 134 | 0.62 |
| 164 | 8.56 | 33.86 | 3.15 | 171 | 400 | 6.38 | 34.16 | 0.90 | 26.86 | 120 | 0.75 |
| 183 | 8.30 | 33.95 | 2.77 | 161 | | | | | | | |
| 228 | 7.64 | 34.01 | 2.22 | 148 | | | | | | | |
| 298 | 7.13 | 34.09 | 1.60 | 135 | | | | | | | |
| 392 | 6.46 | 34.15 | 1.00 | 122 | | | | | | | |
| 424p | 6.21 | 34.19 | 0.75 | 115 | | | | | | | |

77.55 SPENCER F. BAIRD; April 9, 1958; 2335, 2350 GCT; 34°57.5'N, 121°13.5'W; sounding, 320 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 35°, 41°.

| | | | | |
|---|---|---|---|---|
| 0 | 14.11 | 33.45 | 5.78 | 298 |
| 9 | 14.14 | 33.41 | 5.76 | 301 |
| 22a) | 14.00 | 33.48 | 5.18 | 294 |
| 31a) | 13.48 | 33.56 | 4.27 | 278 |
| 39a) | 12.26 | 33.66 | 3.65 | 247 |
| 55a) | 11.04 | 33.72 | 3.24 | 222 |
| 70a) | 10.24 | 33.82 | 2.85 | 201 |
| 82a) | 9.94 | 33.86 | 2.62 | 193 |
| 103a) | 9.68 | 33.90 | 2.37 | 186 |
| 136a) | 9.37 | 33.98 | 2.27 | 175 |
| 168a) | 8.88 | 34.02 | 2.22 | 165 |
| 217a) | 8.44 | 34.06 | 1.91 | 155 |
| 295a) | 8.15 | 34.14 | 1.54 | 145 |

77.60 SPENCER F. BAIRD; April 10, 1958; 0313 GCT; 34°52'N, 121°35.5'W; sounding, 1000 fm; wind, 330°, force 6; weather, partly cloudy; sea, very rough; wire angle, 31°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.64 | 33.44 | 5.72 | 289 | 0 | 13.64 | 33.44 | 5.72 | 25.08 | 289 | 0.00 |
| 8 | 13.66 | 33.44 | 5.73 | 290 | 10 | 13.63 | 33.44 | 5.73 | 25.08 | 290 | 0.03 |
| 30 | 13.57 | 33.43 | 5.68 | 288 | 20 | 13.62 | 33.43 | 5.73 | 25.08 | 289 | 0.06 |
| 39 | 13.47 | 33.45 | - | 285 | 30 | 13.57 | 33.43 | 5.68 | 25.09 | 288 | 0.09 |
| 52 | 13.28 | 33.45 | 5.53 | 281 | 50 | 13.32 | 33.45 | 5.54 | 25.15 | 282 | 0.14 |
| 60 | 12.60 | 33.40 | 5.01 | 272 | 75 | 10.66 | 33.46 | 4.21 | 25.65 | 235 | 0.21 |
| 68 | 11.65 | 33.42 | 4.62 | 254 | 100 | 9.68 | 33.56 | 3.89 | 25.91 | 210 | 0.26 |
| 83 | 10.22 | 33.49 | 4.01 | 225 | 150 | 8.54 | 33.90 | 2.75 | 26.36 | 168 | 0.36 |
| 100 | 9.68 | 33.56 | 3.89 | 210 | 200 | 8.33 | 34.08 | 1.84 | 26.52 | 152 | 0.44 |
| 111 | 9.29 | 33.60 | 3.76 | 202 | 250 | 7.85 | 34.14 | 1.47 | 26.64 | 141 | 0.52 |
| 129 | 8.89 | 33.77 | 3.13 | 183 | 300 | 7.27 | 34.15 | 1.28 | 26.74 | 132 | 0.59 |
| 160 | 8.42 | 33.94 | 2.64 | 164 | 400 | 6.50 | 34.21 | 0.74 | 26.89 | 118 | 0.72 |
| 192 | 8.39 | 34.05 | 2.02 | 155 | 500 | (5.63) | (34.22) | | (27.00) | (106) | (0.83) |
| 248 | 7.87 | 34.14 | 1.49 | 141 | | | | | | | |
| 314 | 7.14 | 34.16 | 1.22 | 130 | | | | | | | |
| 358p | 6.82 | 34.20 | 0.97 | 122 | | | | | | | |
| 477p | 5.85 | 34.22 | 0.50 | 109 | | | | | | | |

a) Pretrip; depth too uncertain for interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

SPENCER F. BAIRD; April 10, 1958; 0850 GCT; 34°22'N, 122°16'W; sounding, 2000+ fm; wind, 340°, force 7; weather, clear; sea, high; wire angle, 40°. 77.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.78 | 33.02 | 5.92 | 322 | 0 | 13.78 | 33.02 | 5.92 | 24.74 | 322 | 0.00 |
| 7 | 13.84 | 32.99 | 5.92 | 327 | 10 | 13.84 | 32.99 | 5.90 | 24.68 | 327 | 0.03 |
| 27 | 13.88 | 33.04 | 5.89 | 323 | 20 | 13.85 | 33.03 | 5.89 | 24.71 | 324 | 0.06 |
| 49 | 13.95 | 33.35 | 5.76 | 302 | 30 | 13.93 | 33.09 | 5.80 | 24.76 | 320 | 0.10 |
| 54 | 13.33 | 33.37 | 5.53 | 288 | 50 | 13.92 | 33.36 | 5.72 | 24.95 | 301 | 0.16 |
| 64 | 12.62 | 33.49 | 4.42 | 266 | 75 | 11.21 | 33.60 | 3.80 | 25.67 | 233 | 0.23 |
| 70 | 11.19 | 33.53 | 4.21 | 238 | 100 | 10.11 | 33.66 | 3.58 | 25.91 | 210 | 0.28 |
| 83 | 10.86 | 33.61 | 3.78 | 227 | | | | | | | |
| 93 | 10.42 | 33.64 | 3.64 | 217 | | | | | | | |
| 108 | 9.85 | 33.70 | 3.51 | 204 | | | | | | | |
| 220a) | 8.74 | 34.09 | 2.10 | | | | | | | | |
| 340a) | 7.43 | 34.24 | 1.11 | | | | | | | | |
| 501a) | 6.24 | 34.28 | - | | | | | | | | |

SPENCER F. BAIRD; April 10, 1958; 1325 GCT; 34°03'N, 122°57.5'W; sounding, 2000+ fm; wind, 360°, force 6; weather, overcast; sea, very high; wire angle, 25°. 77.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.55 | 33.30 | 5.78 | 317 | 0 | 14.55 | 33.30 | 5.78 | 24.79 | 317 | 0.00 |
| 9 | 14.56 | 33.29 | 5.79 | 318 | 10 | 14.56 | 33.29 | 5.79 | 24.78 | 318 | 0.03 |
| 31 | 14.56 | 33.29 | 5.82 | 318 | 20 | 14.56 | 33.29 | 5.80 | 24.78 | 318 | 0.06 |
| 57 | 14.55 | 33.31 | 5.78 | 317 | 30 | 14.56 | 33.29 | 5.81 | 24.78 | 318 | 0.10 |
| 65 | 14.55 | 33.33 | 5.78 | 317 | 50 | 14.56 | 33.30 | 5.78 | 24.79 | 317 | 0.16 |
| 85 | 12.44 | 33.35 | 5.47 | 274 | 75 | 14.25 | 33.33 | 5.74 | 24.87 | 309 | 0.24 |
| 102 | 10.87 | 33.35 | 5.05 | 246 | 100 | 11.00 | 33.35 | 5.07 | 25.51 | 248 | 0.31 |
| 115 | 10.21 | 33.39 | 4.96 | 232 | 150 | 9.21 | 33.62 | 3.78 | 26.02 | 200 | 0.42 |
| 131 | 9.48 | 33.46 | 4.74 | 215 | 200 | 8.57 | 33.94 | 2.30 | 26.38 | 166 | 0.51 |
| 153 | 9.18 | 33.64 | 3.63 | 197 | 250 | 7.86 | 34.03 | 1.99 | 26.56 | 149 | 0.59 |
| 178 | 8.78 | 33.84 | 2.92 | 176 | 300 | 7.33 | 34.09 | 1.60 | 26.68 | 137 | 0.67 |
| 205 | 8.51 | 33.95 | 2.21 | 164 | 400 | 6.48 | 34.17 | 0.96 | 26.86 | 120 | 0.80 |
| 258 | 7.76 | 34.04 | 1.96 | 146 | 500 | 5.72 | 34.22 | 0.69 | 26.99 | 107 | 0.92 |
| 340 | 7.00 | 34.13 | 1.22 | 130 | 600 | (5.09) | (34.24) | (0.38) | (27.08) | (99) | (1.03) |
| 449 | 6.05 | 34.20 | 0.81 | 113 | | | | | | | |
| 595 | 5.17 | 34.24 | 0.38 | 99 | | | | | | | |

BLACK DOUGLAS; April 11, 1958; 1055 GCT; 33°31.5'N, 123°30'W; sounding, 2400 fm; wind, 340°, force 6; weather, clear; sea, very rough; wire angle, 18°. 77.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.97 | 33.43 | 5.77 | 317 | 0 | 14.97 | 33.43 | 5.77 | 24.79 | 317 | 0.00 |
| 10 | 14.96 | 33.43 | 5.81 | 317 | 10 | 14.96 | 33.43 | 5.81 | 24.79 | 317 | 0.03 |
| 28 | 14.96 | 33.42 | 5.82 | 317 | 20 | 14.96 | 33.42 | 5.81 | 24.79 | 317 | 0.06 |
| 55 | 14.96 | 33.43 | 5.90 | 317 | 30 | 14.96 | 33.42 | 5.82 | 24.79 | 317 | 0.10 |
| 64 | 14.94 | 33.43 | 5.84 | 316 | 50 | 14.96 | 33.42 | 5.88 | 24.79 | 317 | 0.16 |
| 73 | 14.89 | 33.42 | 5.80 | 316 | 75 | 14.88 | 33.42 | 5.78 | 24.80 | 316 | 0.24 |
| 85 | 14.20 | 33.39 | 5.67 | 304 | 100 | 11.58 | 33.39 | 5.34 | 25.43 | 256 | 0.31 |
| 98 | 11.82 | 33.39 | 5.38 | 259 | 150 | 9.24 | 33.62 | 4.08 | 26.03 | 199 | 0.42 |
| 111 | 10.35 | 33.37 | 5.06 | 235 | 200 | 8.36 | 33.96 | 2.76 | 26.43 | 161 | 0.52 |
| 128 | 10.00 | 33.46 | 4.68 | 224 | 250 | 7.86 | 34.03 | 2.26 | 26.55 | 149 | 0.60 |
| 145 | 9.39 | 33.58 | 4.22 | 205 | 300 | 7.30 | 34.08 | 2.04 | 26.67 | 138 | 0.67 |
| 171 | 8.82 | 33.82 | 3.26 | 178 | 400 | 6.40 | 34.17 | 1.16 | 26.87 | 119 | 0.80 |
| 193 | 8.46 | 33.94 | 2.86 | 164 | 500 | 5.88 | 34.25 | 0.60 | 26.99 | 108 | 0.92 |
| 240 | 7.98 | 34.02 | 2.31 | 151 | | | | | | | |
| 315 | 7.14 | 34.09 | 1.99 | 134 | | | | | | | |
| 414 | 6.32 | 34.18 | 0.96 | 117 | | | | | | | |
| 544 | 5.64 | 34.29 | 0.43 | 101 | | | | | | | |

a) Pretrip; depth too uncertain for interpolation.

SIO

CCOFI
5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **80.51** | BLACK DOUGLAS; April 9, 1958; 2114 GCT; 34°26.5'N, 120°32.5'W; sounding, 45 fm; wind, 280°, force 5; weather, clear; sea, very rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 13.72 | 33.51 | 5.46 | 286 | 0 | 13.72 | 33.51 | 5.46 | 25.12 | 286 | 0.00 |
| 15 | 13.62 | 33.56 | 5.46 | 280 | 10 | 13.66 | 33.55 | 5.46 | 25.16 | 282 | 0.03 |
| 29 | 12.01 | 33.57 | 4.32 | 250 | 20 | 13.59 | 33.56 | 5.45 | 25.18 | 279 | 0.06 |
| 48 | 11.35 | 33.58 | 4.00 | 237 | 30 | 12.00 | 33.57 | 4.32 | 25.51 | 249 | 0.08 |
| 58 | 10.98 | 33.64 | 3.77 | 226 | 50 | 11.30 | 33.58 | 3.96 | 25.64 | 236 | 0.13 |
| **80.55** | BLACK DOUGLAS; April 10, 1958; 0223 GCT;[a] 34°19'N, 120°48'W; sounding, 420 fm; wind, 280°, force 7; weather, clear; sea, very rough; wire angle, missing. | | | | | | | | | | |
| 0 | 13.90 | 33.45 | 5.79 | 294 | 0 | 13.90 | 33.45 | 5.79 | 25.03 | 294 | 0.00 |
| 9 | 13.90 | 33.47 | 5.88 | 292 | 10 | 13.89 | 33.47 | 5.88 | 25.05 | 292 | 0.03 |
| 32 | 13.63 | 33.47 | 5.69 | 287 | 20 | 13.75 | 33.47 | 5.76 | 25.08 | 289 | 0.06 |
| 41 | 13.60 | 33.46 | 5.56 | 287 | 30 | 13.64 | 33.47 | 5.71 | 25.10 | 287 | 0.09 |
| 54 | 12.28 | 33.51 | 4.65 | 258 | 50 | 13.45 | 33.46 | 5.34 | 25.14 | 283 | 0.14 |
| 63 | 10.90 | 33.53 | 4.29 | 233 | 75 | 10.42 | 33.53 | 4.24 | 25.76 | 224 | 0.21 |
| 72 | 10.55 | 33.53 | 4.24 | 227 | 100 | 10.02 | 33.67 | 3.55 | 25.93 | 208 | 0.26 |
| 88 | 10.36 | 33.60 | 3.78 | 218 | 150 | 9.32 | 33.92 | 2.68 | 26.24 | 179 | 0.36 |
| 104 | 9.92 | 33.68 | 3.51 | 206 | 200 | 8.70 | 34.01 | 2.40 | 26.41 | 162 | 0.45 |
| 116 | 9.80 | 33.75 | 3.27 | 199 | 250 | 7.98 | 34.10 | 1.85 | 26.59 | 146 | 0.52 |
| 137 | 9.49 | 33.84 | 2.97 | 187 | 300 | 7.48 | 34.19 | 1.36 | 26.74 | 132 | 0.60 |
| 170 | 9.18 | 33.96 | 2.52 | 174 | 400 | 6.61 | 34.29 | 0.74 | 26.94 | 113 | 0.72 |
| 203 | 8.62 | 34.02 | 2.38 | 160 | 500 | 5.90 | 34.35 | 0.67 | 27.07 | 100 | 0.83 |
| 254 | 7.98 | 34.11 | 1.81 | 144 | | | | | | | |
| 330 | 7.23 | 34.22 | 1.11 | 127 | | | | | | | |
| 429 | 6.38 | 34.31 | 0.60 | 108 | | | | | | | |
| 562b) | 5.73 | 34.36 | 0.72 | 97 | | | | | | | |
| **80.60** | BLACK DOUGLAS; April 10, 1958; 0555 GCT; 34°09'N, 121°09'W; sounding, 1250 fm; wind, 300°, force 7; weather, clear; sea, high; wire angle, 37°. | | | | | | | | | | |
| 0 | 13.84 | 33.33 | 5.88 | 302 | 0 | 13.84 | 33.33 | 5.88 | 24.95 | 302 | 0.00 |
| 8 | 13.82 | 33.35 | 5.98 | 300 | 10 | 13.82 | 33.35 | 5.97 | 24.97 | 300 | 0.03 |
| 28 | 13.82 | 33.33 | 5.88 | 302 | 20 | 13.82 | 33.34 | 5.90 | 24.97 | 300 | 0.06 |
| 36 | 13.80 | 33.34 | 6.12 | 300 | 30 | 13.82 | 33.34 | 5.95 | 24.97 | 300 | 0.09 |
| 47 | 12.91 | 33.49 | 5.05 | 272 | 50 | 12.78 | 33.49 | 5.03 | 25.29 | 269 | 0.15 |
| 56 | 12.56 | 33.49 | 5.00 | 265 | 75 | 11.23 | 33.65 | 4.35 | 25.70 | 230 | 0.21 |
| 63 | 12.08 | 33.57 | 4.87 | 251 | 100 | 10.08 | 33.72 | 3.32 | 25.95 | 206 | 0.26 |
| 78 | 11.07 | 33.67 | 4.01 | 226 | 150 | 9.28 | 33.99 | 2.38 | 26.30 | 173 | 0.36 |
| 92 | 10.30 | 33.69 | 3.46 | 211 | 200 | 8.84 | 34.11 | 2.04 | 26.46 | 158 | 0.44 |
| 102 | 10.05 | 33.74 | 3.28 | 204 | 250 | 8.10 | 34.13 | 1.64 | 26.60 | 145 | 0.52 |
| 120 | 9.81 | 33.81 | 3.07 | 194 | 300 | 7.45 | 34.16 | 1.28 | 26.72 | 134 | 0.59 |
| 146 | 9.34 | 33.97 | 2.41 | 175 | 400 | 6.72 | 34.24 | 1.02 | 26.88 | 118 | 0.72 |
| 173 | 9.15 | 34.04 | 2.23 | 167 | 500 | (5.99) | (34.29) | (0.53) | (27.01) | (106) | (0.84) |
| 214 | 8.66 | 34.12 | 1.94 | 154 | | | | | | | |
| 278 | 7.68 | 34.14 | 1.39 | 138 | | | | | | | |
| 366 | 6.94 | 34.22 | 1.10 | 122 | | | | | | | |
| 492 | 6.04 | 34.28 | 0.55 | 107 | | | | | | | |

a) Owing to difficulty in tripping Nansen bottles, five casts were made on this station; times of observation, wire angles and depths of casts were not recorded.

b) Possible pretrip; depth uncertain. Alternate depth, 537 meters.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; April 10, 1958; 1335 GCT; 33°47'N, 121°54'W; sounding, 2000 fm; wind, 300°, force 6; weather, overcast; sea, very rough; wire angle, 13°. | | | | | | | | | | | 80.70 |
| 0 | 13.91 | 33.20 | 6.09 | 312 | 0 | 13.91 | 33.20 | 6.09 | 24.84 | 312 | 0.00 |
| 10 | 13.89 | 33.19 | 5.98 | 312 | 10 | 13.89 | 33.19 | 5.98 | 24.84 | 312 | 0.03 |
| 29 | 13.94 | 33.24 | 5.94 | 310 | 20 | 13.90 | 33.22 | 5.96 | 24.86 | 310 | 0.06 |
| 43 | 13.85 | 33.33 | 5.87 | 302 | 30 | 13.94 | 33.26 | 5.93 | 24.88 | 308 | 0.09 |
| 52 | 12.73 | 33.40 | 5.20 | 275 | 50 | 13.40 | 33.37 | 5.56 | 25.08 | 290 | 0.15 |
| 62 | 11.58 | 33.37 | 4.85 | 256 | 75 | 10.20 | 33.34 | 4.82 | 25.64 | 236 | 0.22 |
| 71 | 10.86 | 33.40 | 4.60 | 242 | 100 | 9.50 | 33.55 | 4.07 | 25.92 | 209 | 0.28 |
| 89 | 9.83 | 33.46 | 4.42 | 221 | 150 | 8.77 | 33.78 | 3.27 | 26.23 | 180 | 0.37 |
| 102 | 9.48 | 33.57 | 4.04 | 207 | | | | | | | |
| 116 | 9.72 | 33.68 | 3.39 | 202 | | | | | | | |
| 138 | 9.03 | 33.74 | 3.32 | 188 | | | | | | | |
| 164 | 8.52 | 33.81 | 3.16 | 175 | | | | | | | |
| 200 | 8.56 | 33.82a) | 2.99 | | | | | | | | |
| 249b) | 7.94 | 34.11 | 1.73 | 144 | | | | | | | |
| 422b) | 6.24 | 34.18 | 1.08 | 116 | | | | | | | |
| 559b) | 5.36 | 34.29 | 0.43 | 98 | | | | | | | |
| BLACK DOUGLAS; April 10, 1958; 2020 GCT; 33°27'N, 122°35'W; sounding, 2200 fm; wind, 330°, force 6; weather, cloudy; sea, very rough; wire angle, 02°. | | | | | | | | | | | 80.80 |
| 0 | 14.23 | 33.22 | 5.81 | 317 | 0 | 14.23 | 33.22 | 5.81 | 24.79 | 317 | 0.00 |
| 10 | 14.22 | 33.27 | 5.90 | 314 | 10 | 14.22 | 33.27 | 5.90 | 24.82 | 314 | 0.03 |
| 29 | 14.22 | 33.22 | 5.95 | 317 | 20 | 14.22 | 33.23 | 5.93 | 24.80 | 316 | 0.06 |
| 59 | 14.21 | 33.24 | 5.85 | 315 | 30 | 14.22 | 33.22 | 5.95 | 24.79 | 317 | 0.09 |
| 252c) | 8.02 | 34.02 | 2.05 | 152 | 50 | 14.21 | 33.23 | 5.88 | 24.80 | 316 | 0.16 |
| 329 | 7.00 | 34.10 | 1.25 | 132 | | | | | | | |
| 429 | 6.00 | 34.16 | 0.85 | 115 | | | | | | | |
| 563 | 5.27 | 34.24 | 0.42 | 101 | | | | | | | |
| BLACK DOUGLAS; April 11, 1958; 0327 GCT; 33°06'N, 123°14'W; sounding, 2150 fm; wind, 340°, force 6; weather, clear; sea, very rough; wire angle, 18°. | | | | | | | | | | | 80.90 |
| 0 | 15.19 | 33.44 | 5.83 | 320 | 0 | 15.19 | 33.44 | 5.83 | 24.75 | 320 | 0.00 |
| 9 | 15.16 | 33.44 | 5.81 | 319 | 10 | 15.16 | 33.44 | 5.81 | 24.76 | 319 | 0.03 |
| 28 | 15.18 | 33.47 | 5.83 | 318 | 20 | 15.16 | 33.46 | 5.82 | 24.77 | 318 | 0.06 |
| 53 | 15.18 | 33.45 | 5.76 | 319 | 30 | 15.18 | 33.46 | 5.83 | 24.77 | 318 | 0.10 |
| 62 | 15.18 | 33.48 | 5.76 | 317 | 50 | 15.18 | 33.46 | 5.78 | 24.76 | 319 | 0.16 |
| 70 | 15.20 | 33.48 | 5.86 | 317 | 75 | 15.18 | 33.48 | 5.84 | 24.79 | 317 | 0.24 |
| 82 | 14.96 | 33.49 | 5.72 | 312 | 100 | 12.55 | 33.45 | 5.47 | 25.30 | 268 | 0.31 |
| 94 | 13.42 | 33.48 | 5.58 | 283 | 150 | 9.30 | 33.68 | 3.45 | 26.06 | 196 | 0.43 |
| 107 | 11.18 | 33.40 | 5.20 | 247 | 200 | 8.61 | 34.08 | 2.08 | 26.48 | 156 | 0.52 |
| 123 | 9.90 | 33.48 | 4.71 | 220 | 250 | 8.20 | 34.24 | 1.44 | 26.67 | 138 | 0.59 |
| 140 | 9.50 | 33.59 | 4.09 | 206 | 300 | 7.80 | 34.29 | 1.03 | 26.76 | 129 | 0.66 |
| 166 | 9.00 | 33.86 | 2.78 | 178 | 400 | 7.00 | 34.31 | 0.66 | 26.90 | 116 | 0.79 |
| 186 | 8.75 | 34.02 | 2.34 | 162 | | | | | | | |
| 233 | 8.38 | 34.19 | 1.63 | 144 | | | | | | | |
| 305 | 7.79 | 34.29 | 1.01 | 128 | | | | | | | |
| 312p | 7.68 | 34.27r | 0.98 | | | | | | | | |
| 412p | 6.91 | 34.31 | 0.62 | 115 | | | | | | | |

a) Possible evaporation; value does not fall on property curve.
b) Pretrip; depth too uncertain for interpolation.
c) Possible pretrip, 252 to 563 meters.

S10

CCOFI 5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **80.110** | BLACK DOUGLAS; April 6, 1958; 1708, 1725, 1758 GCT; 32°29'N, 124°34.5'W; sounding, 2500 fm; wind, 240°, force 6; weather, partly cloudy, sea, high; wire angle, 18°, 21°, 21°. | | | | | | | | | | |
| 0 | 14.55 | 33.21 | 5.52 | 324 | 0 | 14.55 | 33.21 | 5.52 | 24.72 | 324 | 0.00 |
| 9 | 14.54 | 33.22 | 5.74 | 323 | 10 | 14.54 | 33.22 | 5.75 | 24.72 | 323 | 0.03 |
| 28 | 14.54 | 33.22 | 5.78 | 323 | 20 | 14.54 | 33.22 | 5.77 | 24.72 | 323 | 0.06 |
| 56 | 14.53 | 33.22 | 5.80 | 323 | 30 | 14.54 | 33.22 | 5.78 | 24.72 | 323 | 0.10 |
| | | | | | 50 | 14.54 | 33.22 | 5.79 | 24.72 | 323 | 0.16 |
| 64 | 14.53 | 33.21 | 5.79 | 324 | 75 | 14.49 | 33.19 | 5.78 | 24.71 | 324 | 0.24 |
| 73 | 14.48 | 33.18 | 5.78 | 325 | 100 | 13.18 | 33.52 | 5.59 | 25.22 | 275 | 0.32 |
| 85 | 14.94 | 33.53 | 5.72 | 308 | 150 | 10.08 | 33.54 | 5.16 | 25.81 | 239 | 0.44 |
| 98 | 13.34 | 33.52 | 5.60 | 278 | 200 | (8.80) | (33.79) | (4.00) | (26.22) | (181) | (0.55) |
| | | | | | 250 | (8.03) | (33.90) | (3.48) | (26.42) | (162) | (0.63) |
| 109 | 12.36 | 33.52 | 5.48 | 259 | 300 | (7.25) | (33.97) | (2.74) | (26.59) | (145) | (0.71) |
| 148 | 10.15 | 33.53 | 5.21 | 220 | 400 | 6.52 | 34.06 | 1.70 | 26.76 | 129 | (0.86) |
| 196 | 8.84 | 33.78 | 4.03 | 182 | 500 | 5.94 | 34.17 | 0.98 | 26.93 | 113 | (0.98) |
| 321 | 6.92 | 34.00 | 2.36 | 138 | | | | | | | |
| 422 | 6.44 | 34.07 | 1.61 | 127 | | | | | | | |
| 551 | 5.42 | 34.28 | 0.51 | 100 | | | | | | | |
| **80.130** | BLACK DOUGLAS; April 6, 1958; 0412, 0433, 0449 GCT; 31°49'N, 125°56'W; sounding, 2400 fm; wind, 260°, force 4; weather, drizzle; sea, very rough; wire angle, 10°, 02°, 02°. | | | | | | | | | | |
| 0 | 15.32 | 33.36 | 5.33 | 329 | 0 | 15.32 | 33.36 | 5.33 | 24.66 | 329 | 0.00 |
| 10 | 15.33 | 33.42 | 5.34 | 324 | 10 | 15.33 | 33.42 | 5.34 | 24.71 | 324 | 0.03 |
| 29 | 15.34 | 33.39 | 5.47 | 327 | 20 | 15.33 | 33.40 | 5.40 | 24.69 | 326 | 0.06 |
| 58 | 15.44 | 33.66u | 5.37 | | 30 | 15.34 | 33.40 | 5.46 | 24.68 | 327 | 0.10 |
| 67 | 15.37 | 33.40 | 5.39 | 327 | 50 | 15.41 | 33.40 | 5.40 | 24.68 | 327 | 0.16 |
| 76 | 15.40 | 33.42 | 5.67 | 326 | 75 | 15.39 | 33.40 | 5.65 | 24.68 | 327 | 0.24 |
| 88 | 15.32 | 33.42 | 5.73 | 324 | 100 | 14.42 | 33.67 | 5.67 | 25.10 | 288 | 0.32 |
| 103 | 14.02 | 33.68 | 5.64 | 279 | 150 | 10.15 | 33.48 | 5.30 | 25.76 | 225 | 0.45 |
| | | | | | 200 | 8.96 | 33.80 | 3.92 | 26.20 | 182 | 0.56 |
| 119 | 13.06 | 33.53 | 5.60 | 272 | 250 | 8.26 | 34.02 | 2.40 | 26.48 | 156 | 0.64 |
| 136 | 11.39 | 33.51 | 5.52 | 243 | 300 | 7.60 | 34.06 | 2.00 | 26.62 | 143 | 0.72 |
| | | | | | 400 | 6.67 | 34.12 | 1.12 | 26.80 | 126 | 0.86 |
| 155 | 9.84 | 33.48 | 5.22 | 220 | 500 | 5.97 | 34.22 | 0.58 | 26.96 | 110 | 0.98 |
| 182 | 9.06 | 33.75 | 4.50 | 187 | | | | | | | |
| 203 | 8.93 | 33.84 | 3.23 | 178 | | | | | | | |
| 252 | 8.22 | 34.02 | 2.38 | 155 | | | | | | | |
| 328 | 7.27 | 34.07 | 1.84 | 138 | | | | | | | |
| 427 | 6.50 | 34.40u | 0.86 | | | | | | | | |
| 557 | 5.57 | 34.29 | 0.48 | 100 | | | | | | | |
| **80.145** | BLACK DOUGLAS; April 5, 1958; 1931, 1959 GCT; 31°18.5'N, 126°58'W; sounding, 2400 fm; wind, 250°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°, 22°. | | | | | | | | | | |
| 0 | 15.57 | 33.37 | | 333 | 0 | 15.57 | 33.37 | | 24.62 | 333 | 0.00 |
| 9 | 15.57 | 33.37 | | 333 | 10 | 15.56 | 33.37 | | 24.62 | 333 | 0.03 |
| 28 | 15.53 | 33.39 | | 331 | 20 | 15.54 | 33.37 | | 24.62 | 333 | 0.07 |
| 54 | 15.54 | 33.40 | | 331 | 30 | 15.53 | 33.40 | | 24.64 | 331 | 0.10 |
| 63 | 15.54 | 33.40 | | 331 | 50 | 15.54 | 33.40 | | 24.64 | 331 | 0.17 |
| 72 | 15.57 | 33.44 | | 328 | 75 | 15.57 | 33.45 | | 24.68 | 327 | 0.25 |
| 84 | 15.56 | 33.45 | | 327 | 100 | 13.92 | 33.40 | | 24.98 | 299 | 0.33 |
| 96 | 14.87 | 33.40 | | 317 | 150 | 10.36 | 33.45 | | 25.70 | 230 | 0.46 |
| | | | | | 200 | 8.73 | 33.82 | | 26.26 | 177 | 0.56 |
| 114 | 12.58 | 33.42 | | 270 | 250 | 7.99 | 33.97 | | 26.49 | 155 | 0.65 |
| 131 | 11.65 | 33.42 | | 254 | 300 | 7.42 | 34.03 | | 26.62 | 143 | 0.73 |
| 148 | 10.52 | 33.44 | | 233 | 400 | 6.68 | 34.15 | | 26.82 | 124 | 0.87 |
| 193 | 8.86 | 33.78 | | 182 | 500 | 5.98 | 34.21 | | 26.95 | 111 | 0.99 |
| 239 | 8.12 | 33.95 | | 158 | | | | | | | |
| 311 | 7.31 | 34.04 | | 140 | | | | | | | |
| 404 | 6.65 | 34.16 | | 123 | | | | | | | |
| 523 | 5.81 | 34.22 | | 108 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

PAOLINA-T; April 2, 1958; 0215 GCT; 34°14.5'N, 119°55'W; sounding, 310 fm; wind, 290°, force 4; weather, rain; sea, rough; wire angle, 00°. 82.47

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.82 | 33.45 | 6.03 | 312 | 0 | 14.82 | 33.45 | 6.03 | 24.84 | 312 | 0.00 |
| 10 | 14.84 | 33.41 | 5.79 | 315 | 10 | 14.84 | 33.41 | 5.79 | 24.81 | 315 | 0.03 |
| 30 | 13.93 | 33.53 | 5.44 | 288 | 20 | 14.69 | 33.42 | 5.65 | 24.84 | 312 | 0.06 |
| 40 | 13.06 | 33.58 | 5.83 | 268 | 30 | 13.93 | 33.53 | 5.44 | 25.09 | 288 | 0.09 |
| 50 | 12.40 | 33.61 | 4.57 | 254 | 50 | 12.40 | 33.61 | 4.57 | 25.45 | 254 | 0.15 |
| 60 | 11.83 | 33.62 | 4.09 | 242 | 75 | 10.82 | 33.69 | 3.28 | 25.81 | 220 | 0.21 |
| 70 | 11.20 | 33.65 | 3.49 | 229 | 100 | 10.10 | 33.80 | 2.78 | 26.02 | 200 | 0.26 |
| 84 | 10.37 | 33.76 | 3.01 | 207 | 150 | 9.53 | 34.02 | 2.15 | 26.29 | 174 | 0.35 |
| 99 | 10.14 | 33.80 | 2.81 | 201 | 200 | 8.94 | 34.13 | 1.58 | 26.47 | 157 | 0.44 |
| 113 | 9.93 | 33.89 | 2.67 | 190 | 250 | 8.47 | 34.16 | 1.44 | 26.56 | 148 | 0.52 |
| 137 | 9.70 | 33.99 | 2.41 | 179 | 300 | 8.00 | 34.21 | 0.95 | 26.68 | 137 | 0.59 |
| 166 | 9.32 | 34.04 | 1.91 | 170 | 400 | 7.28 | 34.23 | 0.75 | 26.80 | 126 | 0.72 |
| 199 | 8.97 | 34.13 | 1.61 | 158 | 500 | (6.57) | (34.28) | (0.26) | (26.94) | (112) | (0.85) |
| 248 | 8.50 | 34.16 | 1.46 | 149 | | | | | | | |
| 296 | 8.02 | 34.21 | 0.97 | 138 | | | | | | | |
| 398 | 7.30 | 34.23 | 0.76 | 127 | | | | | | | |
| 498 | 6.59 | 34.28 | 0.28 | 113 | | | | | | | |

PAOLINA-T; April 1, 1958; 2214 GCT; 34°09'N, 119°33.5'W; sounding, 130 fm; wind, 220°, force 3; weather, rain; sea, rough; wire angle, 03°. 83.43

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.96 | 33.42 | 5.81 | 317 | 0 | 14.96 | 33.42 | 5.81 | 24.79 | 317 | 0.00 |
| 9 | 14.96 | 33.45 | 5.88 | 315 | 10 | 14.96 | 33.46 | 5.87 | 24.82 | 314 | 0.03 |
| 29 | 14.82 | 33.52 | 5.75 | 307 | 20 | 14.94 | 33.49 | 5.83 | 24.85 | 311 | 0.06 |
| 49 | 13.10 | 33.56 | 4.99 | 270 | 30 | 14.82 | 33.52 | 5.75 | 24.89 | 307 | 0.09 |
| 74 | 11.50 | 33.58 | 4.08 | 240 | 50 | 13.05 | 33.56 | 4.95 | 25.29 | 269 | 0.15 |
| 97 | 10.76 | 33.66 | 3.57 | 220 | 75 | 11.47 | 33.58 | 4.07 | 25.60 | 239 | 0.21 |
| 122 | 10.22 | 33.77 | 3.18 | 204 | 100 | 10.66 | 33.67 | 3.53 | 25.82 | 218 | 0.27 |
| 160 | 9.13 | 34.09 | 1.99 | 163 | 150 | 9.35 | 34.03 | 2.25 | 26.32 | 171 | 0.37 |
| 199 | 8.85 | 34.17 | 1.58 | 153 | 200 | (8.84) | (34.18) | (1.56) | (26.52) | (152) | (0.46) |

PAOLINA-T; April 2, 1958; 0715 GCT; 33°52'N, 120°07.5'W; sounding, 71 fm; wind, 270°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°. 83.51

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.21 | 33.51 | 5.65 | 295 | 0 | 14.21 | 33.51 | 5.65 | 25.01 | 295 | 0.00 |
| 10 | 14.20 | 33.48 | 5.60 | 297 | 10 | 14.20 | 33.48 | 5.60 | 25.00 | 297 | 0.03 |
| 29 | 13.81 | 33.53 | 5.47 | 286 | 20 | 14.08 | 33.50 | 5.54 | 25.03 | 294 | 0.06 |
| 48 | 11.71 | 33.60 | 4.21 | 242 | 30 | 13.77 | 33.53 | 5.43 | 25.11 | 286 | 0.09 |
| 72 | 11.26 | 33.58 | 3.99 | 236 | 50 | 11.65 | 33.60 | 4.19 | 25.59 | 241 | 0.14 |
| 95 | 10.52 | 33.69 | 3.43 | 214 | 75 | 11.18 | 33.59 | 3.92 | 25.66 | 234 | 0.20 |
| 117 | 10.18 | 33.82 | 3.09 | 199 | 100 | 10.25 | 33.70 | 3.38 | 25.92 | 210 | 0.26 |

PAOLINA-T; April 2, 1958; 1042 GCT; 33°44.5'N, 120°23'W; sounding, 630 fm; wind, 270°, force 4; weather, partly cloudy; sea, high; wire angle, 10°. 83.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.12 | 33.50 | 5.70 | 294 | 0 | 14.12 | 33.50 | 5.70 | 25.03 | 294 | 0.00 |
| 10 | 14.12 | 33.51 | 5.93 | 294 | 10 | 14.12 | 33.51 | 5.93 | 25.03 | 294 | 0.03 |
| 30 | 13.41 | 33.51 | 5.42 | 280 | 20 | 14.03 | 33.51 | 5.91 | 25.05 | 292 | 0.06 |
| 44 | 12.37 | 33.58 | 4.52 | 255 | 30 | 13.41 | 33.51 | 5.42 | 25.18 | 280 | 0.09 |
| 54 | 11.30 | 33.66 | 3.84 | 230 | 50 | 11.78 | 33.64 | 4.07 | 25.60 | 240 | 0.14 |
| 63 | 10.40 | 33.56 | 3.82 | 222 | 75 | 10.20 | 33.69 | 3.28 | 25.92 | 210 | 0.20 |
| 73 | 10.25 | 33.68 | 3.32 | 211 | 100 | 9.74 | 33.82 | 2.80 | 26.09 | 193 | 0.25 |
| 92 | 9.66 | 33.74 | 3.04 | 197 | 150 | 9.40 | 33.99 | 2.23 | 26.28 | 175 | 0.34 |
| 107 | 9.80 | 33.87 | 2.60 | 190 | 200 | 9.01 | 34.09 | 1.93 | 26.43 | 161 | 0.42 |
| 122 | 9.64 | 33.92 | 2.47 | 184 | 250 | 8.47 | 34.20 | 1.32 | 26.60 | 145 | 0.50 |
| 145 | 9.44 | 33.97 | 2.27 | 177 | 300 | 8.02 | 34.24 | 1.12 | 26.69 | 136 | 0.58 |
| 174 | 9.18 | 34.06 | 2.09 | 166 | 400 | 7.12 | 34.26 | 0.84 | 26.83 | 123 | 0.71 |
| 212 | 8.93 | 34.11 | 1.80 | 158 | 500 | 6.03 | 34.29 | 0.65 | 27.01 | 106 | 0.83 |
| 264 | 8.30 | 34.22 | 1.25 | 141 | 600 | (5.44) | (34.33) | | (27.11) | (96) | (0.93) |
| 346 | 7.75 | 34.25 | 1.00 | 131 | | | | | | | |
| 448 | 6.50 | 34.26 | 0.74 | 114 | | | | | | | |
| 589 | 5.53 | 34.33 | 0.51 | 97 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **83.60** | PAOLINA-T; April 2, 1958; 1449 GCT; 33°35'N, 120°43'W; sounding, 800 fm; wind, 220°, force 4; weather, cloudy; sea, high; wire angle, 16°. | | | | | | | | | | |
| 0 | 14.48 | 33.30 | 5.65 | 316 | 0 | 14.48 | 33.30 | 5.65 | 24.80 | 316 | 0.00 |
| 10 | 14.48 | 33.33 | 5.76 | 314 | 10 | 14.48 | 33.33 | 5.76 | 24.82 | 314 | 0.03 |
| 29 | 14.47 | 33.31 | 5.80 | 315 | 20 | 14.48 | 33.31 | 5.78 | 24.81 | 315 | 0.06 |
| 43 | 14.24 | 33.38 | 5.88 | 305 | 30 | 14.47 | 33.32 | 5.81 | 24.81 | 315 | 0.09 |
| 52 | 13.93 | 33.38 | 5.88 | 299 | 50 | 14.00 | 33.38 | 5.88 | 24.96 | 300 | 0.16 |
| 61 | 13.60 | 33.41 | 5.66 | 291 | 75 | 12.23 | 33.39 | 5.20 | 25.31 | 268 | 0.23 |
| 70 | 12.86 | 33.40 | 5.27 | 277 | 100 | 10.22 | 33.38 | 4.84 | 25.67 | 233 | 0.29 |
| 87 | 10.68 | 33.33 | 5.03 | 244 | 150 | 9.22 | 33.71 | 3.31 | 26.09 | 193 | 0.40 |
| 100 | 10.22 | 33.38 | 4.84 | 233 | 200 | 8.54 | 33.97 | 2.24 | 26.41 | 163 | 0.49 |
| 113 | 9.69 | 33.44 | 4.53 | 220 | 250 | 8.04 | 34.08 | 1.70 | 26.57 | 148 | 0.57 |
| 135 | 9.46 | 33.62 | 3.71 | 203 | 300 | 7.47 | 34.09 | 1.53 | 26.65 | 140 | 0.64 |
| 162 | 9.03 | 33.79 | 3.01 | 184 | 400 | 6.83 | 34.22 | 1.09 | 26.85 | 121 | 0.78 |
| 196 | 8.58 | 33.96 | 2.30 | 164 | 500 | 6.27 | 34.30 | 0.68 | 26.99 | 108 | 0.90 |
| 245 | 8.12 | 34.08 | 1.73 | 149 | | | | | | | |
| 322 | 7.28 | 34.09 | 1.47 | 137 | | | | | | | |
| 418 | 6.74 | 34.25 | 1.01 | 118 | | | | | | | |
| 553 | 5.94 | 34.31 | 0.56 | 103 | | | | | | | |
| **87.35** | PAOLINA-T; April 6, 1958; 1405 GCT; 33°50'N, 118°37.5'W; sounding, 350 fm; wind, 140°, force 5; weather, cloudy; sea, very rough; wire angle, 17°. | | | | | | | | | | |
| 0 | 15.34 | 33.42 | 5.93 | 325 | 0 | 15.34 | 33.42 | 5.93 | 24.70 | 325 | 0.00 |
| 10 | 15.34 | 33.44 | 5.85 | 324 | 10 | 15.34 | 33.44 | 5.85 | 24.72 | 324 | 0.03 |
| 20 | 15.32 | 33.46 | 5.85 | 322 | 20 | 15.32 | 33.46 | 5.85 | 24.74 | 322 | 0.06 |
| 38 | 14.52 | 33.52 | 5.58 | 301 | 30 | 15.25 | 33.47 | 5.82 | 24.76 | 320 | 0.10 |
| 48 | 12.87 | 33.53 | 4.75 | 268 | 50 | 12.65 | 33.53 | 4.62 | 25.34 | 264 | 0.16 |
| 57 | 11.97 | 33.58 | 4.07 | 248 | 75 | 10.76 | 33.68 | 3.73 | 25.81 | 220 | 0.22 |
| 76 | 10.75 | 33.68 | 3.72 | 220 | 100 | 10.38 | 33.71 | 3.42 | 25.91 | 210 | 0.27 |
| 89 | 10.40 | 33.70 | 3.46 | 212 | 150 | 9.80 | 33.92 | 2.88 | 26.17 | 186 | 0.37 |
| 102 | 10.36 | 33.72 | - | 210 | 200 | 9.02 | 34.15 | 2.07 | 26.47 | 157 | 0.46 |
| 115 | 10.15 | 33.81 | 3.18 | 200 | 250 | 8.70 | 34.17 | 1.77 | 26.54 | 150 | 0.54 |
| 136 | 9.93 | 33.89 | 3.01 | 190 | 300 | 8.41 | 34.30 | 1.49 | 26.69 | 136 | 0.61 |
| 162 | 9.66 | 33.95 | 2.68 | 182 | 400 | 7.71 | 34.36 | 0.84 | 26.84 | 122 | 0.74 |
| 193 | 9.08 | 34.14 | 2.11 | 159 | 500 | 6.65 | 34.38 | 0.40 | 27.00 | 107 | 0.86 |
| 236 | 8.79 | 34.16 | 1.85 | 152 | | | | | | | |
| 309 | 8.38 | 34.31 | 1.44 | 135 | | | | | | | |
| 400 | 7.71 | 34.36 | 0.84 | 122 | | | | | | | |
| 523 | 6.42 | 34.38 | 0.34 | 104 | | | | | | | |
| **87.40** | PAOLINA-T; April 6, 1958; 1035 GCT; 33°40'N, 118°58.5'W; sounding, 480 fm; wind, 150°, force 4; weather, cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 14.79 | 33.54 | 5.24 | 305 | 0 | 14.79 | 33.54 | 5.24 | 24.92 | 305 | 0.00 |
| 10 | 14.68 | 33.49 | 5.07 | 306 | 10 | 14.68 | 33.49 | 5.07 | 24.90 | 306 | 0.03 |
| 30 | 13.70 | 33.58 | 4.89 | 280 | 20 | 14.63 | 33.49 | 5.06 | 24.92 | 305 | 0.06 |
| 40 | 12.96 | 33.53 | 4.16 | 270 | 30 | 13.70 | 33.58 | 4.89 | 25.18 | 280 | 0.09 |
| 50 | 11.76 | 33.49 | 3.99 | 251 | 50 | 11.76 | 33.49 | 3.99 | 25.48 | 251 | 0.14 |
| 60 | 11.50 | 33.53 | 4.21 | 243 | 75 | 10.69 | 33.58 | 4.00 | 25.73 | 227 | 0.20 |
| 69 | 11.10 | 33.56 | 4.03 | 234 | 100 | 10.14 | 33.70 | 3.40 | 25.94 | 208 | 0.26 |
| 83 | 10.48 | 33.67u | 3.75 | 223 | 150 | 9.61 | 34.00 | 2.52 | 26.25 | 178 | 0.35 |
| 97 | 10.22 | 33.66 | 3.45 | 212 | 200 | 8.98 | 34.15 | 1.79 | 26.48 | 156 | 0.44 |
| 111 | 9.94 | 33.78 | 3.20 | 199 | 250 | 8.58 | 34.23 | 1.45 | 26.60 | 145 | 0.52 |
| 135 | 9.77 | 33.97 | 2.78 | 182 | 300 | 8.20 | 34.28 | 1.23 | 26.70 | 135 | 0.59 |
| 163 | 9.46 | 34.02 | 2.32 | 174 | 400 | 7.30 | 34.31 | 0.72 | 26.85 | 121 | 0.72 |
| 196 | 9.02 | 34.14 | 1.87 | 158 | 500 | 6.55 | 34.35 | 0.60 | 26.99 | 108 | 0.84 |
| 244 | 8.63 | 34.22 | 1.49 | 146 | | | | | | | |
| 320 | 8.03 | 34.30 | 1.15 | 131 | | | | | | | |
| 416 | 7.20 | 34.31 | 0.67 | 119 | | | | | | | |
| 543 | 6.22 | 34.38 | 0.59 | 101 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; April 6, 1958; 0646 GCT; 33°30'N, 119°18'W; sounding, 920 fm; wind, 160, force 3; weather, partly cloudy; sea, high; wire angle, 03°. 87.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.40 | 33.51 | 5.82 | 299 | 0 | 14.40 | 33.51 | 5.82 | 24.98 | 299 | 0.00 |
| 10 | 14.38 | 33.52 | 5.83 | 298 | 10 | 14.38 | 33.52 | 5.83 | 24.99 | 298 | 0.03 |
| 30 | 14.22 | 33.51 | 5.76 | 295 | 20 | 14.32 | 33.52 | 5.81 | 25.00 | 296 | 0.06 |
| 40 | 14.12 | 33.51 | 5.74 | 293 | 30 | 14.22 | 33.51 | 5.76 | 25.02 | 295 | 0.09 |
| 50 | 13.37 | 33.58 | 5.27 | 274 | 50 | 13.37 | 33.58 | 5.27 | 25.24 | 274 | 0.15 |
| 59 | 11.98 | 33.55 | 4.45 | 250 | 75 | 10.37 | 33.60 | 3.95 | 25.82 | 218 | 0.21 |
| 69 | 11.26 | 33.58 | 4.11 | 235 | 100 | 9.80 | 33.69 | 3.24 | 25.98 | 203 | 0.27 |
| 83 | 10.22 | 33.68 | 3.30 | 211 | 150 | 9.40 | 33.91 | 2.54 | 26.22 | 180 | 0.36 |
| 97 | 9.86 | 33.68 | - | 205 | 200 | 8.79 | 34.17 | 1.66 | 26.52 | 152 | 0.44 |
| 112 | 9.70 | 33.73 | 3.22 | 199 | 250 | 8.45 | 34.22 | 1.34 | 26.62 | 143 | 0.52 |
| 137 | 9.48 | 33.86 | 2.72 | 186 | 300 | 7.95 | 34.25 | 1.07 | 26.72 | 134 | 0.59 |
| 165 | 9.22 | 33.98 | 2.39 | 173 | 400 | 7.23 | 34.36 | 0.70 | 26.91 | 116 | 0.72 |
| 198 | 8.81 | 34.14 | 1.74 | 155 | 500 | 6.55 | 34.36 | 0.43 | 27.00 | 107 | 0.83 |
| 246 | 8.54 | 34.22 | 1.37 | 145 | | | | | | | |
| 324 | 7.75 | 34.26 | 0.95 | 130 | | | | | | | |
| 421 | 7.10 | 34.38 | 0.62 | 113 | | | | | | | |
| 549 | 6.20 | 34.34 | 0.35 | 104 | | | | | | | |

PAOLINA-T; April 6, 1958; 0036 GCT; 33°10.5'N, 120°01'W; sounding, 640 fm; wind, 180°, force 3; weather, partly cloudy; sea, high; wire angle, 14°. 87.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.88 | 33.46 | 5.86 | 313 | 0 | 14.88 | 33.46 | 5.86 | 24.83 | 313 | 0.00 |
| 10 | 14.52 | 33.44 | 5.82 | 307 | 10 | 14.52 | 33.44 | 5.82 | 24.89 | 307 | 0.03 |
| 29 | 14.06 | 33.46 | 5.77 | 296 | 20 | 14.27 | 33.45 | 5.80 | 24.95 | 302 | 0.06 |
| 39 | 13.50 | 33.46 | 5.52 | 285 | 30 | 14.04 | 33.46 | 5.76 | 25.02 | 295 | 0.09 |
| 48 | 12.78 | 33.46 | 5.12 | 271 | 50 | 12.67 | 33.47 | 5.07 | 25.29 | 269 | 0.15 |
| 59 | 12.25 | 33.57 | 4.69 | 254 | 75 | 10.62 | 33.49 | 4.33 | 25.69 | 232 | 0.21 |
| 67 | 11.61 | 33.51 | 4.36 | 247 | 100 | 9.54 | 33.52 | 3.93 | 25.90 | 212 | 0.27 |
| 81 | 10.22 | 33.49 | 4.30 | 225 | 150 | 9.00 | 33.83 | 3.04 | 26.23 | 180 | 0.36 |
| 96 | 9.64 | 33.50 | 4.05 | 215 | 200 | 8.66 | 34.22 | 1.80 | 26.59 | 146 | 0.45 |
| 111 | 9.32 | 33.63 | 3.70 | 200 | 250 | 8.07 | 34.19 | 1.44 | 26.66 | 139 | 0.52 |
| 134 | 9.16 | 33.73 | 3.50 | 190 | 300 | 7.83 | 34.18 | 1.28 | 26.68 | 137 | 0.59 |
| 162 | 8.92 | 33.93 | 2.68 | 172 | 400 | 6.98 | 34.29 | 0.73 | 26.88 | 118 | 0.72 |
| 196 | 8.76 | 34.22 | 1.88 | 148 | 500 | 6.02 | 34.36 | 0.47 | 27.06 | 101 | 0.84 |
| 243 | 8.16 | 34.20 | 1.50 | 140 | | | | | | | |
| 320 | 7.67 | 34.18 | 1.19 | 135 | | | | | | | |
| 415 | 6.83 | 34.31 | 0.67 | 114 | | | | | | | |
| 540 | 5.76 | 34.36 | 0.44 | 97 | | | | | | | |

PAOLINA-T; April 5, 1958; 2105, 2120 GCT; 33°02'N, 120°22.5'W; sounding, 2100 fm; wind, 300°, force 3; weather, partly cloudy; sea, high; wire angle, 00°, 00°. 87.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.42 | 33.53 | 5.84 | 319 | 0 | 15.42 | 33.53 | 5.84 | 24.77 | 319 | 0.00 |
| 10 | 14.98 | 33.48 | 5.81 | 313 | 10 | 14.98 | 33.48 | 5.81 | 24.83 | 313 | 0.03 |
| 30 | 14.94 | 33.55 | 5.76 | 307 | 20 | 14.96 | 33.52 | 5.79 | 24.86 | 310 | 0.06 |
| 60 | 14.42 | 33.51 | 5.74 | 300 | 30 | 14.94 | 33.55 | 5.76 | 24.89 | 307 | 0.09 |
| 70 | 13.70 | 33.49 | 5.50 | 287 | 50 | 14.86 | 33.55 | 5.74 | 24.90 | 306 | 0.15 |
| 80 | 12.09 | 33.48 | 4.81 | 258 | 75 | 12.62 | 33.48 | 5.02 | 25.32 | 266 | 0.23 |
| | | | | | 100 | 11.22 | 33.53 | 4.51 | 25.62 | 238 | 0.29 |
| 95 | 11.46 | 33.48 | 4.60 | 246 | 150 | 9.50 | 33.76 | 3.22 | 26.08 | 194 | 0.40 |
| 110 | 10.72 | 33.62 | 4.34 | 224 | 200 | 8.72 | 33.97 | 2.61 | 26.38 | 166 | 0.49 |
| 125 | 10.26 | 33.62 | 3.75 | 216 | 250 | 8.26 | 34.25 | 1.73 | 26.66 | 139 | 0.57 |
| 144 | 9.93 | 33.77 | 3.16 | 199 | 300 | 7.63 | 34.29 | 1.38 | 26.80 | 126 | 0.64 |
| 163 | 9.42 | 33.92 | 2.78 | 180 | 400 | 6.92 | 34.27 | 0.95 | 26.88 | 118 | 0.76 |
| 192 | 8.71 | 33.93 | 2.68 | 168 | 500 | 6.30 | (34.24) | | (26.94) | (113) | (0.88) |
| 216 | 8.78 | 34.06 | 2.10 | 160 | 600 | (5.65) | | | | | |
| 268 | 8.02 | 34.28 | 1.61 | 133 | | | | | | | |
| 350 | 7.23 | 34.29 | 1.15 | 121 | | | | | | | |
| 456 | 6.57 | 34.25 | 0.66 | 115 | | | | | | | |
| 593 | 5.67 | - | - | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

87.70 PAOLINA-T; April 5, 1958; 1458 GCT; 32°39.5'N, 121°03'W; sounding, 2100 fm; wind, 300°, force 3; weather, partly cloudy; sea, very high; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.38 | 33.58 | 5.57 | 314 | 0 | 15.38 | 33.58 | 5.57 | 24.82 | 314 | 0.00 |
| 10 | 15.38 | 33.58 | 5.56 | 314 | 10 | 15.38 | 33.58 | 5.56 | 24.82 | 314 | 0.03 |
| 30 | 15.38 | 33.58 | 5.48 | 314 | 20 | 15.38 | 33.58 | 5.52 | 24.82 | 314 | 0.06 |
| 60 | 15.32 | 33.59 | 5.50 | 312 | 30 | 15.38 | 33.58 | 5.48 | 24.82 | 314 | 0.09 |
| 70 | 14.54 | 33.54 | 5.41 | 300 | 50 | 15.36 | 33.59 | 5.48 | 24.83 | 313 | 0.16 |
| 80 | 13.62 | 33.52 | 5.43 | 283 | 75 | 14.05 | 33.53 | 5.41 | 25.06 | 291 | 0.23 |
| 95 | 12.10 | 33.45 | 5.06 | 260 | 100 | 11.60 | 33.45 | 4.92 | 25.48 | 251 | 0.30 |
| 110 | 10.75 | 33.48 | 4.69 | 234 | 150 | 9.50 | 33.67 | 3.72 | 26.02 | 200 | 0.42 |
| 124 | 10.35 | 33.53 | - | 224 | 200 | 8.53 | 33.95 | 2.87 | 26.39 | 165 | 0.51 |
| 144 | 9.66 | 33.62 | 3.87 | 206 | 250 | 7.86 | 34.05 | 2.37 | 26.57 | 147 | 0.59 |
| 163 | 9.16 | 33.77 | 3.46 | 187 | 300 | 7.22 | 34.11 | 1.82 | 26.70 | 135 | 0.66 |
| 191 | 8.66 | 33.90 | 2.95 | 170 | 400 | 6.26 | 34.22 | 0.64 | 26.93 | 114 | 0.79 |
| 214 | 8.30 | 34.00 | 2.71 | 158 | 500 | 5.84 | 34.29 | 0.56 | 27.03 | 104 | 0.90 |
| 266 | 7.63 | 34.07 | 2.23 | 143 | 600 | (5.45) | (34.35) | (0.63) | (27.13) | (94) | (1.01) |
| 347 | 6.71 | 34.16 | 1.11 | 124 | | | | | | | |
| 452 | 6.03 | 34.25 | 0.56 | 109 | | | | | | | |
| 591 | 5.52 | 34.34 | 0.62 | 96 | | | | | | | |

90.28 PAOLINA-T; April 8, 1958; 0039 GCT; 33°28.5'N, 117°47'W; sounding, 210 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.89 | 32.84 | 5.73 | 378 | 0 | 15.89 | 32.84 | 5.73 | 24.14 | 378 | 0.00 |
| 10 | 15.95 | 33.19 | 5.62 | 354 | 10 | 15.95 | 33.19 | 5.62 | 24.40 | 354 | 0.04 |
| 30 | 15.18 | 33.56 | 5.34 | 311 | 20 | 15.88 | 33.24 | 5.58 | 24.45 | 349 | 0.07 |
| 51 | 13.04 | 33.64 | 4.49 | 264 | 30 | 15.18 | 33.56 | 5.34 | 24.85 | 311 | 0.10 |
| 74 | 11.05 | 33.68 | 3.73 | 224 | 50 | 13.12 | 33.64 | 4.50 | 25.34 | 264 | 0.16 |
| 98 | 10.30 | 33.85 | 3.12 | 199 | 75 | 11.00 | 33.69 | 3.69 | 25.78 | 223 | 0.22 |
| 122 | 9.83 | 33.95 | 2.66 | 185 | 100 | 10.23 | 33.85 | 3.03 | 26.04 | 198 | 0.28 |
| 161 | 9.16 | 34.09 | 2.18 | 163 | 150 | 9.34 | 34.06 | 2.32 | 26.35 | 168 | 0.37 |
| 201 | 8.92 | 34.16 | 1.86 | 154 | 200 | 8.92 | 34.16 | 1.87 | 26.49 | 155 | 0.45 |

90.30 PAOLINA-T; April 8, 1958; 0247 GCT; 33°24.5'N, 117°55'W; sounding, 350 fm; wind, 300°, force 5; weather, partly cloudy; sea, very rough; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.69 | 33.43 | 5.19 | 332 | 0 | 15.69 | 33.43 | 5.19 | 24.63 | 332 | 0.00 |
| 9 | 15.70 | 33.38 | 5.51 | 336 | 10 | 15.70 | 33.38 | 5.51 | 24.59 | 336 | 0.03 |
| 27 | 15.46 | 33.55 | 5.51 | 318 | 20 | 15.62 | 33.40 | 5.51 | 24.62 | 333 | 0.07 |
| 36 | 14.11 | 33.55 | 5.19 | 290 | 30 | 14.82 | 33.55 | 5.35 | 24.92 | 305 | 0.10 |
| 45 | 13.20 | 33.57 | 5.09 | 271 | 50 | 12.45 | 33.57 | 4.77 | 25.42 | 257 | 0.15 |
| 54 | 12.08 | 33.57 | 4.52 | 251 | 75 | 11.02 | 33.59 | 4.08 | 25.70 | 230 | 0.22 |
| 63 | 11.66 | 33.58 | 4.31 | 243 | 100 | 10.24 | 33.76 | 3.34 | 25.97 | 204 | 0.27 |
| 76 | 10.96 | 33.59 | 4.05 | 230 | 150 | 9.07 | 33.96 | 2.56 | 26.32 | 172 | 0.37 |
| 91 | 10.46 | 33.69 | 3.54 | 214 | 200 | 8.73 | 34.10 | 1.85 | 26.48 | 156 | 0.45 |
| 104 | 10.18 | 33.77 | 3.26 | 203 | 250 | 8.43 | 34.19 | 1.67 | 26.60 | 145 | 0.53 |
| 126 | 9.64 | 33.86 | - | 188 | 300 | 8.17 | 34.24 | 1.31 | 26.68 | 137 | 0.60 |
| 152 | 9.04 | 33.97 | 2.51 | 171 | 400 | 7.26 | 34.27 | 0.79 | 26.83 | 123 | 0.73 |
| 182 | 8.82 | 34.06 | 1.93 | 161 | 500 | 6.43 | 34.30 | 0.44 | 26.97 | 110 | 0.85 |
| 226 | 8.54 | 34.16 | 1.74 | 149 | | | | | | | |
| 298 | 8.18 | 34.24 | 1.32 | 138 | | | | | | | |
| 389 | 7.34 | 34.27 | 0.85 | 124 | | | | | | | |
| 511 | 6.38 | 34.31 | 0.40 | 108 | | | | | | | |

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5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| PAOLINA-T; April 8, 1958; 1805 GCT; 33°10.5'N, 118°23.5'W; sounding, 650 fm; wind, 270°, force 4; weather, clear; sea, very rough; wire angle, 12°. | | | | | | | | | | | 90.37 |
| 0 | 15.22 | 33.53 | 5.64 | 315 | 0 | 15.22 | 33.53 | 5.64 | 24.81 | 315 | 0.00 |
| 10 | 15.08 | 33.50 | 5.44 | 314 | 10 | 15.08 | 33.50 | 5.44 | 24.82 | 314 | 0.03 |
| 30 | 15.04 | 33.52 | 5.67 | 312 | 20 | 15.06 | 33.51 | 5.53 | 24.84 | 312 | 0.06 |
| 39 | 14.92 | 33.53 | 5.41 | 308 | 30 | 15.04 | 33.52 | 5.67 | 24.84 | 312 | 0.09 |
| 49 | 13.70 | 33.54 | 4.95 | 283 | 50 | 13.60 | 33.54 | 4.93 | 25.16 | 282 | 0.15 |
| 58 | 13.02 | 33.53 | 4.74 | 271 | 75 | 12.28 | 33.52 | 4.53 | 25.41 | 258 | 0.22 |
| 68 | 12.64 | 33.52 | 4.47 | 265 | 100 | 10.60 | 33.56 | 4.60 | 25.74 | 226 | 0.28 |
| 83 | 10.83 | 33.55 | 4.79 | 230 | 150 | 9.67 | 33.91 | 2.67 | 26.17 | 186 | 0.39 |
| 97 | 10.64 | 33.55 | - | 227 | 200 | 8.86 | 34.14 | 1.90 | 26.49 | 155 | 0.47 |
| 111 | 10.34 | 33.68 | 3.92 | 212 | 250 | 8.34 | 34.20 | 1.59 | 26.62 | 143 | 0.55 |
| 136 | 9.88 | 33.81 | 2.92 | 196 | 300 | 8.02 | 34.25 | 1.28 | 26.70 | 135 | 0.62 |
| 163 | 9.47 | 34.01 | 2.41 | 174 | 400 | 7.34 | 34.26 | 0.77 | 26.81 | 125 | 0.75 |
| 196 | 8.92 | 34.14 | 1.92 | 156 | 500 | 6.62 | 34.30 | 0.46 | 26.95 | 112 | 0.88 |
| 244 | 8.37 | 34.19 | 1.61 | 144 | | | | | | | |
| 319 | 7.90 | 34.27 | 1.12 | 132 | | | | | | | |
| 415 | 7.24 | 34.26 | 0.74 | 124 | | | | | | | |
| 541 | 6.18 | 34.34 | 0.31 | 104 | | | | | | | |
| PAOLINA-T; April 8, 1958; 2338 GCT; 32°55'N, 118°56.5'W; sounding, 935 fm; wind, 290°, force 6; weather, clear; sea, high; wire angle, 28°. | | | | | | | | | | | 90.45 |
| 0 | 14.52 | 33.50 | 5.89 | 302 | 0 | 14.52 | 33.50 | 5.89 | 24.95 | 302 | 0.00 |
| 9 | 14.48 | 33.46 | 5.88 | 304 | 10 | 14.47 | 33.46 | 5.87 | 24.93 | 304 | 0.03 |
| 27 | 14.30 | 33.50 | 5.80 | 298 | 20 | 14.37 | 33.49 | 5.86 | 24.97 | 300 | 0.06 |
| 40 | 14.26 | 33.48 | 5.63 | 298 | 30 | 14.26 | 33.49 | 5.71 | 24.99 | 298 | 0.09 |
| 48 | 14.28 | 33.48 | 5.48 | 299 | 50 | 14.24 | 33.49 | 5.43 | 24.99 | 298 | 0.15 |
| 56 | 13.85 | 33.51 | 5.40 | 288 | 75 | 11.85 | 33.52 | 4.44 | 25.49 | 250 | 0.22 |
| 64 | 12.72 | 33.51 | 4.69 | 266 | 100 | 10.22 | 33.57 | 3.99 | 25.82 | 219 | 0.28 |
| 80 | 11.46 | 33.53 | 4.35 | 242 | 150 | 9.30 | 33.81 | 3.00 | 26.16 | 186 | 0.38 |
| 91 | 10.60 | 33.54 | 4.22 | 227 | 200 | 9.12 | 34.04 | 2.10 | 26.36 | 167 | 0.47 |
| 104 | 10.08 | 33.58 | 3.87 | 216 | 250 | 8.50 | 34.14 | 1.65 | 26.54 | 150 | 0.55 |
| 123 | 9.56 | 33.68 | 3.54 | 200 | 300 | 7.98 | 34.25 | 1.14 | 26.71 | 134 | 0.62 |
| 146 | 9.25 | 33.78 | 3.20 | 188 | 400 | 7.26 | 34.29 | 0.57 | 26.84 | 122 | 0.76 |
| 177 | 9.42 | 33.97 | 2.44 | 177 | 500 | 6.75 | 34.31 | 0.51 | 26.94 | 113 | 0.88 |
| 222 | 8.84 | 34.07 | 1.92 | 160 | | | | | | | |
| 291 | 8.07 | 34.24 | 1.25 | 136 | | | | | | | |
| 380 | 7.34 | 34.28 | 0.60 | 123 | | | | | | | |
| 510 | 6.68 | 34.32 | 0.50 | 112 | | | | | | | |
| PAOLINA-T; April 12, 1958; 0315, 0334 GCT; 30°06'N, 124°38'W; sounding, 2000 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 12°, 12°. | | | | | | | | | | | 90.130 |
| 0 | 16.94 | 33.82 | 5.15 | 330 | 0 | 16.94 | 33.82 | 5.15 | 24.65 | 330 | 0.00 |
| 10 | 16.92 | 33.77 | 4.97 | 334 | 10 | 16.92 | 33.77 | 4.97 | 24.61 | 334 | 0.03 |
| 29 | 16.86 | 33.78 | 5.10 | 331 | 20 | 16.89 | 33.77 | 5.03 | 24.63 | 332 | 0.07 |
| 59 | 16.86 | 33.82 | 5.02 | 329 | 30 | 16.86 | 33.78 | 5.09 | 24.64 | 331 | 0.10 |
| 68 | 16.86 | 33.85 | 5.03 | 326 | 50 | 16.86 | 33.80 | 5.04 | 24.65 | 330 | 0.16 |
| 78 | 16.88 | 33.84 | 5.02 | 327 | 75 | 16.87 | 33.85 | 5.02 | 24.68 | 327 | 0.25 |
| | | | | | 100 | 16.85 | 33.92 | 5.06 | 24.74 | 322 | 0.33 |
| 93 | 16.94 | 33.84 | 5.07 | 329 | 150 | 11.70 | 33.52 | 4.98 | 25.52 | 248 | 0.47 |
| 108 | 16.63 | 34.06 | 5.05 | 305 | 200 | 9.60 | 33.70 | 4.06 | 26.03 | 199 | 0.59 |
| 122 | 14.50 | 33.75 | 5.33 | 283 | 250 | 8.41 | 33.91 | 3.20 | 26.38 | 165 | 0.68 |
| 142 | 12.42 | 33.59 | 5.03 | 256 | 300 | 7.60 | 34.00 | 2.47 | 26.58 | 147 | 0.76 |
| 161 | 10.70 | 33.44 | 4.84 | 236 | 400 | 6.43 | 34.12 | 1.24 | 26.82 | 124 | 0.90 |
| 190 | 9.58 | 33.59 | 4.30 | 206 | 500 | 5.80 | 34.21 | 0.60 | 26.98 | 109 | 1.02 |
| 213 | 9.16 | 33.72 | 3.95 | 191 | 600 | (5.30) | (34.30) | (0.32) | (27.12) | (96) | (1.13) |
| 266 | 8.16 | 33.96 | 2.88 | 158 | | | | | | | |
| 347 | 6.98 | 34.06 | 1.85 | 134 | | | | | | | |
| 454 | 6.03 | 34.17 | 0.82 | 115 | | | | | | | |
| 592 | 5.36 | 34.29 | 0.33 | 98 | | | | | | | |



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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

90.145 PAOLINA-T; April 12, 1958; 1305 GCT; 29°36'N, 125°38'W; sounding, 2360 fm; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.47 | 34.06 | 5.19 | 325 | 0 | 17.47 | 34.06 | 5.19 | 24.70 | 325 | 0.00 |
| 10 | 17.46 | 34.04 | 5.40 | 326 | 10 | 17.46 | 34.04 | 5.40 | 24.69 | 326 | 0.03 |
| 30 | 17.46 | 34.04 | 5.39 | 326 | 20 | 17.46 | 34.04 | 5.39 | 24.69 | 326 | 0.06 |
| 55 | 17.50 | 34.06 | 5.45 | 327 | 30 | 17.46 | 34.04 | 5.39 | 24.69 | 326 | 0.10 |
| 64 | 17.50 | 34.08 | 5.34 | 326 | 50 | 17.49 | 34.06 | 5.43 | 24.69 | 326 | 0.16 |
| 74 | 17.49 | 34.09 | 5.33 | 323 | 75 | 17.49 | 34.09 | 5.32 | 24.72 | 324 | 0.24 |
| 84 | 17.50 | 34.06 | 5.26 | 327 | 100 | 17.51 | 34.06 | 5.34 | 24.68 | 327 | 0.33 |
| 98 | 17.50 | 34.06 | 5.33 | 327 | 150 | 14.49 | 33.90 | 5.15 | 25.26 | 272 | 0.48 |
| 113 | 17.53 | 34.05 | - | 327 | 200 | 11.13 | 33.66 | 4.80 | 25.73 | 227 | 0.61 |
| 131 | 16.61 | 34.04 | 5.46 | 307 | 250 | 9.55 | 33.78 | 4.09 | 26.10 | 192 | 0.72 |
| 150 | 14.49 | 33.90 | 5.15 | 272 | 300 | 8.55 | 34.02 | 3.18 | 26.44 | 160 | 0.81 |
| 174 | 12.46 | 33.69 | 5.03 | 249 | 400 | 6.90 | 34.14 | 1.62 | 26.78 | 128 | 0.96 |
| 197 | 11.30 | 33.66 | 4.86 | 230 | 500 | 5.91 | 34.18 | 1.03 | 26.94 | 113 | 1.09 |
| 244 | 9.64 | 33.76 | 4.16 | 196 | | | | | | | |
| 320 | 8.17 | 34.10 | 2.71 | 148 | | | | | | | |
| 417 | 6.70 | 34.14 | 1.48 | 125 | | | | | | | |
| 544 | 5.52 | 34.20 | 0.80 | 106 | | | | | | | |

93.27 PAOLINA-T; April 19, 1958; 0014 GCT; 32°56'N, 117°20'W; sounding, 227 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.80 | 33.37 | 5.66 | 383 | 0 | 17.80 | 33.37 | 5.66 | 24.10 | 383 | 0.00 |
| 11 | 17.30 | 33.41 | 5.68 | 368 | 10 | 17.35 | 33.41 | 5.67 | 24.24 | 369 | 0.04 |
| 30 | 14.50 | 33.55 | 5.20 | 298 | 20 | 15.70 | 33.51 | 5.54 | 24.70 | 325 | 0.07 |
| 50 | 13.36 | 33.55 | 5.10 | 276 | 30 | 14.50 | 33.55 | 5.20 | 24.99 | 298 | 0.10 |
| 75 | 11.34 | 33.58 | 4.16 | 236 | 50 | 13.36 | 33.55 | 5.10 | 25.22 | 276 | 0.16 |
| 100 | 10.67 | 33.68 | 3.66 | 218 | 75 | 11.34 | 33.58 | 4.16 | 25.64 | 236 | 0.22 |
| 123 | 9.64 | 33.81 | 3.26 | 192 | 100 | 10.67 | 33.68 | 3.66 | 25.83 | 218 | 0.28 |
| 162 | 9.01 | 33.84 | 3.15 | 180 | 150 | 9.10 | 33.83 | 3.17 | 26.21 | 182 | 0.38 |
| 202 | 8.78 | 34.02 | 2.48 | 163 | 200 | 8.80 | 34.02 | 2.48 | 26.40 | 164 | 0.47 |
| 250 | 8.32 | 34.07 | 2.14 | 152 | 250 | 8.32 | 34.07 | 2.14 | 26.52 | 152 | 0.55 |
| 299 | 8.26 | 34.23 | 1.31 | 140 | 300 | (8.25) | (34.23) | (1.25) | (26.66) | (140) | (0.63) |

93.30 PAOLINA-T; April 19, 1958; 0251 GCT; 32°50'N, 117°31.5'W; sounding, 430 fm; wind, calm; weather, overcast; sea, rough; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.74 | 33.49 | 5.62 | 373 | 0 | 17.74 | 33.49 | 5.62 | 24.20 | 373 | 0.00 |
| 10 | 16.63 | 33.48 | 5.41 | 349 | 10 | 16.63 | 33.48 | 5.41 | 24.45 | 349 | 0.04 |
| 30 | 12.94 | 33.52 | 5.10 | 270 | 20 | 14.25 | 33.51 | 5.17 | 25.01 | 296 | 0.07 |
| 40 | 12.36 | 33.51 | 5.03 | 260 | 30 | 12.94 | 33.52 | 5.10 | 25.28 | 270 | 0.10 |
| 50 | 11.52 | 33.51 | 4.45 | 245 | 50 | 11.52 | 33.51 | 4.45 | 25.54 | 245 | 0.15 |
| 60 | 11.19 | 33.55 | 4.13 | 236 | 75 | 10.35 | 33.60 | 3.75 | 25.83 | 218 | 0.20 |
| 69 | 10.48 | 33.58 | 3.78 | 222 | 100 | 10.05 | 33.70 | 3.53 | 25.94 | 207 | 0.26 |
| 84 | 10.22 | 33.65 | 3.70 | 213 | 150 | 9.40 | 33.96 | 2.75 | 26.26 | 177 | 0.36 |
| 98 | 10.10 | 33.69 | 3.52 | 208 | 200 | 9.04 | 34.12 | 2.13 | 26.45 | 159 | 0.44 |
| 113 | 9.64 | 33.71 | 3.61 | 199 | 250 | 8.61 | 34.16 | 1.80 | 26.56 | 149 | 0.52 |
| 137 | 9.34 | 33.86 | 3.08 | 183 | 300 | 8.22 | 34.22 | 1.36 | 26.65 | 140 | 0.60 |
| 166 | 9.10 | 34.01 | 2.63 | 169 | 400 | 7.27 | 34.26 | 0.73 | 26.82 | 124 | 0.73 |
| 199 | 9.04 | 34.12 | 2.14 | 160 | 500 | 6.40 | 34.30 | 0.49 | 26.97 | 108 | 0.86 |
| 247 | 8.62 | 34.16 | 1.87 | 150 | | | | | | | |
| 324 | 8.01 | 34.25 | 1.12 | 135 | | | | | | | |
| 422 | 7.04 | 34.26 | 0.67 | 121 | | | | | | | |
| 550 | 6.10 | 34.33 | 0.43 | 104 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| PAOLINA-T; April 19, 1958; 0930 GCT; 32°30'N, 118°12'W; sounding, 920 fm; wind, 270°, force 2; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | | 93.40 |
| 0 | 16.50 | 33.60 | 5.55 | 337 | 0 | 16.50 | 33.60 | 5.55 | 24.58 | 337 | 0.00 |
| 10 | 16.49 | 33.61 | 5.61 | 336 | 10 | 16.49 | 33.61 | 5.61 | 24.59 | 336 | 0.03 |
| 30 | 15.73 | 33.58 | 5.65 | 322 | 20 | 16.10 | 33.59 | 5.61 | 24.68 | 327 | 0.07 |
| 40 | 15.40 | 33.56 | 5.77 | 316 | 30 | 15.73 | 33.58 | 5.65 | 24.74 | 322 | 0.10 |
| 49 | 14.62 | 33.53 | 5.60 | 302 | 50 | 14.55 | 33.53 | 5.56 | 24.95 | 302 | 0.16 |
| 59 | 13.70 | 33.55 | 5.04 | 282 | 75 | 12.23 | 33.52 | 4.77 | 25.41 | 258 | 0.23 |
| 68 | 12.85 | 33.55 | 4.91 | 266 | 100 | 10.78 | 33.62 | 3.94 | 25.76 | 225 | 0.29 |
| 82 | 11.77 | 33.49 | 4.59 | 251 | 150 | 9.62 | 33.83 | 2.88 | 26.13 | 190 | 0.40 |
| 96 | 10.98 | 33.58 | 4.10 | 230 | 200 | 9.05 | 33.98 | 1.41 | 26.33 | 170 | 0.49 |
| 111 | 10.40 | 33.69 | 3.54 | 213 | 250 | 8.30 | 34.12 | 1.78 | 26.56 | 149 | 0.57 |
| 134 | 9.87 | 33.78 | 3.11 | 198 | 300 | 7.74 | 34.17 | 1.03 | 26.68 | 137 | 0.64 |
| 163 | 9.45 | 33.88 | 2.72 | 184 | 400 | 7.00 | 34.28 | 0.21 | 26.87 | 119 | 0.78 |
| 195 | 9.12 | 33.96 | 2.47 | 173 | 500 | 6.25 | 34.32 | | 27.01 | 106 | 0.89 |
| 242 | 8.40 | 34.11 | 1.88 | 150 | | | | | | | |
| 319 | 7.56 | 34.19 | 0.56 | 133 | | | | | | | |
| 413 | 6.92 | 34.29 | 0.19 | 117 | | | | | | | |
| 538 | 5.93 | 34.33 | - | 101 | | | | | | | |
| PAOLINA-T; April 19, 1958; 1657 GCT; 32°10'N, 118°53'W; sounding, 820 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 07°. | | | | | | | | | | | 93.50 |
| 0 | 16.00 | 33.55 | 5.07 | 330 | 0 | 16.00 | 33.55 | 5.07 | 24.65 | 330 | 0.00 |
| 10 | 15.95 | 33.53 | 4.01 | 330 | 10 | 15.95 | 33.53 | 4.01 | 24.65 | 330 | 0.03 |
| 30 | 15.60 | 33.51 | 4.93 | 324 | 20 | 15.76 | 33.52 | 4.45 | 24.68 | 327 | 0.07 |
| 40 | 15.43 | 33.47 | 5.65 | 323 | 30 | 15.60 | 33.51 | 4.93 | 24.72 | 324 | 0.10 |
| 50 | 15.10 | 33.49 | 5.74 | 315 | 50 | 15.10 | 33.49 | 5.74 | 24.81 | 315 | 0.16 |
| 60 | 14.38 | 33.49 | 5.48 | 300 | 75 | 13.23 | 33.50 | 5.03 | 25.20 | 277 | 0.24 |
| 70 | 13.65 | 33.50 | 5.18 | 285 | 100 | 11.65 | 33.42 | 4.87 | 25.45 | 254 | 0.30 |
| 84 | 12.54 | 33.49 | 4.89 | 265 | 150 | 9.52 | 33.80 | 2.87 | 26.12 | 190 | 0.42 |
| 99 | 11.70 | 33.42 | 4.89 | 255 | 200 | 8.78 | 34.04 | 2.32 | 26.43 | 161 | 0.50 |
| 113 | 10.84 | 33.51 | 4.06 | 234 | 250 | 8.08 | 34.14 | 1.83 | 26.61 | 144 | 0.58 |
| 137 | 9.82 | 33.68 | 3.25 | 204 | 300 | 7.80 | 34.22 | 1.22 | 26.71 | 134 | 0.66 |
| 166 | 9.21 | 33.91 | 2.58 | 178 | 400 | 7.04 | 34.26 | 0.62 | 26.85 | 121 | 0.79 |
| 199 | 8.80 | 34.04 | 2.33 | 162 | 500 | 6.28 | 34.28 | 0.42 | 26.98 | 109 | 0.91 |
| 247 | 8.14 | 34.13 | 1.88 | 145 | | | | | | | |
| 324 | 7.66 | 34.24 | 1.05 | 131 | | | | | | | |
| 421 | 6.86 | 34.27 | 0.55 | 118 | | | | | | | |
| 549 | 5.98 | 34.29 | 0.39 | 105 | | | | | | | |
| PAOLINA-T; April 20, 1958; 0020 GCT; 31°50'N, 119°33'W; sounding, 1120 fm; wind, 320°, force 6; weather, clear; sea, very high; wire angle, 20°. | | | | | | | | | | | 93.60 |
| 0 | 16.38 | 33.58 | 5.47 | 336 | 0 | 16.38 | 33.58 | 5.47 | 24.59 | 336 | 0.00 |
| 11 | 16.35 | 33.55 | 5.58 | 337 | 10 | 16.35 | 33.55 | 5.58 | 24.58 | 337 | 0.03 |
| 29 | 16.22 | 33.56 | 5.47 | 334 | 20 | 16.27 | 33.56 | 5.47 | 24.60 | 335 | 0.07 |
| 57 | 15.67 | 33.51 | 5.61 | 326 | 30 | 16.22 | 33.56 | 5.47 | 24.62 | 333 | 0.10 |
| 66 | 15.54 | 33.49 | 5.55 | 324 | 50 | 15.93 | 33.54 | 5.55 | 24.66 | 329 | 0.17 |
| 75 | 15.32 | 33.51 | 5.58 | 318 | 75 | 15.32 | 33.51 | 5.58 | 24.78 | 318 | 0.25 |
| 90 | 13.55 | 33.55 | 5.22 | 280 | 100 | 12.54 | 33.50 | 4.99 | 25.34 | 264 | 0.32 |
| 103 | 12.24 | 33.49 | 4.92 | 260 | 150 | 10.00 | 33.60 | 3.93 | 25.88 | 213 | 0.44 |
| 117 | 11.22 | 33.49 | 4.60 | 241 | 200 | 9.05 | 34.02 | 2.32 | 26.36 | 167 | 0.54 |
| 134 | 10.80 | 33.58 | 4.13 | 228 | 250 | 8.20 | 34.10 | 2.04 | 26.56 | 149 | 0.62 |
| 152 | 9.92 | 33.60 | 3.90 | 212 | 300 | 7.70 | 34.21 | 1.20 | 26.72 | 134 | 0.69 |
| 178 | 9.31 | 33.82 | 3.09 | 186 | 400 | 6.86 | 34.35 | 0.43 | 26.95 | 112 | 0.82 |
| 197 | 9.11 | 34.02 | 2.33 | 168 | 500 | 6.25 | 34.34 | 0.34 | 27.02 | 105 | 0.93 |
| 245 | 8.23 | 34.09 | 2.07 | 150 | | | | | | | |
| 318 | 7.56 | 34.27 | 0.97 | 127 | | | | | | | |
| 416 | 6.80 | 34.35 | 0.41 | 111 | | | | | | | |
| 546 | 5.96 | 34.33 | 0.32 | 102 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **93.70** | PAOLINA-T; April 20, 1958; 1551 GCT; 31°30'N, 120°29'W; sounding, 2050 fm; wind, 300°, force 4; weather, clear; sea, high; wire angle, 07°. | | | | | | | | | | |
| 0 | 16.03 | 33.48 | 4.12 | 335 | 0 | 16.03 | 33.48 | 4.12 | 24.60 | 335 | 0.00 |
| 10 | 16.00 | 33.51 | 5.33 | 333 | 10 | 16.00 | 33.51 | 5.33 | 24.62 | 333 | 0.04 |
| 30 | 16.00 | 33.47 | 5.37 | 336 | 20 | 16.00 | 33.47 | 5.35 | 24.61 | 334 | 0.07 |
| 45 | 15.77 | 33.47 | 5.46 | 330 | 30 | 16.00 | 33.47 | 5.37 | 24.59 | 336 | 0.11 |
| 55 | 15.38 | 33.48 | 5.20 | 322 | 50 | 15.58 | 33.48 | 5.35 | 24.68 | 327 | 0.17 |
| 65 | 14.28 | 33.43 | 5.04 | 303 | 75 | 13.12 | 33.37 | 5.52 | 25.13 | 284 | 0.25 |
| 75 | 13.12 | 33.37 | 5.52 | 284 | 100 | 10.75 | 33.37 | 4.54 | 25.58 | 242 | 0.32 |
| 95 | 11.13 | 33.35 | 4.59 | 250 | 150 | 8.86 | 33.79 | 2.96 | 26.21 | 182 | 0.42 |
| 109 | 10.20 | 33.43 | 4.48 | 228 | 200 | 8.34 | 33.99 | 2.33 | 26.46 | 158 | 0.51 |
| 124 | 9.58 | 33.51 | 3.97 | 213 | 250 | 7.70 | 34.05 | 1.82 | 26.60 | 145 | 0.59 |
| 148 | 8.94 | 33.75 | 3.10 | 186 | 300 | 7.20 | 34.12 | 1.20 | 26.72 | 134 | 0.66 |
| 176 | 8.64 | 33.97a) | 2.59 | 165 | 400 | 6.60 | 34.19 | 0.67 | 26.86 | 120 | 0.79 |
| 214 | 8.15 | 34.00 | 2.23 | 155 | 500 | 5.95 | 34.25 | 0.39 | 26.99 | 108 | 0.91 |
| 266 | 7.52 | 34.07 | 1.60 | 141 | 600 | (5.25) | (34.31) | | (27.12) | (95) | (1.02) |
| 346 | 6.92 | 34.16 | 0.97 | 126 | | | | | | | |
| 447 | 6.30 | 34.22 | 0.51 | 114 | | | | | | | |
| 589 | 5.37 | 34.31 | 0.32 | 96 | | | | | | | |
| **93.80** | PAOLINA-T; April 20, 1958; 2148 GCT; 31°11'N, 120°53'W; sounding, 2060 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 16°. | | | | | | | | | | |
| 0 | 16.35 | 33.57 | 5.57 | 336 | 0 | 16.35 | 33.57 | 5.57 | 24.59 | 336 | 0.00 |
| 10 | 16.28 | 33.50 | 5.51 | 339 | 10 | 16.28 | 33.50 | 5.51 | 24.56 | 339 | 0.03 |
| 29 | 16.10 | 33.52 | 5.62 | 334 | 20 | 16.17 | 33.51 | 5.58 | 24.59 | 336 | 0.07 |
| 43 | 15.85 | 33.53 | 5.69 | 328 | 30 | 16.10 | 33.52 | 5.62 | 24.61 | 334 | 0.10 |
| 53 | 14.98 | 33.40 | 5.72 | 319 | 50 | 15.20 | 33.43 | 5.71 | 24.75 | 321 | 0.17 |
| 62 | 14.81 | 33.42 | 5.69 | 314 | 75 | 14.45 | 33.41 | 5.75 | 24.88 | 308 | 0.24 |
| 72 | 14.65 | 33.42 | 5.78 | 311 | 100 | 10.86 | 33.37 | 4.93 | 25.54 | 245 | 0.32 |
| 92 | 12.03 | 33.36 | 5.26 | 265 | 150 | 9.18 | 33.69 | 3.57 | 26.08 | 194 | 0.43 |
| 105 | 10.62 | 33.38 | 4.82 | 240 | 200 | 8.56 | 33.93 | 2.59 | 26.38 | 166 | 0.52 |
| 119 | 10.17 | 33.52 | 4.29 | 221 | 250 | 7.95 | 33.98 | 2.20 | 26.50 | 154 | 0.60 |
| 142 | 9.29 | 33.63 | 3.73 | 200 | 300 | 7.38 | 34.03 | 1.71 | 26.63 | 142 | 0.68 |
| 170 | 9.00 | 33.86 | 3.08 | 178 | 400 | 6.39 | 34.18 | 0.77 | 26.88 | 118 | 0.81 |
| 206 | 8.46 | 33.94 | 2.54 | 164 | 500 | 5.75 | 34.25 | 0.43 | 27.01 | 106 | 0.93 |
| 258 | 7.84 | 33.99 | 2.15 | 151 | | | | | | | |
| 337 | 6.95 | 34.09 | 1.31 | 132 | | | | | | | |
| 436 | 6.13 | 34.22 | 0.58 | 112 | | | | | | | |
| 574 | 5.39 | 34.27 | 0.34 | 100 | | | | | | | |
| **93.145** | PAOLINA-T; April 12, 1958; 1827 GCT; 29°01'N, 125°19'W; sounding, 2350 fm; wind, 330°, force 4; weather, overcast; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 17.32 | 33.96 | 5.19 | 329 | 0 | 17.32 | 33.96 | 5.19 | 24.66 | 329 | 0.00 |
| 10 | 17.28 | 33.89 | 5.46 | 333 | 10 | 17.28 | 33.89 | 5.46 | 24.62 | 333 | 0.03 |
| 30 | 17.28 | 33.94 | 5.43 | 329 | 20 | 17.28 | 33.92 | 5.45 | 24.64 | 331 | 0.07 |
| 60 | 17.28 | 33.95 | 5.38 | 328 | 30 | 17.28 | 33.94 | 5.43 | 24.66 | 329 | 0.10 |
| 70 | 17.29 | 33.96 | 5.30 | 328 | 50 | 17.28 | 33.94 | 5.40 | 24.66 | 329 | 0.16 |
| 80 | 17.28 | 33.95 | 5.41 | 328 | 75 | 17.28 | 33.95 | 5.35 | 24.67 | 328 | 0.25 |
| 94 | 17.64 | 34.13 | 5.27 | 324 | 100 | 17.62 | 34.13 | 5.38 | 24.72 | 324 | 0.33 |
| 108 | 17.50 | 34.12 | 5.47 | 322 | 150 | 14.18 | 33.84 | 5.28 | 25.28 | 270 | 0.48 |
| 123 | 16.96 | 34.05 | 5.40 | 314 | 200 | 11.00 | 33.66 | 4.86 | 25.76 | 225 | 0.61 |
| 141 | 15.20 | 33.94 | 5.30 | 284 | 250 | 9.10 | 33.86 | 3.64 | 26.24 | 179 | 0.71 |
| 160 | 13.72 | 33.81 | 5.26 | 263 | 300 | 8.27 | 34.01 | 2.72 | 26.48 | 156 | 0.80 |
| 188 | 11.87 | 33.68 | 5.03 | 238 | 400 | 7.01 | 34.10 | 1.74 | 26.72 | 133 | 0.95 |
| 211 | 10.23 | 33.64 | 4.66 | 214 | 500 | 5.99 | 34.16 | 1.07 | 26.92 | 115 | 1.08 |
| 262 | 8.88 | 33.91 | 3.37 | 173 | 600 | (5.22) | (34.23) | | (27.06) | (101) | (1.20) |
| 343 | 7.68 | 34.07 | 2.22 | 143 | | | | | | | |
| 448 | 6.44 | 34.12 | 1.37 | 124 | | | | | | | |
| 584 | 5.37 | 34.22 | 0.62 | 103 | | | | | | | |

a) Broken bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

PAOLINA-T; April 22, 1958; 1410 GCT; 32°15.5'N, 117°08.5'W; sounding, 30 fm; wind, 250°, force 4; weather, overcast; sea, rough; wire angle, 17°. 97.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.96 | 33.49 | 5.61 | 378 | 0 | 17.96 | 33.49 | 5.61 | 24.14 | 378 | 0.00 |
| 10 | 16.66 | 33.48 | 5.97 | 349 | 10 | 16.66 | 33.48 | 5.97 | 24.45 | 349 | 0.04 |
| 29 | 15.22 | 33.48 | 5.91 | 318 | 20 | 16.43 | 33.48 | 5.97 | 24.50 | 344 | 0.07 |
| 39 | 14.48 | 33.49 | 5.82 | 302 | 30 | 15.15 | 33.48 | 5.90 | 24.79 | 317 | 0.10 |
| 48 | 12.70 | 33.49 | 5.09 | 268 | | | | | | | |

PAOLINA-T; April 22, 1958; 1224 GCT; 32°12.5'N, 117°17'W; sounding, 420 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 05°. 97.32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.00 | 33.60 | 5.03 | 394 | 0 | 19.00 | 33.60 | 5.03 | 23.98 | 394 | 0.00 |
| 10 | 16.72 | 33.58 | 6.87 | 343 | 10 | 16.72 | 33.58 | 6.87 | 24.52 | 343 | 0.04 |
| 30 | 15.58 | 33.58 | 5.57 | 318 | 20 | 15.75 | 33.58 | 5.63 | 24.74 | 322 | 0.07 |
| 40 | 14.30 | 33.55 | 5.62 | 294 | 30 | 15.58 | 33.58 | 5.57 | 24.78 | 318 | 0.10 |
| 50 | 12.96 | 33.48 | 4.96 | 273 | 50 | 12.96 | 33.48 | 4.96 | 25.25 | 273 | 0.16 |
| 61 | 11.64 | 33.47 | 4.55 | 250 | 75 | 10.70 | 33.50 | 4.22 | 25.68 | 232 | 0.22 |
| 71 | 10.96 | 33.49 | 4.31 | 237 | 100 | 9.70 | 33.58 | 3.85 | 25.92 | 210 | 0.28 |
| 85 | 10.24 | 33.52 | 4.09 | 223 | 150 | 8.85 | 33.84 | 3.03 | 26.25 | 178 | 0.38 |
| 100 | 9.70 | 33.58 | 3.85 | 210 | 200 | 8.17 | 33.99 | 2.30 | 26.48 | 156 | 0.46 |
| 114 | 9.57 | 33.66 | 3.33 | 202 | 250 | 7.43 | 34.03 | 1.87 | 26.62 | 143 | 0.54 |
| 139 | 9.09 | 33.79 | 3.14 | 185 | 300 | 7.00 | 34.08 | 1.42 | 26.71 | 134 | 0.61 |
| 168 | 8.59 | 33.89 | 2.85 | 170 | 400 | 6.73 | 34.20 | 0.54 | 26.85 | 121 | 0.74 |
| 200 | 8.17 | 33.99 | 2.30 | 156 | 500 | 6.26 | 34.31 | 0.35 | 26.99 | 108 | 0.86 |
| 247 | 7.48 | 34.03 | 1.90 | 144 | | | | | | | |
| 323 | 6.85 | 34.11 | 1.17 | 130 | | | | | | | |
| 418 | 6.68 | 34.25 | 0.49 | 117 | | | | | | | |
| 544 | 5.88 | 34.33 | 0.28 | 101 | | | | | | | |

PAOLINA-T; April 22, 1958; 0630 GCT; 31°55.5'N, 117°50'W; sounding, 650 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 16°. 97.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.18 | 33.57 | 5.28 | 377 | 0 | 18.18 | 33.57 | 5.28 | 24.16 | 372 | 0.00 |
| 10 | 16.56 | 33.53 | 5.76 | 343 | 10 | 16.56 | 33.53 | 5.76 | 24.52 | 343 | 0.04 |
| 29 | 15.32 | 33.55 | 5.78 | 315 | 20 | 15.70 | 33.54 | 5.78 | 24.72 | 324 | 0.07 |
| 43 | 13.79 | 33.53 | 5.55 | 285 | 30 | 15.28 | 33.55 | 5.76 | 24.82 | 314 | 0.10 |
| 53 | 12.55 | 33.53 | 4.89 | 262 | 50 | 12.82 | 33.53 | 5.04 | 25.32 | 266 | 0.16 |
| 62 | 11.80 | 33.53 | 4.47 | 248 | 75 | 11.30 | 33.54 | 4.14 | 25.61 | 239 | 0.22 |
| 72 | 11.40 | 33.53 | 4.20 | 242 | 100 | 10.63 | 33.59 | 3.75 | 25.77 | 224 | 0.28 |
| 91 | 10.82 | 33.57 | 3.95 | 229 | 150 | 9.27 | 33.84 | 3.18 | 26.19 | 184 | 0.38 |
| 105 | 10.52 | 33.61 | 3.64 | 220 | 200 | 8.17 | 34.02 | 2.26 | 26.50 | 154 | 0.47 |
| 119 | 9.88 | 33.65 | 3.57 | 208 | 250 | 7.45 | 34.06 | 1.80 | 26.63 | 142 | 0.54 |
| 142 | 9.35 | 33.77 | 3.36 | 190 | 300 | 6.99 | 34.10 | 1.31 | 26.74 | 132 | 0.62 |
| 169 | 8.69 | 33.93 | 2.74 | 169 | 400 | 6.30 | 34.22 | 0.65 | 26.92 | 114 | 0.74 |
| 205 | 8.11 | 34.03 | 2.22 | 152 | 500 | 5.81 | 34.30 | 0.32 | 27.05 | 102 | 0.86 |
| 255 | 7.40 | 34.06a) | 1.76 | 140 | | | | | | | |
| 332 | 6.78 | 34.14 | 1.09 | 126 | | | | | | | |
| 429 | 6.15 | 34.25 | 0.51 | 110 | | | | | | | |
| 566 | 5.64 | 34.35 | 0.28 | 97 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

S10

CCOFI 5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

97.50 PAOLINA-T; April 21, 1958; 2339 GCT; 31°36'N, 118°31'W; sounding, 1335 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.32 | 33.60 | 5.41 | 355 | 0 | 17.32 | 33.60 | 5.41 | 24.39 | 355 | 0.00 |
| 9 | 16.97 | 33.58 | 4.99 | 348 | 10 | 16.93 | 33.58 | 4.99 | 24.46 | 348 | 0.04 |
| 27 | 15.31 | 33.55 | 5.12 | 315 | 20 | 16.50 | 33.57 | 5.01 | 24.56 | 338 | 0.07 |
| 42 | 14.96 | 33.48 | 5.12 | 313 | 30 | 15.22 | 33.53 | 5.12 | 24.82 | 314 | 0.10 |
| 50 | 14.49 | 33.49 | 5.55 | 302 | 50 | 14.49 | 33.49 | 5.55 | 24.94 | 302 | 0.16 |
| 60 | 12.98 | 33.48 | 4.19 | 274 | 75 | 11.59 | 33.48 | 4.27 | 25.50 | 249 | 0.23 |
| 69 | 12.02 | 33.48 | 4.55 | 256 | 100 | 10.11 | 33.60 | 3.63 | 25.87 | 214 | 0.29 |
| 86 | 10.84 | 33.49 | 3.70 | 235 | 150 | 9.16 | 33.92 | 2.68 | 26.27 | 176 | 0.39 |
| 98 | 10.18 | 33.58 | 3.66 | 217 | 200 | 8.74 | 34.12 | 1.86 | 26.49 | 155 | 0.48 |
| 110 | 9.98 | 33.65 | 3.57 | 209 | 250 | 8.22 | 34.19 | 1.33 | 26.63 | 142 | 0.55 |
| 130 | 9.63 | 33.78 | 3.17 | 194 | 300 | 7.60 | 34.22 | 0.93 | 26.74 | 131 | 0.62 |
| 152 | 9.14 | 33.93 | 2.67 | 175 | 400 | 6.54 | 34.31 | 0.49 | 26.96 | 110 | 0.75 |
| 183 | 8.92 | 34.03 | 2.10 | 164 | 500 | 6.12 | 34.34 | 0.37 | 27.03 | 104 | 0.86 |
| 225 | 8.44 | 34.18 | 1.53 | 146 | | | | | | | |
| 295 | 7.64 | 34.22 | 0.98 | 132 | | | | | | | |
| 382 | 6.64 | 34.30 | 0.53 | 112 | | | | | | | |
| 510 | 6.10 | 34.34 | 0.36 | 103 | | | | | | | |

97.60 PAOLINA-T; April 21, 1958; 1753 GCT; 31°19'N, 119°05.5'W; sounding, 1820 fm; wind, 320°, force 4; weather, clear; sea, high; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.52 | 33.57 | 5.61 | 340 | 0 | 16.52 | 33.57 | 5.61 | 24.55 | 340 | 0.00 |
| 10 | 16.18 | 33.55 | 5.55 | 333 | 10 | 16.18 | 33.55 | 5.55 | 24.62 | 333 | 0.03 |
| 29 | 16.12 | 33.53 | 5.42 | 333 | 20 | 16.16 | 33.54 | 5.51 | 24.62 | 333 | 0.07 |
| 43 | 15.93 | 33.54 | 5.35 | 328 | 30 | 16.09 | 33.53 | 5.40 | 24.62 | 333 | 0.10 |
| 53 | 15.53 | 33.47 | 5.69 | 325 | 50 | 15.70 | 33.51 | 5.52 | 24.69 | 326 | 0.17 |
| 62 | 14.30 | 33.40 | 5.73 | 305 | 75 | 12.86 | 33.47 | 5.04 | 25.25 | 273 | 0.24 |
| 71 | 13.31 | 33.45 | 5.19 | 282 | 100 | 10.93 | 33.52 | 4.35 | 25.66 | 234 | 0.31 |
| 89 | 11.52 | 33.50 | 4.61 | 246 | 150 | 9.40 | 33.82 | 2.97 | 26.16 | 187 | 0.42 |
| 102 | 10.84 | 33.53 | 4.31 | 232 | 200 | 8.67 | 34.05 | 2.29 | 26.45 | 159 | 0.50 |
| 115 | 10.32 | 33.58 | 4.02 | 220 | 250 | 8.26 | 34.15 | 1.58 | 26.59 | 146 | 0.58 |
| 136 | 9.70 | 33.69 | 3.36 | 202 | 300 | 7.87 | 34.20 | 1.15 | 26.68 | 137 | 0.65 |
| 162 | 9.20 | 33.90 | 2.82 | 178 | 400 | 6.96 | 34.28 | 0.56 | 26.88 | 118 | 0.78 |
| 195 | 8.76 | 34.02 | 2.40 | 162 | 500 | 6.25 | 34.31 | 0.36 | 27.00 | 106 | 0.90 |
| 244 | 8.31 | 34.14 | 1.66 | 147 | | | | | | | |
| 317 | 7.73 | 34.22 | 1.06 | 133 | | | | | | | |
| 409 | 6.86 | 34.29 | 0.52 | 116 | | | | | | | |
| 540 | 6.00 | 34.32 | 0.32 | 103 | | | | | | | |

97.70 PAOLINA-T; April 21, 1958; 1045, 1101 GCT; 30°56'N, 119°51'W; sounding, 1930 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 05°, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.26 | 33.49 | 5.43 | 339 | 0 | 16.26 | 33.49 | 5.43 | 24.55 | 339 | 0.00 |
| 10 | 16.20 | 33.52 | 5.44 | 336 | 10 | 16.20 | 33.52 | 5.44 | 24.59 | 336 | 0.03 |
| | | | | | 20 | 16.14 | 33.54 | 5.40 | 24.62 | 333 | 0.07 |
| 30 | 15.93 | 33.58 | 5.37 | 326 | 30 | 15.93 | 33.58 | 5.37 | 24.70 | 326 | 0.10 |
| 60 | 15.05 | 33.54 | 5.50 | 311 | 50 | 15.36 | 33.55 | 5.46 | 24.80 | 316 | 0.16 |
| 70 | 14.76 | 33.53 | 5.40 | 305 | 75 | 14.40 | 33.52 | 5.36 | 24.98 | 298 | 0.24 |
| 79 | 13.79 | 33.50 | 5.34 | 288 | 100 | 11.45 | 33.43 | 4.91 | 25.49 | 250 | 0.31 |
| 93 | 11.91 | 33.44 | 4.84 | 257 | 150 | 9.22 | 33.66 | 3.66 | 26.06 | 196 | 0.42 |
| 108 | 10.94 | 33.43 | 5.00 | 241 | 200 | 8.25 | 33.96 | 2.58 | 26.44 | 160 | 0.51 |
| 122 | 10.01 | 33.50 | 4.42 | 221 | 250 | 7.60 | 34.07 | 2.02 | 26.63 | 142 | 0.59 |
| 141 | 9.54 | 33.58 | 3.99 | 207 | 300 | 7.09 | 34.12 | 1.53 | 26.74 | 132 | 0.66 |
| 161 | 8.96 | 33.77 | 3.35 | 184 | 400 | 6.35 | 34.20 | 0.81 | 26.90 | 116 | 0.79 |
| 188 | 8.46 | 33.91 | 2.84 | 166 | 500 | 5.75 | 34.26 | 0.46 | 27.02 | 105 | 0.91 |
| 212 | 8.14 | 34.00 | 2.44 | 155 | 600 | (5.25) | (34.35) | (0.42) | (27.15) | (92) | (1.01) |
| 264 | 7.42 | 34.09 | 1.86 | 139 | | | | | | | |
| 346 | 6.77 | 34.16 | 1.19 | 124 | | | | | | | |
| 453 | 6.00 | 34.23 | 0.53 | 110 | | | | | | | |
| 590 | 5.30 | 34.34 | 0.42 | 93 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| PAOLINA-T; April 21, 1958; 0353 GCT; 30°36'N, 120°31'W; sounding, 2100 fm; wind, 330°, force 5; weather, clear; sea, very rough; wire angle, 10°. | | | | | | | | | | | 97.80 |
| 0 | 16.10 | 33.39 | 5.55 | 343 | 0 | 16.10 | 33.39 | 5.55 | 24.52 | 343 | 0.00 |
| 10 | 16.05 | 33.41 | 5.52 | 341 | 10 | 16.05 | 33.41 | 5.52 | 24.54 | 341 | 0.03 |
| 30 | 15.81 | 33.37 | 5.48 | 339 | 20 | 15.96 | 33.40 | 5.50 | 24.55 | 340 | 0.07 |
| 45 | 15.55 | 33.38 | 5.55 | 332 | 30 | 15.81 | 33.37 | 5.48 | 24.56 | 339 | 0.10 |
| 55 | 15.32 | 33.39 | 5.66 | 327 | 50 | 15.42 | 33.39 | 5.62 | 24.66 | 329 | 0.17 |
| 74 | 15.10 | 33.40 | 5.59 | 321 | 75 | 15.08 | 33.40 | 5.58 | 24.75 | 321 | 0.25 |
| 94 | 14.00 | 33.40 | 5.48 | 299 | 100 | 13.40 | 33.39 | 5.46 | 25.08 | 289 | 0.33 |
| 108 | 12.44 | 33.37 | 5.46 | 272 | 150 | 9.60 | 33.50 | 4.19 | 25.87 | 214 | 0.45 |
| 122 | 11.16 | 33.38 | 4.68 | 248 | 200 | 8.62 | 33.81 | 2.82 | 26.27 | 176 | 0.55 |
| 147 | 9.72 | 33.48 | 4.24 | 217 | 250 | 7.98 | 34.01 | 2.10 | 26.53 | 152 | 0.64 |
| 174 | 8.87 | 33.68 | 3.36 | 189 | 300 | 7.20 | 34.04 | 1.67 | 26.66 | 139 | 0.71 |
| 212 | 8.50 | 33.88 | 2.59 | 169 | 400 | 6.16 | 34.14 | 0.92 | 26.88 | 118 | 0.85 |
| 263 | 7.76 | 34.03 | 1.94 | 148 | 500 | 5.70 | 34.26 | 0.40 | 27.03 | 104 | 0.96 |
| 342 | 6.66 | 34.05 | 1.42 | 132 | 600 | (5.25) | (34.35) | | (27.16) | (92) | (1.07) |
| 442 | 5.92 | 34.21 | 0.62 | 110 | | | | | | | |
| 582 | 5.36 | 34.34 | 0.11 | 94 | | | | | | | |
| PAOLINA-T; April 13, 1958; 0032 GCT; 28°26.5'N, 124°47'W; sounding, 2330 fm; wind, 330°, force 2; weather, cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | | 97.145 |
| 0 | 18.84 | 34.32 | 5.36 | 338 | 0 | 18.84 | 34.32 | 5.36 | 24.56 | 338 | 0.00 |
| 10 | 18.27 | 34.27 | 5.36 | 328 | 10 | 18.27 | 34.27 | 5.36 | 24.67 | 328 | 0.03 |
| 30 | 18.22 | 34.28 | 5.32 | 327 | 20 | 18.23 | 34.28 | 5.34 | 24.68 | 327 | 0.07 |
| 55 | 18.22 | 34.27 | 5.37 | 327 | 30 | 18.22 | 34.28 | 5.32 | 24.68 | 327 | 0.10 |
| 65 | 18.22 | 34.29 | 5.29 | 326 | 50 | 18.22 | 34.27 | 5.34 | 24.68 | 327 | 0.16 |
| 75 | 18.23 | 34.30 | 5.36 | 326 | 75 | 18.23 | 34.30 | 5.36 | 24.69 | 326 | 0.24 |
| 85 | 18.23 | 34.27 | 5.34 | 327 | 100 | 18.16 | 34.34 | 5.32 | 24.76 | 320 | 0.33 |
| 100 | 18.16 | 34.34 | 5.32 | 320 | 150 | 14.46 | 33.92 | 5.07 | 25.28 | 270 | 0.48 |
| 116 | 16.94 | 34.13 | 5.32 | 308 | 200 | 10.85 | 33.68 | 4.38 | 25.80 | 221 | 0.60 |
| 134 | 15.46 | 33.96 | 5.23 | 288 | 250 | 9.26 | 33.91 | 3.36 | 26.24 | 178 | 0.70 |
| 154 | 14.42 | 33.93 | 5.05 | 269 | 300 | 8.33 | 34.01 | 2.92 | 26.47 | 157 | 0.79 |
| 179 | 12.50 | 33.77 | 4.90 | 244 | 400 | 6.89 | 34.12 | 1.50 | 26.76 | 129 | 0.94 |
| 202 | 10.76 | 33.68 | 4.32 | 219 | 500 | 5.99 | 34.18 | 0.85 | 26.94 | 113 | 1.07 |
| 249 | 9.30 | 33.91 | 3.39 | 179 | | | | | | | |
| 326 | 7.94 | 34.05 | 2.66 | 148 | | | | | | | |
| 422 | 6.63 | 34.14 | 1.29 | 124 | | | | | | | |
| 549 | 5.58 | 34.22 | 0.68 | 105 | | | | | | | |
| PAOLINA-T; April 16, 1958; 0700 GCT; 31°41'N, 116°46.5'W; sounding, 260 fm; wind, calm; weather, clear; sea, moderate; wire angle, 09°. | | | | | | | | | | | 100.30 |
| 0 | 17.54 | 33.52 | 5.87 | 366 | 0 | 17.54 | 33.52 | 5.87 | 24.27 | 366 | 0.00 |
| 10 | 16.84 | 33.50 | 5.90 | 352 | 10 | 16.84 | 33.50 | 5.90 | 24.42 | 352 | 0.04 |
| 30 | 14.98 | 33.55 | 5.82 | 308 | 20 | 15.60 | 33.54 | 5.88 | 24.74 | 322 | 0.07 |
| 50 | 12.52 | 33.57 | 4.60 | 258 | 30 | 14.98 | 33.55 | 5.82 | 24.88 | 308 | 0.10 |
| 74 | 10.38 | 33.50 | 4.45 | 226 | 50 | 12.52 | 33.57 | 4.60 | 25.40 | 258 | 0.16 |
| 99 | 9.90 | 33.68 | 4.04 | 205 | 75 | 10.35 | 33.50 | 4.45 | 25.75 | 225 | 0.22 |
| 123 | 9.67 | 33.84 | 3.31 | 190 | 100 | 9.86 | 33.69 | 4.04 | 25.96 | 205 | 0.27 |
| 161 | 9.52 | 34.06 | 2.37 | 171 | 150 | 9.45 | 33.96 | 3.18 | 26.26 | 177 | 0.37 |
| 197 | 9.18 | 34.14 | 2.00 | 160 | 200 | 9.07 | 34.14 | 1.98 | 26.46 | 158 | 0.45 |
| 245 | 8.90 | 34.20 | 1.63 | 151 | 250 | 8.84 | 34.22 | 1.55 | 26.56 | 149 | 0.53 |
| 292 | 8.32 | 34.29 | 1.03 | 136 | 300 | 8.22 | 34.29 | 0.99 | 26.70 | 135 | 0.60 |
| 391 | 7.09 | 34.27 | 0.68 | 121 | 400 | (6.98) | (34.27) | (0.64) | (26.87) | (119) | (0.74) |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 100.35 | PAOLINA-T; April 16, 1958; 0353 GCT; 31°30'N, 117°00.5'W; sounding, 660 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 17.35 | 33.58 | 5.62 | 358 | 0 | 17.35 | 33.58 | 5.62 | 24.36 | 358 | 0.00 |
| 10 | 16.77 | 33.56 | 5.68 | 346 | 10 | 16.77 | 33.56 | 5.68 | 24.48 | 346 | 0.04 |
| 30 | 15.68 | 33.57 | 5.73 | 322 | 20 | 16.10 | 33.57 | 5.70 | 24.64 | 331 | 0.07 |
| 40 | 15.12 | 33.56 | 5.80 | 310 | 30 | 15.68 | 33.57 | 5.73 | 24.74 | 322 | 0.10 |
| 49 | 14.01 | 33.53 | 5.77 | 290 | 50 | 13.95 | 33.53 | 5.74 | 25.08 | 289 | 0.16 |
| 59 | 13.47 | 33.49 | 5.50 | 282 | 75 | 12.20 | 33.48 | 5.03 | 25.40 | 259 | 0.23 |
| 69 | 12.90 | 33.49 | - | 271 | 100 | 10.77 | 33.51 | 4.55 | 25.67 | 233 | 0.29 |
| 83 | 11.24 | 33.48 | 4.72 | 242 | 150 | 9.36 | 33.85 | 3.15 | 26.18 | 184 | 0.40 |
| 98 | 10.86 | 33.50 | 4.58 | 235 | 200 | 8.35 | 33.96 | 2.77 | 26.42 | 162 | 0.49 |
| 112 | 10.06 | 33.57 | 4.17 | 216 | 250 | 7.62 | 34.05 | 2.26 | 26.61 | 144 | 0.57 |
| 136 | 9.66 | 33.74 | 3.42 | 197 | 300 | 7.25 | 34.09 | 1.80 | 26.69 | 136 | 0.64 |
| 165 | 9.00 | 33.90 | 2.95 | 176 | 400 | 6.35 | 34.20 | 0.84 | 26.90 | 116 | 0.77 |
| 197 | 8.40 | 33.95 | 2.81 | 163 | 500 | 5.98 | 34.30 | 0.40 | 27.02 | 105 | 0.88 |
| 244 | 7.71 | 34.04 | 2.32 | 146 | | | | | | | |
| 322 | 7.05 | 34.12 | 1.49 | 131 | | | | | | | |
| 418 | 6.23 | 34.22 | 0.76 | 113 | | | | | | | |
| 544 | 5.90 | 34.33 | 0.32 | 101 | | | | | | | |
| 100.40 | PAOLINA-T; April 15, 1958; 2325 GCT; 31°21'N, 117°24'W; sounding, 1085 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 17.10 | 33.49 | 5.57 | 358 | 0 | 17.10 | 33.49 | 5.57 | 24.36 | 358 | 0.00 |
| 10 | 16.00 | 33.49 | 5.63 | 334 | 10 | 16.00 | 33.49 | 5.63 | 24.61 | 334 | 0.03 |
| 30 | 15.48 | 33.50 | 5.63 | 323 | 20 | 15.72 | 33.49 | 5.63 | 24.68 | 327 | 0.07 |
| 54 | 15.00 | 33.51 | 5.70 | 312 | 30 | 15.48 | 33.50 | 5.63 | 24.73 | 323 | 0.10 |
| 64 | 13.80 | 33.42 | 5.75 | 294 | 50 | 15.03 | 33.51 | 5.68 | 24.83 | 313 | 0.16 |
| 74 | 12.57 | 33.40 | 5.26 | 272 | 75 | 12.43 | 33.40 | 5.22 | 25.28 | 270 | 0.24 |
| 83 | 11.85 | 33.45 | 5.10 | 255 | 100 | 10.98 | 33.48 | 4.34 | 25.62 | 238 | 0.30 |
| 99 | 11.02 | 33.48 | 4.38 | 239 | 150 | 9.54 | 33.85 | 2.97 | 26.15 | 187 | 0.41 |
| 113 | 10.50 | 33.53 | - | 226 | 200 | 8.82 | 33.97 | 2.53 | 26.36 | 167 | 0.50 |
| 131 | 10.02 | 33.71 | 3.50 | 205 | 250 | 7.86 | 34.05 | 2.37 | 26.57 | 148 | 0.58 |
| 149 | 9.57 | 33.85 | 3.01 | 187 | 300 | 7.32 | 34.09 | 1.84 | 26.68 | 137 | 0.65 |
| 174 | 9.16 | 33.94 | 2.66 | 174 | 400 | 6.40 | 34.17 | 0.90 | 26.87 | 119 | 0.78 |
| 197 | 8.86 | 33.96 | 2.53 | 169 | 500 | 5.88 | 34.26 | 0.50 | 27.00 | 106 | 0.90 |
| 245 | 7.96 | 34.05 | 2.44 | 149 | | | | | | | |
| 321 | 7.05 | 34.11 | 1.53 | 132 | | | | | | | |
| 416 | 6.32 | 34.19 | 0.81 | 116 | | | | | | | |
| 542 | 5.72 | 34.29 | 0.42 | 102 | | | | | | | |
| 100.50 | PAOLINA-T; April 15, 1958; 1654 GCT; 31°01'N, 118°07.5'W; sounding, 950 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 16.53 | 33.49 | 5.66 | 345 | 0 | 16.53 | 33.49 | 5.66 | 24.49 | 345 | 0.00 |
| 10 | 16.48 | 33.47 | 5.68 | 346 | 10 | 16.48 | 33.47 | 5.68 | 24.48 | 346 | 0.03 |
| 29 | 16.45 | 33.58 | 5.67 | 337 | 20 | 16.46 | 33.53 | 5.68 | 24.53 | 342 | 0.07 |
| 53 | 16.40 | 33.63 | 5.61 | 332 | 30 | 16.44 | 33.58 | 5.66 | 24.58 | 337 | 0.10 |
| 62 | 16.37 | 33.64a) | 5.66 | 331 | 50 | 16.41 | 33.62 | 5.61 | 24.61 | 334 | 0.17 |
| 72 | 16.08 | 33.55 | 5.67 | 372 | 75 | 15.96 | 33.55 | 5.68 | 24.66 | 329 | 0.25 |
| 81 | 15.60 | 33.55 | - | 321 | 100 | 13.94 | 33.55 | 5.65 | 25.10 | 287 | 0.33 |
| 94 | 14.28 | 33.66b) | 5.82 | | 150 | 10.10 | 33.52 | 4.30 | 25.80 | 220 | 0.46 |
| 108 | 12.54 | 33.38 | 5.48 | 273 | 200 | 9.29 | 33.91 | 2.79 | 26.24 | 179 | 0.56 |
| 127 | 10.85 | 33.37 | 5.09 | 244 | 250 | 8.16 | 34.04 | 2.32 | 26.52 | 153 | 0.64 |
| 145 | 10.22 | 33.48 | 4.48 | 225 | 300 | 7.55 | 34.08 | 1.87 | 26.64 | 141 | 0.72 |
| 168 | 9.82 | 33.73 | 3.76 | 201 | 400 | 6.56 | 34.16 | 0.93 | 26.84 | 122 | 0.86 |
| 191 | 9.46 | 33.86 | 3.04 | 186 | 500 | 5.83 | 34.23 | | 26.99 | 108 | 0.98 |
| 237 | 8.32 | 34.02 | 2.44 | 156 | | | | | | | |
| 311 | 7.42 | 34.09 | 1.77 | 138 | | | | | | | |
| 405 | 6.53 | 34.17 | 0.91 | 120 | | | | | | | |
| 530 | 5.64 | 34.25 | - | 104 | | | | | | | |

a) Loose bottle cap; value falls on property curve.
b) Broken bottle cap; value does not fall on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; April 15, 1958; 1041 GCT; 30°45.5'N, 118°46'W; sounding, 1550 fm; wind, 360°, force 4; weather, clear; sea, very rough; wire angle, 08°. 100.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.42 | 33.43 | 5.63 | 348 | 0 | 16.42 | 33.43 | 5.63 | 24.46 | 348 | 0.00 |
| 10 | 16.40 | 33.40 | 5.63 | 349 | 10 | 16.40 | 33.40 | 5.63 | 24.45 | 349 | 0.03 |
| 30 | 15.76 | 33.40 | 5.66 | 335 | 20 | 16.38 | 33.40 | 5.63 | 24.45 | 349 | 0.07 |
| 45 | 15.72 | 33.41 | 5.70 | 334 | 30 | 15.76 | 33.40 | 5.66 | 24.60 | 335 | 0.10 |
| 55 | 15.52 | 33.42 | 5.66 | 328 | 50 | 15.62 | 33.42 | 5.68 | 24.64 | 331 | 0.17 |
| 65 | 15.22 | 33.40 | 5.73 | 324 | 75 | 15.10 | 33.45 | 5.72 | 24.78 | 318 | 0.25 |
| 75 | 15.10 | 33.45 | 5.72 | 318 | 100 | 12.22 | 33.43 | 5.39 | 25.36 | 263 | 0.33 |
| 94 | 12.77 | 33.43 | 5.51 | 273 | 150 | 9.35 | 33.62 | 4.03 | 26.01 | 201 | 0.44 |
| 108 | 11.54 | 33.44 | 5.22 | 250 | 200 | 8.63 | 33.87 | 2.89 | 26.31 | 172 | 0.54 |
| 123 | 10.29 | 33.46 | 4.80 | 228 | 250 | 7.80 | 34.00 | 2.23 | 26.55 | 150 | 0.62 |
| 146 | 9.41 | 33.61 | 4.10 | 203 | 300 | 7.20 | 34.06 | 1.74 | 26.67 | 138 | 0.69 |
| 174 | 8.98 | 33.70 | 3.54 | 189 | 400 | 6.47 | 34.22 | 0.87 | 26.90 | 116 | 0.82 |
| 211 | 8.48 | 33.96 | 2.64 | 163 | 500 | 5.80 | 34.29 | 0.52 | 27.04 | 103 | 0.94 |
| 264 | 7.56 | 34.02 | 2.11 | 146 | 600 | (5.20) | (34.32) | | (27.14) | (94) | (1.04) |
| 344 | 6.87 | 34.13 | 1.30 | 128 | | | | | | | |
| 445 | 6.11 | 34.26 | 0.64 | 109 | | | | | | | |
| 587 | 5.32 | 34.32 | 0.35 | 95 | | | | | | | |

PAOLINA-T; April 15, 1958; 0433 GCT; 30°22.5'N, 119°20.5'W; sounding, 2000 fm; wind, 360°, force 5; weather, clear; sea, very rough; wire angle, 08°. 100.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.22 | 33.46 | 5.70 | 341 | 0 | 16.22 | 33.46 | 5.70 | 24.54 | 341 | 0.00 |
| 10 | 16.20 | 33.42 | 5.71 | 343 | 10 | 16.20 | 33.42 | 5.71 | 24.51 | 343 | 0.03 |
| 30 | 15.50 | 33.43 | 5.72 | 328 | 20 | 15.55 | 33.43 | 5.72 | 24.66 | 329 | 0.07 |
| 59 | 14.70 | 33.44 | 5.89 | 310 | 30 | 15.50 | 33.43 | 5.72 | 24.67 | 328 | 0.10 |
| 69 | 13.55 | 33.42 | 5.66 | 288 | 50 | 15.23 | 33.43 | 5.78 | 24.74 | 322 | 0.16 |
| 79 | 12.68 | 33.39 | 5.50 | 275 | 75 | 13.20 | 33.41 | 5.57 | 25.14 | 283 | 0.24 |
| 93 | 11.01 | 33.34 | 5.16 | 249 | 100 | 10.45 | 33.37 | 5.00 | 25.63 | 237 | 0.31 |
| 108 | 10.07 | 33.40 | 4.85 | 230 | 150 | 9.05 | 33.69 | 3.53 | 26.11 | 191 | 0.42 |
| 122 | 9.71 | 33.44 | - | 220 | 200 | 8.35 | 33.92 | 2.50 | 26.40 | 164 | 0.51 |
| 141 | 9.26 | 33.57 | 4.02 | 204 | 250 | 7.64 | 34.03 | 1.96 | 26.58 | 146 | 0.59 |
| 160 | 8.83 | 33.78 | 3.17 | 182 | 300 | 7.17 | 34.11 | 1.53 | 26.72 | 134 | 0.66 |
| 189 | 8.50 | 33.88 | 2.63 | 169 | 400 | 6.38 | 34.20 | 0.76 | 26.90 | 116 | 0.79 |
| 212 | 8.18 | 33.95 | 2.34 | 159 | 500 | 5.80 | 34.26 | 0.46 | 27.02 | 105 | 0.90 |
| 265 | 7.49 | 34.06 | 1.85 | 142 | 600 | (5.20) | (34.36) | | (27.17) | (91) | (1.01) |
| 346 | 6.77 | 34.16 | 1.16 | 124 | | | | | | | |
| 452 | 6.02 | 34.22 | 0.55 | 111 | | | | | | | |
| 589 | 5.28 | 34.34 | 0.37 | 94 | | | | | | | |

PAOLINA-T; April 14, 1958; 2158 GCT; 30°01'N, 120°07'W; sounding, 2120 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 15°. 100.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.30 | 33.49 | 5.57 | 341 | 0 | 16.30 | 33.49 | 5.57 | 24.54 | 341 | 0.00 |
| 10 | 16.20 | 33.48 | 5.66 | 339 | 10 | 16.20 | 33.48 | 5.66 | 24.56 | 339 | 0.03 |
| 29 | 16.28 | 33.58 | 5.50 | 334 | 20 | 16.23 | 33.53 | 5.60 | 24.59 | 336 | 0.07 |
| 58 | 16.35 | 33.62 | 5.53 | 332 | 30 | 16.28 | 33.58 | 5.50 | 24.62 | 333 | 0.10 |
| 68 | 16.06 | 33.57 | 5.58 | 329 | 50 | 16.35 | 33.61 | 5.52 | 24.63 | 332 | 0.17 |
| 77 | 15.30 | 33.38 | 5.65 | 327 | 75 | 15.37 | 33.40 | 5.65 | 24.67 | 328 | 0.25 |
| 92 | 15.48 | 33.52 | 5.65 | 321 | 100 | 15.72 | 33.64 | 5.70 | 24.79 | 317 | 0.33 |
| 106 | 15.02 | 33.57 | 5.70 | 308 | 150 | 10.20 | 33.48 | 4.58 | 25.76 | 225 | 0.47 |
| 120 | 12.71 | 33.46 | 5.46 | 270 | 200 | 8.81 | 33.82 | 3.38 | 26.25 | 178 | 0.57 |
| 139 | 11.22 | 33.42 | 5.19 | 247 | 250 | 8.00 | 34.01 | 2.56 | 26.52 | 152 | 0.66 |
| 157 | 9.78 | 33.53 | 4.27 | 214 | 300 | 7.55 | 34.12 | 1.79 | 26.67 | 138 | 0.73 |
| 185 | 9.06 | 33.74 | 3.70 | 188 | 400 | 6.65 | 34.20 | 1.16 | 26.86 | 120 | 0.86 |
| 207 | 8.72 | 33.85 | 3.28 | 174 | 500 | 5.80 | 34.25 | 0.77 | 27.01 | 106 | 0.98 |
| 259 | 7.88 | 34.03 | 2.42 | 150 | | | | | | | |
| 337 | 7.29 | 34.17 | 1.40 | 131 | | | | | | | |
| 440 | 6.24 | 34.21 | 1.03 | 114 | | | | | | | |
| 574 | 5.36 | 34.29 | 0.41 | 98 | | | | | | | |

SIO

CCOFI
5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $-5$ $10$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $-5$ $10$ cm/g | ΔD dyn. m |
| 100.90 | PAOLINA-T; April 14, 1958; 1517 GCT; 29°40'N, 120°52'W; sounding, 2120 fm; wind, 020°, force 4; weather, partly cloudy; sea, rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 16.62 | 33.72 | 5.65 | 331 | 0 | 16.62 | 33.72 | 5.65 | 24.64 | 331 | 0.00 |
| 10 | 16.62 | 33.70 | 5.62 | 332 | 10 | 16.62 | 33.70 | 5.62 | 24.63 | 332 | 0.03 |
| 30 | 16.58 | 33.69 | 5.61 | 332 | 20 | 16.61 | 33.70 | 5.62 | 24.63 | 332 | 0.07 |
| 60 | 16.55 | 33.68 | 5.62 | 332 | 30 | 16.58 | 33.69 | 5.61 | 24.63 | 332 | 0.10 |
| 69 | 16.48 | 33.67 | 5.60 | 332 | 50 | 16.56 | 33.69 | 5.62 | 24.63 | 332 | 0.16 |
| 79 | 16.43 | 33.64 | 5.61 | 332 | 75 | 16.45 | 33.65 | 5.61 | 24.63 | 332 | 0.25 |
| 94 | 15.74 | 33.53 | 5.66 | 326 | 100 | 15.00 | 33.39 | 5.76 | 24.76 | 320 | 0.33 |
| 109 | 14.84 | 33.37 | 5.77 | 319 | 150 | 11.53 | 33.44 | 5.24 | 25.48 | 251 | 0.48 |
| 123 | 14.19 | 33.52 | - | 294 | 200 | 9.64 | 33.65 | 3.96 | 25.98 | 203 | 0.59 |
| 143 | 11.92 | 33.43 | 5.34 | 258 | 250 | 8.75 | 33.96 | 2.70 | 26.37 | 167 | 0.69 |
| 162 | 10.90 | 33.45 | 4.99 | 239 | 300 | 7.98 | 34.07 | 2.09 | 26.58 | 147 | 0.77 |
| 190 | 9.84 | 33.60 | 4.26 | 211 | 400 | 6.82 | 34.18 | 1.26 | 26.82 | 124 | 0.91 |
| 213 | 9.40 | 33.72 | 3.43 | 195 | 500 | 6.02 | 34.24 | 0.68 | 26.96 | 110 | 1.03 |
| 265 | 8.47 | 34.03 | 2.43 | 158 | 600 | (5.48) | (34.25) | | (27.05) | (102) | (1.15) |
| 344 | 7.40 | 34.11 | 1.76 | 137 | | | | | | | |
| 450 | 6.39 | 34.22 | 0.90 | 115 | | | | | | | |
| 585 | 5.52 | 34.25 | 0.42 | 102 | | | | | | | |
| 100.100 | PAOLINA-T; April 14, 1958; 0718 GCT; 29°21'N, 121°26'W; sounding, 2360 fm; wind, 330°, force 4; weather, partly cloudy; sea, very rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 16.66 | 33.62 | 5.52 | 339 | 0 | 16.66 | 33.62 | 5.52 | 24.56 | 339 | 0.00 |
| 10 | 16.58 | 33.60 | 5.53 | 338 | 10 | 16.58 | 33.60 | 5.53 | 24.57 | 338 | 0.03 |
| 29 | 16.39 | 33.58 | 5.54 | 336 | 20 | 16.45 | 33.59 | 5.54 | 24.58 | 337 | 0.07 |
| 58 | 16.38 | 33.62 | 5.60 | 333 | 30 | 16.38 | 33.59 | 5.54 | 24.60 | 335 | 0.10 |
| 68 | 16.36 | 33.60 | 5.60 | 334 | 50 | 16.38 | 33.61 | 5.55 | 24.62 | 333 | 0.17 |
| 77 | 16.03 | 33.58 | 5.66 | 328 | 75 | 16.17 | 33.59 | 5.63 | 24.65 | 330 | 0.25 |
| 92 | 14.51 | 33.45 | 5.77 | 306 | 100 | 13.55 | 33.45 | 5.56 | 25.10 | 287 | 0.33 |
| 106 | 12.80 | 33.46 | 5.31 | 272 | 150 | 11.26 | 33.86 | 2.15 | 26.86 | 215 | 0.45 |
| 121 | 11.59 | 33.51 | 4.42 | 246 | 200 | 10.75 | 34.01 | 1.60 | 26.07 | 195 | 0.56 |
| 141 | 11.38 | 33.83 | 2.36 | 219 | 250 | 10.22 | 34.14 | 1.46 | 26.26 | 177 | 0.65 |
| 159 | 11.16 | 33.89 | 2.00 | 211 | 300 | 9.62 | 34.24 | 1.32 | 26.45 | 159 | 0.74 |
| 188 | 10.86 | 33.96 | 1.76 | 201 | 400 | 8.20 | 34.29 | 0.96 | 26.71 | 135 | 0.89 |
| 211 | 10.66 | 34.04 | 1.54 | 191 | 500 | 6.90 | 34.30 | 0.66 | 26.91 | 116 | 1.02 |
| 263 | 10.07 | 34.17 | 1.44 | 172 | 600 | (5.90) | (34.33) | | (27.06) | (101) | (1.14) |
| 343 | 9.02 | 34.29 | 1.16 | 147 | | | | | | | |
| 447 | 7.46 | 34.29 | 0.80 | 124 | | | | | | | |
| 582 | 6.07 | 34.33 | 0.42 | 104 | | | | | | | |
| 100.110 | PAOLINA-T; April 14, 1958; 0212 GCT; 29°04'N, 122°02'W; sounding, 2200 fm; wind, 330°, force 3; weather, partly cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 18.18 | 33.77 | 5.50 | 362 | 0 | 18.18 | 33.77 | 5.50 | 24.31 | 362 | 0.00 |
| 10 | 17.18 | 33.77 | 5.56 | 340 | 10 | 17.18 | 33.77 | 5.56 | 24.55 | 340 | 0.04 |
| 30 | 17.09 | 33.82 | 5.50 | 334 | 20 | 17.11 | 33.78 | 5.51 | 24.58 | 337 | 0.07 |
| 55 | 17.04 | 33.83 | 5.49 | 331 | 30 | 17.09 | 33.82 | 5.50 | 24.61 | 334 | 0.10 |
| 65 | 17.02 | 33.82 | 5.50 | 332 | 50 | 17.06 | 33.82 | 5.49 | 24.63 | 332 | 0.17 |
| 75 | 17.00 | 33.80 | 5.52 | 334 | 75 | 17.00 | 33.80 | 5.52 | 24.61 | 334 | 0.25 |
| 85 | 16.98 | 33.78 | 5.53 | 334 | 100 | 17.07 | 33.87 | 5.52 | 24.66 | 330 | 0.34 |
| 99 | 17.05 | 33.87 | 5.52 | 330 | 150 | 13.12 | 33.74 | 5.15 | 25.42 | 257 | 0.48 |
| 114 | 16.08 | 33.86 | 5.56 | 309 | 200 | 9.70 | 33.64 | 4.32 | 25.96 | 205 | 0.60 |
| 132 | 14.54 | 33.79 | 5.45 | 281 | 250 | 8.75 | 33.88 | 3.42 | 26.30 | 173 | 0.70 |
| 151 | 13.04 | 33.74 | 5.13 | 256 | 300 | 8.06 | 34.03 | 2.54 | 26.53 | 152 | 0.78 |
| 175 | 11.46 | 33.64 | 4.76 | 234 | 400 | 6.92 | 34.13 | 1.38 | 26.77 | 129 | 0.93 |
| 199 | 9.72 | 33.64 | 4.33 | 206 | 500 | 6.08 | 34.20 | 0.73 | 26.94 | 113 | 1.06 |
| 247 | 8.80 | 33.86 | 3.55 | 175 | | | | | | | |
| 325 | 7.78 | 34.09 | 2.13 | 143 | | | | | | | |
| 422 | 6.68 | 34.14 | 1.18 | 125 | | | | | | | |
| 550 | 5.71a) | 34.25 | 0.50 | 105 | | | | | | | |

a) Mean value of 5.65 and 5.77°C.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |

PAOLINA-T; April 13, 1958; 2052 GCT; 28°50'N, 122°41'W; sounding, 2250 fm; wind, 320°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°. 100.120

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.72 | 34.02 | 5.49 | 334 | 0 | 17.72 | 34.02 | 5.49 | 24.61 | 334 | 0.00 |
| 10 | 17.54 | 34.00 | 5.44 | 330 | 10 | 17.54 | 34.00 | 5.44 | 24.65 | 330 | 0.03 |
| 30 | 17.50 | 34.01 | 5.40 | 329 | 20 | 17.50 | 34.00 | 5.42 | 24.65 | 330 | 0.07 |
| 55 | 17.55 | 34.04 | 5.44 | 328 | 30 | 17.50 | 34.01 | 5.40 | 24.66 | 329 | 0.10 |
| 65 | 17.58 | 34.06 | 5.39 | 328 | 50 | 17.54 | 34.02 | 5.43 | 24.66 | 329 | 0.16 |
| 75 | 17.62 | 34.09 | 5.46 | 327 | 75 | 17.62 | 34.09 | 5.46 | 24.68 | 327 | 0.25 |
| 85 | 17.68 | 34.09 | 5.43 | 327 | 100 | 17.64 | 34.09 | 5.42 | 24.68 | 327 | 0.33 |
| 100 | 17.64 | 34.09 | 5.42 | 327 | 150 | 13.50 | 33.74 | 5.24 | 25.34 | 264 | 0.48 |
| 115 | 17.51 | 34.16 | 5.38 | 318 | 200 | 10.37 | 33.68 | 4.48 | 25.88 | 213 | 0.60 |
| 134 | 14.53 | 33.78 | 5.36 | 282 | 250 | 8.82 | 33.91 | 3.24 | 26.32 | 171 | 0.70 |
| 153 | 12.94 | 33.69 | 5.22 | 258 | 300 | 8.02 | 33.98 | 2.62 | 26.50 | 154 | 0.79 |
| 178 | 11.37 | 33.64 | 5.04 | 232 | 400 | 6.76 | 34.15 | 1.44 | 26.80 | 126 | 0.93 |
| 201 | 10.34 | 33.68 | 4.46 | 212 | 500 | 6.01 | 34.29 | 0.57 | 27.01 | 106 | 1.05 |
| 249 | 8.83 | 33.91 | 3.26 | 172 | | | | | | | |
| 326 | 7.63 | 34.02 | 2.36 | 147 | | | | | | | |
| 423 | 6.50 | 34.20 | 1.15 | 118 | | | | | | | |
| 552 | 5.90 | 34.32a) | 0.47 | 102 | | | | | | | |

PAOLINA-T; April 13, 1958; 1517 GCT; 28°27'N, 123°21'W; sounding, 2350 fm; wind, 320°, force 2; weather, overcast; sea, very rough; wire angle, 00°. 100.130

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.79 | 34.09 | 5.39 | 330 | 0 | 17.79 | 34.09 | 5.39 | 24.65 | 330 | 0.00 |
| 10 | 17.80 | 34.09 | 5.39 | 330 | 10 | 17.80 | 34.09 | 5.39 | 24.65 | 330 | 0.03 |
| 30 | 17.78 | 34.09 | 5.31 | 330 | 20 | 17.79 | 34.09 | 5.33 | 24.65 | 330 | 0.07 |
| 55 | 17.76 | 34.08 | 5.36 | 329 | 30 | 17.78 | 34.09 | 5.31 | 24.65 | 330 | 0.10 |
| 65 | 17.70 | 34.05 | 5.30 | 331 | 50 | 17.76 | 34.08 | 5.34 | 24.66 | 329 | 0.16 |
| 74 | 17.58 | 34.05 | 5.38 | 328 | 75 | 17.58 | 34.05 | 5.38 | 24.66 | 329 | 0.25 |
| 84 | 17.64 | 34.07 | 5.37 | 329 | 100 | 17.69 | 34.12 | 5.40 | 24.69 | 326 | 0.33 |
| 99 | 17.69 | 34.12 | 5.40 | 326 | 150 | 14.62 | 33.90 | 5.13 | 25.23 | 275 | 0.48 |
| 113 | 17.76 | 34.18a) | 5.38 | 323 | 200 | 10.96 | 33.68 | 4.50 | 25.78 | 223 | 0.61 |
| 133 | 16.11 | 34.11a) | 5.22 | 291 | 250 | 9.17 | 33.89 | 3.70 | 26.24 | 179 | 0.71 |
| 153 | 14.28 | 33.86 | 5.10 | 271 | 300 | 8.07 | 34.00 | 2.94 | 26.49 | 155 | 0.80 |
| 177 | 12.09 | 33.71 | 4.74 | 240 | 400 | 6.84 | 34.12 | 1.67 | 26.77 | 128 | 0.95 |
| 201 | 10.94 | 33.68 | 4.49 | 222 | 500 | 6.30 | 34.25 | 0.75 | 26.94 | 112 | 1.08 |
| 249 | 9.22 | 33.89 | 3.76 | 179 | | | | | | | |
| 326 | 7.66 | 34.04a) | 2.63 | 146 | | | | | | | |
| 424 | 6.72 | 34.14 | 1.34 | 126 | | | | | | | |
| 551 | 6.08 | 34.34 | 0.44 | 103 | | | | | | | |

PAOLINA-T; April 13, 1958; 0628 GCT; 27°52'N, 124°22'W; sounding, 2300 fm; wind, 180°, force 2; weather, overcast; sea, rough; wire angle, 05°. 100.145

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.86 | 33.99 | 5.38 | 339 | 0 | 17.86 | 33.99 | 5.38 | 24.56 | 339 | 0.00 |
| 10 | 17.74 | 33.95 | 5.39 | 339 | 10 | 17.74 | 33.95 | 5.39 | 24.56 | 339 | 0.03 |
| 30 | 17.72 | 34.00 | 5.41 | 335 | 20 | 17.93 | 33.98 | 5.40 | 24.57 | 338 | 0.07 |
| 55 | 17.74 | 33.99 | 5.34 | 336 | 30 | 17.72 | 34.00 | 5.41 | 24.60 | 335 | 0.10 |
| 64 | 17.73 | 33.99 | 5.38 | 336 | 50 | 17.74 | 33.99 | 5.37 | 24.59 | 336 | 0.17 |
| 74 | 17.70 | 33.98 | 5.38 | 336 | 75 | 17.69 | 33.99 | 5.39 | 24.59 | 336 | 0.25 |
| 84 | 17.58 | 34.00 | 5.41 | 332 | 100 | 17.65 | 34.05 | 5.33 | 24.66 | 330 | 0.34 |
| 99 | 17.64 | 34.05 | 5.33 | 330 | 150 | 13.35 | 33.81 | 5.10 | 25.42 | 257 | 0.48 |
| 113 | 16.99 | 34.03 | 5.42 | 316 | 200 | 10.60 | 33.69 | 4.54 | 25.85 | 216 | 0.60 |
| 132 | 14.59 | 33.83 | 5.24 | 280 | 250 | 9.06 | 33.89 | 3.67 | 26.26 | 177 | 0.71 |
| 151 | 13.26 | 33.80 | 5.10 | 256 | 300 | 8.06 | 34.05 | 2.64 | 26.54 | 151 | 0.79 |
| 175 | 11.70 | 33.68 | 4.68 | 236 | 400 | 7.23 | 34.20 | 1.28 | 26.78 | 128 | 0.94 |
| 199 | 10.62 | 33.69 | 4.55 | 216 | 500 | 6.58 | 34.27 | 0.65 | 26.92 | 114 | 1.06 |
| 247 | 9.18 | 33.88 | 3.73 | 179 | | | | | | | |
| 324 | 7.78 | 34.09 | 2.25 | 143 | | | | | | | |
| 420 | 7.13 | 34.23 | 1.09 | 124 | | | | | | | |
| 546 | 6.20 | 34.29 | 0.44 | 108 | | | | | | | |

a) Broken bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **103.30** | BLACK DOUGLAS; April 23, 1958; 1242 GCT; 31°05'N, 116°25'W; sounding, 38 fm; wind, 280°, force 3; weather, partly cloudy; sea, rough; wire angle, 02°. | | | | | | | | | | |
| 0 | 17.46 | 33.53 | 5.68 | 364 | 0 | 17.46 | 33.53 | 5.68 | 24.29 | 364 | 0.00 |
| 10 | 17.42 | 33.58 | 5.83 | 359 | 10 | 17.42 | 33.58 | 5.83 | 24.34 | 359 | 0.04 |
| 29 | 14.30 | 33.48 | 5.85 | 300 | 20 | 14.90 | 33.50 | 5.84 | 24.88 | 308 | 0.07 |
| 48 | 11.73 | 33.45 | 4.95 | 253 | 30 | 14.28 | 33.48 | 5.85 | 24.97 | 299 | 0.10 |
| **103.35** | BLACK DOUGLAS; April 23, 1958; 1601 GCT; 30°55.5'N, 116°45'W; sounding, 1000 fm; wind, 270°, force 3; weather, partly cloudy; sea, high; wire angle, 23°. | | | | | | | | | | |
| 0 | 17.07 | 33.52 | 5.82 | 356 | 0 | 17.07 | 33.52 | 5.82 | 24.38 | 356 | 0.00 |
| 8 | 16.84 | 33.54 | 5.94 | 349 | 10 | 16.74 | 33.54 | 5.94 | 24.47 | 347 | 0.04 |
| 27 | 12.64 | 33.49 | 5.33 | 267 | 20 | 14.40 | 33.52 | 5.52 | 24.98 | 298 | 0.07 |
| 40 | 11.46 | 33.55 | 4.58 | 241 | 30 | 12.30 | 33.50 | 5.18 | 25.39 | 260 | 0.10 |
| 49 | 10.88 | 33.54 | 4.43 | 232 | 50 | 10.85 | 33.54 | 4.42 | 25.68 | 232 | 0.14 |
| 58 | 10.61 | 33.59 | 4.16 | 224 | 75 | 10.03 | 33.69 | 3.62 | 25.95 | 206 | 0.20 |
| 65 | 10.28 | 33.88r | 4.00 | | 100 | 9.29 | 33.81 | 3.43 | 26.16 | 186 | 0.25 |
| 81 | 9.93 | 33.71 | 3.57 | 203 | 150 | 8.76 | 34.05 | 2.46 | 26.42 | 160 | 0.34 |
| 92 | 9.42 | 33.91r | 3.53 | | 200 | 9.02 | 34.33 | 1.14 | 26.61 | 144 | 0.41 |
| 102 | 9.28 | 33.82 | 3.41 | 186 | 250 | 8.55 | 34.33 | 0.91 | 26.68 | 137 | 0.48 |
| 120 | 9.20 | 33.93 | 2.90 | 176 | 300 | 8.00 | 34.30 | 0.80 | 26.75 | 131 | 0.55 |
| 140 | 8.76 | 34.00 | 2.58 | 164 | 400 | 7.16 | 34.29 | 0.70 | 26.86 | 120 | 0.68 |
| 169 | 9.21 | 34.27 | 1.45 | 151 | 500 | (6.20) | (34.31) | (0.53) | (27.01) | (106) | (0.80) |
| 209 | 8.94 | 34.34 | 1.06 | 142 | | | | | | | |
| 274 | 8.23 | 34.31 | 0.85 | 133 | | | | | | | |
| 359 | 7.48 | 34.29 | 0.75 | 125 | | | | | | | |
| 484 | 6.36 | 34.31 | 0.55 | 108 | | | | | | | |
| **103.40** | BLACK DOUGLAS; April 23, 1958; 1937 GCT; 30°45'N, 117°05.5'W; sounding, 800 fm; wind, 300°, force 4; weather, cloudy; sea, high; wire angle, 16°. | | | | | | | | | | |
| 0 | 17.45 | 33.54 | - | 362 | 0 | 17.45 | 33.54 | | 24.31 | 362 | 0.00 |
| 9 | 17.34 | 33.53 | 5.62 | 360 | 10 | 17.30 | 33.53 | 5.62 | 24.34 | 360 | 0.04 |
| 28 | 16.04 | 33.51 | 5.68 | 334 | 20 | 16.84 | 33.52 | 5.64 | 24.43 | 351 | 0.07 |
| 42 | 15.08 | 33.47 | 5.77 | 316 | 30 | 15.90 | 33.51 | 5.68 | 24.64 | 331 | 0.10 |
| 51 | 14.59 | 33.45 | 5.84 | 307 | 50 | 14.65 | 33.45 | 5.84 | 24.87 | 309 | 0.17 |
| 60 | 14.02 | 33.45 | 5.78 | 296 | 75 | 12.68 | 33.48 | 5.45 | 25.30 | 268 | 0.24 |
| 69 | 13.26 | 33.47 | 5.60 | 280 | 100 | 11.26 | 33.44 | 5.06 | 25.54 | 246 | 0.31 |
| 87 | 11.76 | 33.48 | 5.16 | 251 | 150 | 9.85 | 33.77 | 3.44 | 26.05 | 197 | 0.42 |
| 100 | 11.26 | 33.44 | 5.06 | 246 | 200 | 9.22 | 33.96 | 2.53 | 26.29 | 174 | 0.51 |
| 112 | 10.78 | 33.53 | 4.65 | 231 | 250 | 9.32 | 34.21 | 1.18 | 26.55 | 150 | 0.60 |
| 134 | 10.29 | 33.69 | 3.78 | 211 | 300 | 8.82 | 34.34 | 1.04 | 26.65 | 140 | 0.67 |
| 158 | 9.54 | 33.81 | 3.17 | 190 | 400 | 7.11 | 34.27 | 1.12 | 26.85 | 121 | 0.81 |
| 192 | 9.22 | 33.93 | 2.53 | 176 | 500 | 6.34 | 34.30 | 0.77 | 27.01 | 106 | 0.93 |
| 239 | 9.48 | 34.29 | 1.27 | 154 | | | | | | | |
| 311 | 8.72 | 34.34 | 1.04 | 138 | | | | | | | |
| 400 | 7.11 | 34.27a) | 1.12 | 121 | | | | | | | |
| 528 | 6.20 | 34.31 | 0.62 | 106 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; April 24, 1958; 0250 GCT; 30°22'N, 117°45'W; sounding, 1200 fm; wind, 310°, force 5; weather, haze; sea, high; wire angle, 18°. | | | | | | | | | | | 103.50 |
| 0 | 17.27 | 33.68u | 5.52 | | 0 | 17.27 | (33.60) | 5.52 | (24.40) | (353) | (0.00) |
| 9 | 17.26 | 33.60 | 5.59 | 353 | 10 | 17.25 | 33.60 | 5.60 | 24.40 | 353 | 0.04 |
| 27 | 16.95 | 33.62 | 5.60 | 346 | 20 | 17.08 | 33.62 | 5.60 | 24.46 | 348 | 0.07 |
| 40 | 16.61 | 33.58 | 5.64 | 341 | 30 | 16.87 | 33.61 | 5.60 | 24.50 | 344 | 0.10 |
| 47 | 16.12 | 33.58 | 5.74 | 330 | 50 | 16.08 | 33.61 | 5.74 | 24.68 | 327 | 0.17 |
| 56 | 16.06 | 33.64 | 5.73 | 325 | 75 | 15.36 | 33.58 | 5.74 | 24.82 | 314 | 0.25 |
| 63 | 15.66 | 33.61 | 5.75 | 318 | 100 | 13.40 | 33.58 | 5.01 | 25.23 | 275 | 0.33 |
| 79 | 15.22 | 33.57 | 5.74 | 312 | 150 | 10.46 | 33.65 | 4.16 | 25.84 | 217 | 0.45 |
| 92 | 14.37 | 33.56 | 5.59 | 295 | 200 | 9.22 | 33.98 | 2.91 | 26.30 | 173 | 0.55 |
| 104 | 13.06 | 33.59 | 4.86 | 267 | 250 | 8.82 | 34.12 | 2.00 | 26.48 | 156 | 0.63 |
| 124 | 11.50 | 33.61 | 4.47 | 237 | 300 | 8.53 | 34.22 | 1.60 | 26.60 | 145 | 0.71 |
| 149 | 10.49 | 33.65 | 4.17 | 217 | 400 | 6.86 | 34.23 | 1.17 | 26.85 | 121 | 0.85 |
| 182 | 9.70 | 33.97 | 2.98 | 181 | 500 | 5.91 | 34.24 | 0.75 | 26.98 | 108 | 0.97 |
| 229 | 8.90 | 34.04 | 2.46 | 163 | | | | | | | |
| 302 | 8.53 | 34.22 | 1.60 | 144 | | | | | | | |
| 394 | 6.94 | 34.23 | 1.18 | 121 | | | | | | | |
| 525 | 5.75 | 34.25 | 0.67 | 105 | | | | | | | |
| BLACK DOUGLAS; April 24, 1958; 0952 GCT; 30°06'N, 118°25.5'W; sounding, 1700 fm; wind, 340°, force 5; weather, clear; sea, high; wire angle, 14°. | | | | | | | | | | | 103.60 |
| 0 | 17.10 | 33.59 | 5.61 | 351 | 0 | 17.10 | 33.59 | 5.61 | 24.43 | 351 | 0.00 |
| 9 | 17.14 | 33.58 | 5.64 | 352 | 10 | 17.14 | 33.58 | 5.63 | 24.42 | 352 | 0.04 |
| 28 | 17.38 | 33.81a) | 5.53 | 341 | 20 | 17.27 | 33.64 | 5.58 | 24.42 | 352 | 0.07 |
| 57 | 17.30 | 33.87 | 5.68 | 335 | 30 | 17.38 | 33.83 | 5.54 | 24.56 | 339 | 0.10 |
| 66 | 16.98 | 33.78 | 5.71 | 334 | 50 | 17.36 | 33.85 | 5.64 | 24.58 | 337 | 0.17 |
| 75 | 17.00 | 33.81 | 5.55 | 333 | 75 | 17.00 | 33.81 | 5.55 | 24.62 | 333 | 0.26 |
| 88 | 16.38 | 33.87 | 5.48 | 314 | 100 | 14.46 | 33.67 | 5.18 | 25.09 | 288 | 0.34 |
| 101 | 14.35 | 33.66 | 5.18 | 287 | 150 | 10.67 | 33.57 | 4.49 | 25.74 | 226 | 0.46 |
| 114 | 12.92 | 33.58 | 5.14 | 265 | 200 | 9.12 | 33.85 | 3.17 | 26.22 | 181 | 0.57 |
| 132 | 11.57 | 33.53 | 4.78 | 244 | 250 | 8.52 | 33.97 | 2.53 | 26.42 | 162 | 0.66 |
| 150 | 10.67 | 33.57 | 4.49 | 226 | 300 | 7.55 | 34.02 | 2.03 | 26.59 | 146 | 0.74 |
| 176 | 9.46 | 33.66 | 4.06 | 200 | 400 | 6.80 | 34.33 | 1.01 | 26.94 | 113 | 0.87 |
| 198 | 9.16 | 33.84 | 3.21 | 182 | 500 | 6.20 | 34.33 | 0.47 | 27.02 | 105 | 0.98 |
| 246 | 8.58 | 33.97 | 2.57 | 164 | | | | | | | |
| 321 | 7.25 | 34.07 | 1.77 | 138 | | | | | | | |
| 420 | 6.71 | 34.33 | 0.93 | 111 | | | | | | | |
| 547 | 5.89 | 34.33 | 0.36 | 101 | | | | | | | |
| BLACK DOUGLAS; April 24, 1958; 1543 GCT; 29°48.5'N, 119°01'W; sounding, 1850 fm; wind, 340°, force 5; weather, cloudy; sea, high; wire angle, 18°. | | | | | | | | | | | 103.70 |
| 0 | 16.30 | 33.46 | 5.75 | 342 | 0 | 16.30 | 33.46 | 5.75 | 24.52 | 342 | 0.00 |
| 9 | 16.28 | 33.46 | 5.78 | 342 | 10 | 16.27 | 33.46 | 5.78 | 24.53 | 341 | 0.03 |
| 27 | 16.26 | 33.48 | 5.79 | 340 | 20 | 16.26 | 33.47 | 5.78 | 24.53 | 341 | 0.07 |
| 55 | 16.37 | 33.63 | 5.64 | 332 | 30 | 16.26 | 33.51 | 5.79 | 24.57 | 338 | 0.10 |
| 64 | 16.18 | 33.56 | 5.63 | 332 | 50 | 16.35 | 33.59 | 5.69 | 24.61 | 334 | 0.17 |
| 73 | 15.67 | 33.45 | 5.66 | 330 | 75 | 15.65 | 33.45 | 5.67 | 24.66 | 329 | 0.25 |
| 86 | 15.52 | 33.49 | 5.71 | 323 | 100 | 15.70 | 33.66 | 5.64 | 24.81 | 315 | 0.34 |
| 99 | 15.70 | 33.66 | 5.64 | 315 | 150 | 10.50 | 33.54 | 4.77 | 25.75 | 225 | 0.47 |
| 112 | 13.70 | 33.58 | 5.61 | 280 | 200 | 9.01 | 33.84 | 3.33 | 26.23 | 180 | 0.57 |
| 130 | 11.69 | 33.44 | 5.29 | 253 | 250 | 8.24 | 34.04 | 2.52 | 26.50 | 154 | 0.66 |
| 148 | 10.58 | 33.53 | 4.80 | 228 | 300 | 7.49 | 34.09 | 2.14 | 26.65 | 140 | 0.73 |
| 175 | 9.42 | 33.60 | 4.05 | 204 | 400 | 6.47 | 34.18 | 0.92 | 26.87 | 119 | 0.87 |
| 197 | 9.06 | 33.75 | 3.56 | 188 | 500 | 5.98 | 34.25 | 0.58 | 26.99 | 108 | 0.99 |
| 245 | 8.34 | 34.03 | 2.52 | 155 | | | | | | | |
| 321 | 7.23 | 34.11 | 1.82 | 136 | | | | | | | |
| 420 | 6.34 | 34.19 | 0.81 | 117 | | | | | | | |
| 548 | 5.77 | 34.31 | 0.48 | 100 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

S10

CCOFI 5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

103.80 BLACK DOUGLAS; April 24, 1958; 2250 GCT; 29°26.5'N, 119°45.5'W; sounding, 1900 fm; wind, 330°, force 5; weather, cloudy; sea, very rough; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.93 | 33.64 | 5.72 | 343 | 0 | 16.93 | 33.64 | 5.72 | 24.51 | 343 | 0.00 |
| 9 | 16.92 | 33.62 | 3.96u | 345 | 10 | 16.91 | 33.62 | 5.72 | 24.49 | 345 | 0.03 |
| 28 | 16.77 | 33.62 | 5.66 | 341 | 20 | 16.85 | 33.62 | 5.71 | 24.51 | 343 | 0.07 |
| 56 | 17.03 | 33.80 | 5.64 | 335 | 30 | 16.77 | 33.62 | 5.66 | 24.55 | 340 | 0.10 |
| 65 | 17.05 | 33.84 | 5.70 | 332 | 50 | 16.79 | 33.66 | 5.65 | 24.56 | 339 | 0.17 |
| 74 | 16.82 | 33.77 | 5.67 | 332 | 75 | 16.80 | 33.77 | 5.67 | 24.63 | 332 | 0.25 |
| 88 | 16.45 | 33.76 | 5.70 | 324 | 100 | 16.12 | 33.69 | 5.70 | 24.74 | 322 | 0.34 |
| 102 | 16.11 | 33.69 | 5.70 | 322 | 150 | 11.22 | 33.55 | 4.83 | 25.63 | 237 | 0.48 |
| 115 | 14.08 | 33.54 | 6.14 | 391 | 200 | 9.47 | 33.76 | 3.65 | 26.09 | 193 | 0.59 |
| 132 | 12.78 | 33.48 | 5.47 | 270 | 250 | 8.83 | 34.04 | 2.27 | 26.42 | 162 | 0.68 |
| 149 | 11.24 | 33.55 | 4.83 | 238 | 300 | 7.87 | 34.07 | 2.14 | 26.58 | 146 | 0.76 |
| 175 | 10.34 | 33.60 | 4.43 | 218 | 400 | 6.78 | 34.13 | 1.17 | 26.79 | 127 | 0.90 |
| 196 | 9.52 | 33.75 | 3.68 | 194 | 500 | 6.10 | 34.23 | 0.59 | 26.96 | 111 | 1.03 |
| 245 | 8.94 | 34.02 | 2.33 | 165 | | | | | | | |
| 318 | 7.55 | 34.08 | 2.08 | 141 | | | | | | | |
| 416 | 6.66 | 34.15 | 1.07 | 122 | | | | | | | |
| 541 | 5.82 | 34.27 | 0.47 | 104 | | | | | | | |

103.90 BLACK DOUGLAS; April 25, 1958; 0459 GCT; 29°06'N, 120°25'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.45 | 33.84 | 5.47 | 340 | 0 | 17.45 | 33.84 | 5.47 | 24.54 | 340 | 0.00 |
| 10 | 17.48 | 33.80 | 5.50 | 344 | 10 | 17.48 | 33.80 | 5.50 | 24.50 | 344 | 0.03 |
| 29 | 17.42 | 33.82 | 5.56 | 342 | 20 | 17.46 | 33.81 | 5.52 | 24.52 | 343 | 0.07 |
| 56 | 17.35 | 33.80 | 5.58 | 341 | 30 | 17.42 | 33.81 | 5.54 | 24.53 | 341 | 0.10 |
| 65 | 17.24 | 33.80 | 5.58 | 339 | 50 | 17.37 | 33.80 | 5.55 | 24.53 | 341 | 0.17 |
| 74 | 16.90 | 33.77 | 5.58 | 333 | 75 | 16.88 | 33.77 | 5.58 | 24.62 | 333 | 0.26 |
| 87 | 16.86 | 33.82 | 5.59 | 329 | 100 | 16.74 | 33.87 | 5.52 | 24.74 | 322 | 0.34 |
| 100 | 16.74 | 33.87 | 5.52 | 322 | 150 | 11.37 | 33.62 | 4.36 | 25.65 | 235 | 0.48 |
| 113 | 15.16 | 33.74 | 5.26 | 298 | 200 | 9.64 | 33.80 | 3.39 | 26.10 | 192 | 0.59 |
| 130 | 12.92 | 33.62 | 4.74 | 262 | 250 | 9.18 | 34.16 | 1.92 | 26.46 | 158 | 0.68 |
| 148 | 11.44 | 33.62 | 4.39 | 236 | 300 | 8.37 | 34.20 | 1.61 | 26.62 | 143 | 0.76 |
| 174 | 10.27 | 33.75 | 3.60 | 206 | 400 | 7.25 | 34.27 | 0.81 | 26.83 | 123 | 0.89 |
| 196 | 9.70 | 33.80 | 3.42 | 193 | 500 | 6.48 | 34.31 | 0.46 | 26.98 | 109 | 1.02 |
| 244 | 9.28 | 34.15 | 2.08 | 161 | | | | | | | |
| 319 | 8.16 | 34.22 | 1.55 | 138 | | | | | | | |
| 416 | 7.06 | 34.28 | 0.70 | 120 | | | | | | | |
| 541 | 6.21 | 34.33 | 0.38 | 105 | | | | | | | |

107.32 BLACK DOUGLAS; April 27, 1958; 0441 GCT; 30°26'N, 116°11'W; sounding, 350 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 24°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.14 | 33.57 | 5.81 | 331 | 0 | 16.14 | 33.57 | 5.81 | 24.64 | 331 | 0.00 |
| 9 | 16.12 | 33.53 | 5.86 | 333 | 10 | 16.10 | 33.53 | 5.86 | 24.62 | 333 | 0.03 |
| 27 | 15.00 | 33.55 | 6.00 | 308 | 20 | 16.06 | 33.55 | 5.88 | 24.80 | 316 | 0.07 |
| 44 | 12.69 | 33.50 | 5.84 | 267 | 30 | 14.68 | 33.56 | 5.97 | 24.96 | 301 | 0.10 |
| 66 | 11.32 | 33.60 | 4.19 | 235 | 50 | 12.23 | 33.52 | 5.28 | 25.42 | 257 | 0.15 |
| 87 | 10.39 | 33.80 | 3.29 | 204 | 75 | 10.40 | 33.62 | 4.00 | 25.83 | 218 | 0.21 |
| 107 | 10.14 | 33.90 | 2.93 | 193 | 100 | 10.23 | 33.87 | 3.03 | 26.06 | 196 | 0.26 |
| 140 | 9.74 | 34.03 | 2.41 | 177 | 150 | 9.62 | 34.06 | 2.29 | 26.30 | 173 | 0.36 |
| 173 | 9.36 | 34.13 | 2.00 | 164 | 200 | 9.69 | 34.26 | 1.05 | 26.45 | 159 | 0.44 |
| 205 | 9.68 | 34.20u | 1.01 | | 250 | 9.17 | 34.40 | 0.76 | 26.64 | 141 | 0.52 |
| 259 | 9.06 | 34.42 | 0.72 | 138 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}^{-5}$ $10^{3}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}^{-5}$ $10^{3}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; April 27, 1958; 0159 GCT; 30°20'N, 116°23'W; sounding, 900 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 20°. 107.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.43 | 33.61 | 5.66 | 357 | 0 | 17.43 | 33.61 | 5.66 | 24.37 | 357 | 0.00 |
| 9 | 17.44 | 33.60 | 5.60 | 358 | 10 | 17.44 | 33.60 | 5.60 | 24.37 | 357 | 0.04 |
| 28 | 16.62 | 33.59 | 5.72 | 340 | 20 | 17.43 | 33.60 | 5.61 | 24.37 | 357 | 0.07 |
| 41 | 15.30 | 33.55 | 5.91 | 315 | 30 | 16.00 | 33.53 | 6.04 | 24.63 | 332 | 0.11 |
| 50 | 14.23 | 33.55a) | 5.76 | 293 | 50 | 14.23 | 33.55 | 5.76 | 25.04 | 293 | 0.17 |
| 59 | 13.24 | 33.54 | 5.44 | 274 | 75 | 11.80 | 33.53 | 4.47 | 25.51 | 248 | 0.24 |
| 67 | 12.40 | 33.51 | 4.96 | 261 | 100 | 10.22 | 33.60 | 4.05 | 25.83 | 218 | 0.30 |
| 83 | 11.24 | 33.57 | 4.33 | 236 | 150 | 9.27 | 33.96 | 2.66 | 26.28 | 175 | 0.39 |
| 95 | 10.46 | 33.58 | 4.22 | 222 | 200 | 8.35 | 34.08 | 2.09 | 26.52 | 152 | 0.47 |
| 107 | 10.04 | 33.69 | 3.68 | 207 | 250 | 7.83 | 34.16 | 1.74 | 26.66 | 139 | 0.55 |
| 126 | 9.67 | 33.93 | 2.79 | 183 | 300 | 7.48 | 34.18 | 1.34 | 26.72 | 133 | 0.62 |
| 150 | 9.27 | 33.96 | 2.66 | 175 | 400 | 6.87 | 34.32 | 0.50 | 26.92 | 114 | 0.75 |
| 183 | 8.61 | 34.05 | 2.24 | 158 | 500 | 6.32 | 34.34 | 0.40 | 27.01 | 106 | 0.86 |
| 221 | 8.04 | 34.13 | 1.91 | 144 | | | | | | | |
| 298 | 7.48 | 34.18 | 1.35 | 133 | | | | | | | |
| 387 | 6.94 | 34.32 | 0.52 | 115 | | | | | | | |
| 516 | 6.26 | 34.34 | 0.40 | 105 | | | | | | | |

BLACK DOUGLAS; April 26, 1958; 2214 GCT; 30°10.5'N, 116°43'W; sounding, 1400 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 11°. 107.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.91 | 33.51 | 5.56 | 352 | 0 | 16.91 | 33.51 | 5.56 | 24.42 | 352 | 0.00 |
| 10 | 17.00 | 33.58 | 5.61 | 350 | 10 | 17.00 | 33.58 | 5.61 | 24.44 | 350 | 0.04 |
| 29 | 16.18 | 33.49 | 5.72 | 337 | 20 | 16.90 | 33.58 | 5.65 | 24.47 | 347 | 0.07 |
| 43 | 13.50 | 33.51 | 5.66 | 281 | 30 | 15.50 | 33.42 | 5.85 | 24.67 | 328 | 0.10 |
| 52 | 12.93 | 33.49 | 5.48 | 272 | 50 | 13.00 | 33.50 | 5.51 | 25.25 | 273 | 0.16 |
| 61 | 11.82 | 33.49 | 5.14 | 252 | 75 | 11.00 | 33.56 | 4.38 | 25.68 | 232 | 0.23 |
| 70 | 11.18 | 33.53 | 4.58 | 237 | 100 | 10.28 | 33.75 | 3.82 | 25.95 | 206 | 0.28 |
| 88 | 10.60 | 33.66 | 3.99 | 218 | 150 | 9.25 | 33.99 | 2.60 | 26.32 | 172 | 0.38 |
| 100 | 10.28 | 33.75 | 3.82 | 206 | 200 | 8.50 | 34.04 | 2.32 | 26.47 | 157 | 0.46 |
| 114 | 10.00 | 33.77 | 3.33 | 200 | 250 | 7.88 | 34.12 | 2.30 | 26.63 | 142 | 0.54 |
| 136 | 9.52 | 33.94 | 2.71 | 180 | 300 | 7.48 | 34.23 | 1.18 | 26.76 | 129 | 0.61 |
| 162 | 9.03 | 34.01 | 2.53 | 168 | 400 | 6.60 | 34.26 | 0.75 | 26.91 | 115 | 0.74 |
| 196 | 8.56 | 34.04 | 2.31 | 158 | 500 | (6.00) | (34.35) | | (27.07) | (100) | (0.85) |
| 243 | 7.98 | 34.10 | 2.34 | 145 | | | | | | | |
| 298p | 7.48 | 34.23 | 1.28 | 129 | | | | | | | |
| 374p | 6.74 | 34.25 | 0.80 | 117 | | | | | | | |
| 484p | 6.12 | 34.33 | 0.43 | 104 | | | | | | | |

BLACK DOUGLAS; April 26, 1958; 1446 GCT; 29°50.5'N, 117°23.5'W; sounding, 1500 fm; wind, 310°, force 5; weather, partly cloudy; sea, high; wire angle, 27°. 107.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.13 | 33.58 | 5.74 | 352 | 0 | 17.13 | 33.58 | 5.74 | 24.42 | 352 | 0.00 |
| 9 | 17.13 | 33.58 | 5.79 | 352 | 10 | 17.13 | 33.58 | 5.78 | 24.42 | 352 | 0.04 |
| 26 | 16.83 | 33.57 | 5.67 | 347 | 20 | 17.05 | 33.58 | 5.77 | 24.43 | 351 | 0.07 |
| 39 | 15.23 | 33.53 | 5.85 | 315 | 30 | 16.50 | 33.55 | 5.67 | 24.61 | 334 | 0.10 |
| 48 | 14.32 | 33.51 | 5.89 | 297 | 50 | 13.85 | 33.49 | 5.73 | 25.06 | 291 | 0.17 |
| 56 | 12.74 | 33.48 | 5.09 | 259 | 75 | 11.27 | 33.56 | 4.31 | 25.62 | 237 | 0.23 |
| 64 | 11.90 | 33.53 | 4.60 | 250 | 100 | 10.52 | 33.63 | 3.90 | 25.82 | 219 | 0.29 |
| 80 | 11.14 | 33.57 | 4.25 | 234 | 150 | 9.41 | 33.84 | 2.96 | 26.17 | 186 | 0.39 |
| 92 | 10.80 | 33.61 | 4.11 | 226 | 200 | 8.95 | 34.12 | 1.81 | 26.46 | 158 | 0.48 |
| 103 | 10.42 | 33.64 | 3.87 | 217 | 250 | 8.39 | 34.15 | 1.53 | 26.58 | 147 | 0.56 |
| 120 | 9.91 | 33.72 | 3.57 | 203 | 300 | 7.25 | 34.09 | 1.51 | 26.68 | 137 | 0.63 |
| 140 | 9.56 | 33.78 | 3.21 | 192 | 400 | 6.65 | 34.17 | 0.79 | 26.84 | 122 | 0.77 |
| 166 | 9.32 | 33.95 | 2.70 | 176 | | | | | | | |
| 202 | 8.89 | 34.13 | 1.81 | 156 | | | | | | | |
| 260 | 7.87 | 34.07 | 1.86 | 146 | | | | | | | |
| 333 | 6.99 | 34.11 | 1.23 | 131 | | | | | | | |
| 442 | 6.52 | 34.22 | 0.62 | 117 | | | | | | | |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **107.60** | BLACK DOUGLAS; April 26, 1958; 0737 GCT; 29°31'N, 118°03'W; sounding, 1800 fm; wind, 310°, force 5; weather, partly cloudy; sea, very rough; wire angle, 26°. | | | | | | | | | | |
| 0 | 16.90 | 33.59 | 5.60 | 347 | 0 | 16.90 | 33.59 | 5.60 | 24.47 | 347 | 0.00 |
| 9 | 16.88 | 33.57 | 5.61 | 348 | 10 | 16.87 | 33.57 | 5.60 | 24.47 | 347 | 0.03 |
| 26 | 16.86 | 33.58 | 5.57 | 346 | 20 | 16.86 | 33.57 | 5.59 | 24.47 | 347 | 0.07 |
| 53 | 16.16 | 33.58 | 5.70 | 331 | 30 | 16.84 | 33.58 | 5.57 | 24.48 | 346 | 0.10 |
| 62 | 15.99 | 33.58 | 5.71 | 327 | 50 | 16.35 | 33.58 | 5.69 | 24.60 | 335 | 0.17 |
| 70 | 15.86 | 33.57 | 5.72 | 325 | 75 | 15.72 | 33.56 | 5.72 | 24.72 | 323 | 0.25 |
| 82 | 15.38 | 33.53 | 5.72 | 318 | 100 | 14.39 | 33.53 | 5.71 | 24.99 | 298 | 0.33 |
| 95 | 14.72 | 33.53 | 5.76 | 304 | 150 | 10.96 | 33.52 | 4.72 | 25.66 | 234 | 0.47 |
| 107 | 13.80 | 33.55 | 5.60 | 284 | 200 | 9.38 | 33.92 | 3.06 | 26.24 | 179 | 0.57 |
| 122 | 12.99 | 33.46 | 5.43 | 275 | 250 | 8.64 | 34.08 | 2.33 | 26.47 | 157 | 0.66 |
| 135 | 12.15 | 33.48 | 5.20 | 258 | 300 | 8.33 | 34.22 | 1.59 | 26.64 | 141 | 0.74 |
| 156 | 10.40 | 33.56 | 4.47 | 222 | 400 | 7.41 | 34.29 | 0.96 | 26.83 | 123 | 0.88 |
| 174 | 9.90 | 33.77 | 3.55 | 199 | 500 | (5.98) | (34.24) | | (26.98) | (109) | (1.00) |
| 213 | 9.21 | 33.96 | 2.71 | 174 | | | | | | | |
| 276 | 8.55 | 34.16 | 1.87 | 148 | | | | | | | |
| 362 | 7.87 | 34.30 | 1.06 | 129 | | | | | | | |
| 478 | 6.32 | 34.25 | 0.85 | 112 | | | | | | | |
| **107.70** | BLACK DOUGLAS; April 26, 1958; 0053 GCT; 29°11'N, 118°43'W; sounding, 1650 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 16°. | | | | | | | | | | |
| 0 | 17.53 | 33.78 | 5.57 | 346 | 0 | 17.53 | 33.78 | 5.57 | 24.48 | 346 | 0.00 |
| 10 | 17.54 | 33.73 | 5.59 | 350 | 10 | 17.54 | 33.73 | 5.59 | 24.44 | 350 | 0.03 |
| 29 | 17.36 | 33.68 | 5.60 | 350 | 20 | 17.44 | 33.70 | 5.59 | 24.44 | 350 | 0.07 |
| 56 | 17.19 | 33.82 | 5.70 | 336 | 30 | 17.36 | 33.68 | 5.62 | 24.45 | 349 | 0.10 |
| 64 | 17.14 | 33.86 | 5.67 | 332 | 50 | 17.20 | 33.80 | 5.68 | 24.57 | 338 | 0.17 |
| 73 | 17.00 | 33.84 | 5.66 | 330 | 75 | 16.98 | 33.84 | 5.66 | 24.66 | 329 | 0.26 |
| 90 | 16.66 | 33.84 | 5.66 | 323 | 100 | 13.90 | 33.55 | 5.64 | 25.11 | 286 | 0.34 |
| 98 | 14.16 | 33.57 | 5.66 | 290 | 150 | 10.27 | 33.49 | 4.69 | 25.74 | 226 | 0.46 |
| 111 | 12.49 | 33.46 | 5.55 | 266 | 200 | 8.89 | 33.80 | 3.38 | 26.22 | 181 | 0.57 |
| 128 | 11.00 | 33.40 | 5.19 | 244 | 250 | 8.41 | 34.04 | 2.30 | 26.48 | 156 | 0.65 |
| 146 | 10.41 | 33.47 | - | 229 | 300 | 8.06 | 34.14 | 1.10 | 26.62 | 143 | 0.73 |
| 172 | 9.56 | 33.57 | 4.27 | 208 | 400 | 7.05 | 34.22 | 0.94 | 26.82 | 124 | 0.87 |
| 193 | 9.00 | 33.74 | 3.55 | 187 | 500 | 6.22 | 34.23 | 0.75 | 26.94 | 112 | 0.99 |
| 241 | 8.50 | 34.00 | 2.50 | 160 | | | | | | | |
| 316 | 7.95 | 34.16 | 0.92 | 140 | | | | | | | |
| 414 | 6.92 | 34.23 | 0.94 | 122 | | | | | | | |
| 541 | 5.90 | 34.23 | 0.63 | 108 | | | | | | | |
| **107.80** | BLACK DOUGLAS; April 25, 1958; 1753 GCT; 28°54.5'N, 119°19'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 17.77 | 33.93 | 5.64 | 341 | 0 | 17.77 | 33.93 | 5.64 | 24.54 | 341 | 0.00 |
| 10 | 17.79 | 33.89 | 5.62 | 344 | 10 | 17.79 | 33.89 | 5.62 | 24.50 | 344 | 0.03 |
| 28 | 17.74 | 33.86 | 5.56 | 346 | 20 | 17.77 | 33.88 | 5.61 | 24.49 | 345 | 0.07 |
| 57 | 17.66 | 33.93 | 5.58 | 339 | 30 | 17.74 | 33.86 | 5.56 | 24.49 | 345 | 0.10 |
| 66 | 17.52 | 33.95 | 5.52 | 334 | 50 | 17.69 | 33.90 | 5.56 | 24.52 | 342 | 0.17 |
| 75 | 17.52 | 33.96 | 5.53 | 334 | 75 | 17.52 | 33.96 | 5.53 | 24.61 | 334 | 0.26 |
| 88 | 17.26 | 34.03 | 5.44 | 322 | 100 | 16.76 | 33.97 | 5.28 | 24.80 | 316 | 0.34 |
| 102 | 16.74 | 33.96 | 5.28 | 315 | 150 | 12.02 | 33.69 | 3.72 | 25.59 | 240 | 0.48 |
| 115 | 15.26 | 33.84 | 4.94 | 293 | 200 | 10.08 | 33.89 | 2.93 | 26.09 | 193 | 0.59 |
| 133 | 12.86 | 33.57 | 4.89 | 265 | 250 | 8.73 | 34.07 | 2.43 | 26.46 | 158 | 0.68 |
| 151 | 11.99 | 33.69 | 3.70 | 240 | 300 | 8.18 | 34.15 | 1.82 | 26.60 | 145 | 0.76 |
| 177 | 11.07 | 33.96 | 2.92 | 204 | 400 | 7.52 | 34.30 | 0.76 | 26.81 | 125 | 0.90 |
| 199 | 10.10 | 33.89 | 2.93 | 193 | 500 | 6.71 | 34.33 | 0.40 | 26.96 | 111 | 1.02 |
| 248 | 8.79 | 34.07 | 2.44 | 160 | | | | | | | |
| 324 | 8.04 | 34.18 | 1.56 | 140 | | | | | | | |
| 422 | 7.38 | 34.31 | 0.57 | 122 | | | | | | | |
| 551 | 6.28 | 34.34 | 0.37 | 105 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

BLACK DOUGLAS; April 25, 1958; 1041 GCT; 28°32.5'N, 120°01.5'W; sounding, 2000 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 20°. 107.90

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.40 | 33.77 | 5.46 | 344 | 0 | 17.40 | 33.77 | 5.46 | 24.50 | 344 | 0.00 | |
| 9 | 17.50 | 33.76 | 5.48 | 347 | 10 | 17.50 | 33.76 | 5.48 | 24.47 | 347 | 0.03 | |
| 28 | 17.44 | 33.84 | 5.51 | 341 | 20 | 17.49 | 33.81 | 5.49 | 24.51 | 344 | 0.07 | |
| 55 | 17.36 | 33.80 | 5.50 | 342 | 30 | 17.44 | 33.84 | 5.51 | 25.54 | 341 | 0.10 | |
| 64 | 16.86 | 33.70 | 5.52 | 338 | 50 | 17.38 | 33.81 | 5.50 | 24.54 | 341 | 0.17 | |
| 72 | 16.91 | 33.80 | 5.49 | 331 | 75 | 16.88 | 33.80 | 5.46 | 24.64 | 331 | 0.26 | |
| 85 | 16.25 | 33.84 | 5.38 | 314 | 100 | 15.20 | 33.71 | 5.38 | 24.96 | 301 | 0.34 | |
| 98 | 15.45 | 33.75 | 5.31 | 303 | 150 | 11.53 | 33.60 | 4.23 | 25.61 | 238 | 0.47 | |
| 111 | 14.40 | 33.69 | 4.98 | 286 | 200 | 9.58 | 33.93 | 2.88 | 26.20 | 182 | 0.58 | |
| 127 | 13.07 | 33.65 | 4.51 | 264 | 250 | 8.72 | 34.04 | 2.68 | 26.44 | 160 | 0.67 | |
| 143 | 11.95 | 33.59 | 4.41 | 247 | 300 | 8.20 | 34.16 | 1.66 | 26.61 | 144 | 0.75 | |
| 165 | 10.63 | 33.71 | 3.50 | 216 | 400 | 7.43 | 34.29 | 0.69 | 26.82 | 124 | 0.89 | |
| 184 | 9.96 | 33.87 | 2.94 | 192 | 500 | (6.76) | (34.32) | (0.43) | (26.94) | (112) | (1.01) | |
| 225 | 9.04 | 33.98 | 2.84 | 170 | | | | | | | | |
| 292 | 8.28 | 34.13 | 1.82 | 148 | | | | | | | | |
| 380 | 7.58 | 34.28 | 0.78 | 126 | | | | | | | | |
| 495 | 6.80 | 34.32 | 0.43 | 113 | | | | | | | | |

STRANGER; April 27, 1958; 1941 GCT; 29°50.5'N, 115°52'W; sounding, 46 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 09°. 110.33

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.44 | 33.53 | 5.55 | 341 | 0 | 16.44 | 33.53 | 5.55 | 24.54 | 341 | 0.00 | |
| 10 | 16.36 | 33.54 | 5.66 | 338 | 10 | 16.36 | 33.54 | 5.66 | 24.57 | 338 | 0.03 | |
| 30 | 14.12 | 33.48 | 5.90 | 296 | 20 | 15.34 | 33.52 | 5.81 | 24.78 | 318 | 0.07 | |
| 50 | 11.88 | 33.42 | 4.93 | 258 | 30 | 14.12 | 33.48 | 5.90 | 25.01 | 296 | 0.10 | |
| 75 | 10.68 | 33.77 | 3.03 | 212 | 50 | 11.88 | 33.42 | 4.93 | 25.41 | 258 | 0.15 | |
| | | | | | 75 | 10.68 | 33.77 | 3.03 | 25.90 | 211 | 0.21 | |

STRANGER; April 27, 1958; 1800 GCT; 29°45'N, 115°58'W; sounding, 320 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°. 110.35

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.64 | 33.58 | 5.46 | 342 | 0 | 16.64 | 33.58 | 5.46 | 24.53 | 342 | 0.00 | |
| 9 | 16.59 | 33.54 | 5.58 | 343 | 10 | 16.57 | 33.54 | 5.59 | 24.52 | 343 | 0.03 | |
| 28 | 15.78 | 33.60 | 5.72 | 321 | 20 | 16.18 | 33.57 | 5.68 | 24.63 | 332 | 0.07 | |
| 37 | 14.18 | 33.55 | 5.68 | 292 | 30 | 15.52 | 33.60 | 5.72 | 24.80 | 316 | 0.10 | |
| 46 | 12.36 | 33.44 | 5.40 | 265 | 50 | 11.74 | 33.47 | 4.95 | 25.47 | 252 | 0.16 | |
| 55 | 11.33 | 33.49 | 4.71 | 243 | 75 | 10.80 | 33.71 | 3.52 | 25.82 | 218 | 0.22 | |
| 64 | 11.10 | 33.49 | 4.67 | 239 | 100 | 10.10 | 33.88 | 2.60 | 26.08 | 194 | 0.27 | |
| 75 | 10.80 | 33.71 | 3.52 | 218 | 150 | 9.75 | 34.18 | 1.69 | 26.37 | 166 | 0.36 | |
| 87 | 10.34 | 33.78 | 3.51 | 205 | 200 | 9.34 | 34.30 | 1.02 | 26.54 | 151 | 0.44 | |
| 99 | 10.12 | 33.88 | 2.70 | 194 | 250 | 9.36 | 34.38 | 0.79 | 26.60 | 145 | 0.52 | |
| 119 | 9.94 | 34.03 | 2.29 | 180 | 300 | 8.86 | 34.36 | 0.65 | 26.66 | 139 | 0.59 | |
| 143 | 9.96 | 34.18 | 1.68 | 169 | 400 | 7.53 | 34.32 | 0.48 | 26.83 | 123 | 0.72 | |
| 171 | 9.01 | 34.14 | 1.74 | 158 | | | | | | | | |
| 213 | 9.46 | 34.38 | 0.80 | 147 | | | | | | | | |
| 255 | 9.30 | 34.38 | 0.78 | 144 | | | | | | | | |
| 348 | 8.22 | 34.34 | 0.56 | 131 | | | | | | | | |
| 441 | 6.90 | 34.30 | 0.44 | 116 | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| 110.40 | STRANGER; April 27, 1958; 1456 GCT; 29°35'N, 116°19'W; sounding, 1400 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 17.30 | 33.69 | 5.45 | 348 | 0 | 17.30 | 33.69 | 5.45 | 24.46 | 348 | 0.00 |
| 10 | 17.31 | 33.66 | 5.50 | 351 | 10 | 17.31 | 33.66 | 5.50 | 24.43 | 351 | 0.03 |
| 29 | 17.28 | 33.70 | 5.52 | 348 | 20 | 17.30 | 33.69 | 5.51 | 24.46 | 348 | 0.07 |
| 44 | 17.06 | 33.68 | 5.53 | 347 | 30 | 17.28 | 33.70 | 5.52 | 24.48 | 347 | 0.10 |
| 53 | 15.81 | 33.62 | 5.72 | 320 | 50 | 16.23 | 33.64 | 5.66 | 24.67 | 328 | 0.17 |
| 63 | 14.55 | 33.58 | 5.70 | 297 | 75 | 13.50 | 33.55 | 5.37 | 25.18 | 279 | 0.25 |
| 72 | 13.82 | 33.55 | 5.54 | 285 | 100 | 11.52 | 33.57 | 4.41 | 25.58 | 241 | 0.31 |
| 90 | 11.92 | 33.54 | 4.58 | 250 | 150 | 9.87 | 33.96 | 2.95 | 26.18 | 184 | 0.42 |
| 104 | 11.38 | 33.58 | 4.34 | 237 | 200 | 9.37 | 34.24 | 1.53 | 26.49 | 155 | 0.51 |
| 118 | 10.38 | 33.68 | 3.73 | 213 | 250 | 9.08 | 34.34 | 0.90 | 26.61 | 144 | 0.58 |
| 141 | 9.87 | 33.84 | 3.08 | 193 | 300 | 8.44 | 34.33 | 0.79 | 26.70 | 135 | 0.66 |
| 169 | 9.98 | 34.17 | 1.77 | 170 | 400 | 7.30 | 34.31 | 0.54 | 26.85 | 121 | 0.79 |
| 207 | 9.26 | 34.26 | 1.46 | 154 | 500 | 6.55 | 34.32 | 0.43 | 26.97 | 110 | 0.91 |
| 258 | 8.93 | 34.34 | 0.90 | 141 | 600 | (5.86) | (34.41) | | (27.13) | (94) | (1.02) |
| 338 | 8.04 | 34.32 | 0.69 | 130 | | | | | | | |
| 438 | 6.98 | 34.30 | 0.48 | 117 | | | | | | | |
| 583 | 5.98 | 34.40 | 0.35 | 97 | | | | | | | |
| 110.50 | STRANGER; April 27, 1958; 0911 GCT; 29°16'N, 116°59'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 17°. | | | | | | | | | | |
| 0 | 17.19 | 33.68 | 5.32 | 346 | 0 | 17.19 | 33.68 | 5.32 | 24.48 | 346 | 0.00 |
| 10 | 17.20 | 33.65 | 5.33 | 349 | 10 | 17.20 | 33.65 | 5.33 | 24.45 | 349 | 0.03 |
| 28 | 17.19 | 33.69 | 5.40 | 345 | 20 | 17.20 | 33.67 | 5.37 | 24.47 | 347 | 0.07 |
| 43 | 16.32 | 33.55 | 5.36 | 337 | 30 | 17.18 | 33.69 | 5.40 | 24.49 | 345 | 0.10 |
| 52 | 15.44 | 33.51 | 5.67 | 321 | 50 | 15.57 | 33.52 | 5.62 | 24.72 | 324 | 0.17 |
| 62 | 14.41 | 33.48 | 5.80 | 302 | 75 | 12.25 | 33.42 | 4.65 | 25.33 | 265 | 0.24 |
| 71 | 12.68 | 33.40 | 4.78 | 274 | 100 | 10.58 | 33.53 | 4.20 | 25.73 | 227 | 0.31 |
| 89 | 11.22 | 33.50 | 4.40 | 241 | 150 | 9.55 | 33.88 | 2.87 | 26.18 | 185 | 0.41 |
| 102 | 10.50 | 33.54 | 4.17 | 225 | 200 | 8.77 | 34.05 | 2.10 | 26.44 | 160 | 0.50 |
| 115 | 10.14 | 33.64 | 3.62 | 212 | 250 | 8.48 | 34.25 | 1.38 | 26.64 | 141 | 0.58 |
| 137 | 9.74 | 33.84 | 3.12 | 191 | 300 | 7.69 | 34.25 | 1.12 | 26.75 | 130 | 0.65 |
| 163 | 9.40 | 33.91 | 2.65 | 180 | 400 | 6.65 | 34.30 | 0.50 | 26.94 | 112 | 0.77 |
| 199 | 8.77 | 34.05 | 2.10 | 160 | 500 | 6.10 | 34.36 | 0.32 | 27.06 | 102 | 0.88 |
| 249 | 8.50 | 34.25 | 1.39 | 142 | | | | | | | |
| 326 | 7.26 | 34.25 | 0.98 | 125 | | | | | | | |
| 425 | 6.48 | 34.32 | 0.40 | 109 | | | | | | | |
| 565 | 5.76 | 34.39 | 0.29 | 95 | | | | | | | |
| 110.60 | STRANGER; April 27, 1958; 0319 GCT; 28°58'N, 117°37'W; sounding, 2000 fm; wind, 360°, force 5; weather, partly cloudy; sea, very rough; wire angle, 22°. | | | | | | | | | | |
| 0 | 16.87 | 33.58 | 5.36 | 347 | 0 | 16.87 | 33.58 | 5.36 | 24.47 | 347 | 0.00 |
| 9 | 16.90 | 33.60 | 5.56 | 346 | 10 | 16.89 | 33.60 | 5.56 | 24.49 | 346 | 0.03 |
| 28 | 16.75 | 33.58 | 5.54 | 344 | 20 | 16.81 | 33.59 | 5.55 | 24.50 | 344 | 0.07 |
| 54 | 16.63 | 33.68 | 5.57 | 334 | 30 | 16.74 | 33.58 | 5.55 | 24.51 | 343 | 0.10 |
| 63 | 16.47 | 33.68 | 5.62 | 331 | 50 | 16.66 | 33.66 | 5.56 | 24.59 | 336 | 0.17 |
| 71 | 16.16 | 33.66 | 5.55 | 325 | 75 | 15.68 | 33.58 | 5.58 | 24.75 | 320 | 0.25 |
| 84 | 14.84 | 33.46 | 5.67 | 312 | 100 | 13.72 | 33.52 | 5.20 | 25.12 | 285 | 0.33 |
| 95 | 14.16 | 33.53 | 5.24 | 293 | 150 | 10.30 | 33.66 | 3.75 | 25.88 | 213 | 0.46 |
| 108 | 13.00 | 33.50 | 5.15 | 272 | 200 | 9.62 | 33.92 | 2.53 | 26.19 | 183 | 0.56 |
| 124 | 11.60 | 33.53 | 4.71 | 245 | 250 | 9.12 | 34.14 | 1.54 | 26.45 | 159 | 0.64 |
| 140 | 10.68 | 33.57 | 4.17 | 226 | 300 | 8.71 | 34.26 | 1.17 | 26.60 | 144 | 0.72 |
| 166 | 9.98 | 33.78 | 3.30 | 199 | 400 | 7.44 | 34.24 | 0.80 | 26.78 | 128 | 0.86 |
| 185 | 9.77 | 33.86 | 2.87 | 190 | 500 | 6.54 | 34.26 | 0.48 | 26.92 | 114 | 0.99 |
| 231 | 9.30 | 34.07 | 1.87 | 167 | | | | | | | |
| 304 | 8.69 | 34.27 | 1.16 | 143 | | | | | | | |
| 401 | 7.42 | 34.24 | 0.79 | 128 | | | | | | | |
| 530 | 6.26 | 34.27 | 0.42 | 110 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; April 26, 1958; 1544 GCT; 28°42'N, 118°25'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 09°. | | | | | | | | | | | 110.70 |
| 0 | 17.16 | 33.67 | 5.41 | 346 | 0 | 17.16 | 33.67 | 5.41 | 24.48 | 346 | 0.00 |
| 10 | 17.16 | 33.66 | 5.38 | 347 | 10 | 17.16 | 33.66 | 5.38 | 24.47 | 347 | 0.03 |
| 30 | 17.12 | 33.67 | 5.35 | 345 | 20 | 17.14 | 33.66 | 5.36 | 24.48 | 346 | 0.07 |
| 45 | 16.36 | 33.59 | 5.54 | 335 | 30 | 17.12 | 33.67 | 5.35 | 24.49 | 345 | 0.10 |
| 68p | 16.14 | 33.58 | 5.51 | 330 | 50 | 16.32 | 33.59 | 5.54 | 24.61 | 334 | 0.17 |
| 77p | 15.84 | 33.57 | 5.60 | 325 | 75 | 15.92 | 33.57 | 5.58 | 24.69 | 326 | 0.25 |
| 87p | 15.33 | 33.57 | 5.56 | 314 | 100 | 14.15 | 33.52 | 5.50 | 25.04 | 293 | 0.33 |
| 103p | 13.81a) | 33.51 | 5.49 | 288 | 150 | 10.22 | 33.58 | 4.20 | 25.83 | 218 | 0.46 |
| 123p | 11.87 | 33.48 | 4.91 | 254 | 200 | 9.59 | 33.89 | 2.86 | 26.18 | 185 | 0.56 |
| 151p | 10.19 | 33.59 | 4.17 | 217 | 250 | 8.94 | 34.13 | 2.00 | 26.47 | 157 | 0.65 |
| 190p | 9.78 | 33.85 | 3.09 | 191 | 300 | 8.12 | 34.20 | 1.54 | 26.65 | 140 | 0.73 |
| 255p | 8.86 | 34.14 | 1.96 | 155 | 400 | 7.11 | 34.25 | 0.98 | 26.84 | 122 | 0.86 |
| 337p | 7.56 | 34.23 | 1.28 | 130 | | | | | | | |
| 464p | 6.63 | 34.28 | 0.65 | 114 | | | | | | | |
| STRANGER; April 26, 1958; 0942, 1020 GCT; 28°17'N, 118°59.5'W; sounding, 2150 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 19°, 20°. | | | | | | | | | | | 110.80 |
| 0 | 17.86 | 33.92 | 5.35 | 344 | 0 | 17.86 | 33.92 | 5.35 | 24.50 | 344 | 0.00 |
| 10 | 17.88 | 34.04b) | 5.37 | | 10 | 17.88 | 33.92 | 5.37 | 24.50 | 344 | 0.03 |
| 28 | 17.84 | 33.92 | 5.43 | 344 | 20 | 17.86 | 33.92 | 5.39 | 24.50 | 344 | 0.07 |
| 56 | 17.84 | 33.90 | 5.49 | 346 | 30 | 17.84 | 33.91 | 5.43 | 24.49 | 345 | 0.10 |
| 65 | 17.49 | 33.92 | 5.54 | 336 | 50 | 17.84 | 33.90 | 5.47 | 24.48 | 346 | 0.17 |
| 74 | 17.28 | 33.89 | 5.52 | 333 | 75 | 17.27 | 33.89 | 5.52 | 24.62 | 333 | 0.26 |
| 87 | 16.97 | 33.98 | 5.59 | 319 | 100 | 15.08 | 33.78 | 5.14 | 25.03 | 294 | 0.34 |
| 100 | 15.08 | 33.78 | 5.14 | 294 | 150 | 10.60 | 33.62 | 4.32 | 25.80 | 221 | 0.47 |
| 114 | 13.08 | 33.61 | 4.97 | 266 | 200 | 9.10 | 33.87 | 3.17 | 26.24 | 179 | 0.57 |
| 133 | 11.72 | 33.58 | 4.74 | 243 | 250 | 8.20 | 34.05 | 2.30 | 26.52 | 152 | 0.65 |
| 151 | 10.51 | 33.63 | 4.27 | 219 | 300 | 7.68 | 34.16 | 1.66 | 26.68 | 137 | 0.73 |
| 178 | 9.68 | 33.75 | 3.60 | 197 | | | | | | | |
| 201 | 9.09 | 33.87 | 3.16 | 179 | | | | | | | |
| 251 | 8.19 | 34.05 | 2.29 | 152 | | | | | | | |
| 326 | 7.48 | 34.20 | 1.43 | 131 | | | | | | | |
| 549 | 6.30 | 34.37 | 0.40 | 103 | | | | | | | |
| STRANGER; April 26, 1958; 0400 GCT; 27°53'N, 119°33'W; sounding, 2300 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 03°. | | | | | | | | | | | 110.90 |
| 0 | 18.20 | 33.98 | 5.31 | 348 | 0 | 18.20 | 33.98 | 5.31 | 24.46 | 348 | 0.00 |
| 10 | 18.20 | 34.02 | 5.34 | 345 | 10 | 18.20 | 34.02 | 5.34 | 24.49 | 345 | 0.03 |
| 30 | 18.18 | 33.97 | 5.32 | 348 | 20 | 18.20 | 33.97 | 5.33 | 24.46 | 348 | 0.07 |
| 60 | 17.71 | 33.96 | 5.34 | 338 | 30 | 18.18 | 33.97 | 5.32 | 24.46 | 348 | 0.10 |
| 69 | 17.68 | 33.96 | 5.35 | 337 | 50 | 17.87 | 33.96 | 5.32 | 24.52 | 342 | 0.17 |
| 79 | 17.59 | 33.96 | 5.30 | 335 | 75 | 17.62 | 33.96 | 5.32 | 24.59 | 336 | 0.26 |
| 93 | 15.64 | 33.77 | 5.38 | 306 | 100 | 14.05 | 33.64 | 5.17 | 25.14 | 283 | 0.34 |
| 108 | 13.13 | 33.58 | 4.96 | 269 | 150 | 9.84 | 33.86 | 3.21 | 26.11 | 191 | 0.46 |
| 121 | 12.10 | 33.59 | 4.59 | 249 | 200 | 9.06 | 34.01 | 2.57 | 26.35 | 169 | 0.55 |
| 139p | 10.30 | 33.77 | 3.47 | 205 | 250 | 8.52 | 34.14 | 1.86 | 26.55 | 150 | 0.63 |
| 164p | 9.52 | 33.92c) | 2.97 | 182 | 300 | 8.18 | 34.26 | 1.30 | 26.69 | 136 | 0.70 |
| 185p | 9.30 | 33.96 | 2.78 | 175 | | | | | | | |
| 231p | 8.65 | 34.10 | 2.18 | 155 | | | | | | | |
| 302p | 8.16 | 34.26 | 1.28 | 136 | | | | | | | |
| 396p | 7.48 | 34.38 | 0.61 | 118 | | | | | | | |
| 518p | 6.76 | 34.39 | 0.34 | 107 | | | | | | | |

a) Alternate value, 14.21°C, not used in interpolation.
b) Loose bottle cap; value does not fall on property curve.
c) Loose bottle cap; value falls on property curve.

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CCOFI 5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| 113.30 | STRANGER; April 24, 1958; 1042 GCT; 29°20'N, 115°21'W; sounding, 50 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 16.20 | 33.71 | 5.61 | 322 | 0 | 16.20 | 33.71 | 5.61 | 24.73 | 322 | 0.00 |
| 10 | 16.20 | 33.80 | 5.64 | 316 | 10 | 16.20 | 33.80 | 5.64 | 24.80 | 316 | 0.03 |
| 20 | 15.36 | 33.71 | 5.55 | 304 | 20 | 15.36 | 33.71 | 5.55 | 24.92 | 304 | 0.06 |
| 30 | 15.04 | 33.66 | 5.43 | 302 | 30 | 15.04 | 33.66 | 5.43 | 24.95 | 302 | 0.09 |
| 40 | 13.54 | 33.66 | 4.03 | 271 | 50 | 12.20 | 33.73 | 2.99 | 25.58 | 241 | 0.15 |
| 50 | 12.20 | 33.73 | 2.99 | 241 | 75 | 11.48 | 33.78 | 2.57 | 25.76 | 224 | 0.20 |
| 75 | 11.48 | 33.78 | 2.57 | 224 | | | | | | | |
| 113.35 | STRANGER; April 24, 1958; 1313 GCT; 29°12'N, 115°36'W; sounding, 570 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 09°. | | | | | | | | | | |
| 0 | 16.03 | 33.59 | 5.81 | 327 | 0 | 16.03 | 33.59 | 5.81 | 24.68 | 327 | 0.00 |
| 10 | 16.04 | 33.66 | 5.82 | 322 | 10 | 16.04 | 33.66 | 5.82 | 24.73 | 322 | 0.03 |
| 30 | 14.66 | 33.58 | 5.16 | 300 | 20 | 15.66 | 33.63 | 5.50 | 24.80 | 316 | 0.06 |
| 40 | 12.90 | 33.55 | 4.96 | 267 | 30 | 14.66 | 33.58 | 5.16 | 24.97 | 300 | 0.10 |
| 49 | 12.13 | 33.58 | 4.30 | 250 | 50 | 12.12 | 33.58 | 4.29 | 25.49 | 250 | 0.15 |
| 58 | 11.82 | 33.59 | 3.90 | 244 | 75 | 10.88 | 33.69 | 3.22 | 25.80 | 221 | 0.21 |
| 68 | 11.26 | 33.69 | 3.27 | 227 | 100 | 9.97 | 33.78 | 3.08 | 26.03 | 199 | 0.26 |
| 82 | 10.60 | 33.69 | 3.21 | 216 | 150 | 9.68 | 34.08 | 2.00 | 26.30 | 173 | 0.36 |
| 95 | 10.13 | 33.78 | 3.10 | 202 | 200 | 9.88 | 34.37 | 1.05 | 26.50 | 154 | 0.44 |
| 108 | 9.78 | 33.78 | 3.06 | 196 | 250 | 9.40 | 34.41 | 0.74 | 26.62 | 143 | 0.52 |
| 131 | 9.77 | 33.96 | 2.58 | 182 | 300 | 8.82 | 34.39 | 0.64 | 26.68 | 127 | 0.59 |
| 158 | 9.68 | 34.13 | 1.89 | 169 | 400 | 7.58 | 34.39 | 0.46 | 26.87 | 119 | 0.72 |
| 189 | 9.91 | 34.34 | 1.12 | 157 | 500 | 6.60 | 34.40 | 0.31 | 27.02 | 105 | 0.84 |
| 235 | 9.58 | 34.42 | 0.77 | 146 | | | | | | | |
| 310 | 8.68 | 34.38 | 0.62 | 125 | | | | | | | |
| 403 | 7.56 | 34.39 | 0.45 | 118 | | | | | | | |
| 529 | 6.26 | 34.40 | 0.27 | 100 | | | | | | | |
| 113.40 | STRANGER; April 24, 1958; 1629 GCT; 29°00.5'N, 115°56.5'W; sounding, 1000 fm; wind, 280°, force 2; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 17.26 | 33.61 | 5.40 | 353 | 0 | 17.26 | 33.61 | 5.40 | 24.41 | 353 | 0.00 |
| 10 | 17.25 | 33.66 | 5.58 | 349 | 10 | 17.25 | 33.66 | 5.58 | 24.45 | 349 | 0.04 |
| 30 | 16.29 | 33.62 | 5.73 | 331 | 20 | 16.96 | 33.65 | 5.63 | 24.51 | 344 | 0.07 |
| 44 | 16.00 | 33.61 | 5.59 | 325 | 30 | 16.29 | 33.62 | 5.73 | 24.64 | 331 | 0.10 |
| 53 | 15.68 | 33.58 | 5.70 | 321 | 50 | 15.81 | 33.59 | 5.66 | 24.73 | 323 | 0.17 |
| 64 | 15.00 | 33.57 | 5.70 | 307 | 75 | 12.85 | 33.52 | 5.13 | 25.30 | 269 | 0.24 |
| 72 | 13.18 | 33.51 | 5.28 | 275 | 100 | 11.56 | 33.54 | 4.54 | 25.56 | 244 | 0.31 |
| 90 | 12.00 | 33.55 | 4.70 | 251 | 150 | 9.97 | 33.83 | 3.06 | 26.07 | 195 | 0.42 |
| 104 | 11.38 | 33.53 | 4.48 | 241 | 200 | 9.02 | 34.07 | 2.20 | 26.41 | 163 | 0.51 |
| 118 | 10.31 | 33.62 | 3.99 | 216 | 250 | 8.26 | 34.14 | 1.77 | 26.58 | 147 | 0.59 |
| 142 | 10.14 | 33.73 | 3.35 | 206 | 300 | 7.85 | 34.17 | 1.55 | 26.67 | 138 | 0.66 |
| 170 | 9.56 | 33.96a) | 2.56 | 179 | 400 | 7.20 | 34.31 | 0.80 | 26.87 | 119 | 0.80 |
| 207 | 8.90 | 34.09 | 2.12 | 160 | 500 | 6.58 | 34.37 | 0.30 | 27.00 | 107 | 0.91 |
| 259 | 8.18 | 34.14 | 1.72 | 145 | 600 | (5.58) | (34.37) | | (27.13) | (94) | (1.02) |
| 340 | 7.50 | 34.23 | 1.40b) | 129 | | | | | | | |
| 441 | 7.00 | 34.36 | 0.38 | 113 | | | | | | | |
| 582 | 5.78 | 34.37 | 0.26 | 97 | | | | | | | |

a) Loose bottle cap; value falls on property curve.
b) Mean value of 1.10 and 1.71 ml/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}_{10}{}^{3}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}_{10}{}^{3}$ cm/g | ΔD dyn. m | |
| STRANGER; April 24, 1958; 2223 GCT; 28°42'N, 116°36'W; sounding, 2000 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 00°. | | | | | | | | | | | | 113.50 |
| 0 | 17.52 | 33.66 | 5.45 | 355 | 0 | 17.52 | 33.66 | 5.45 | 24.39 | 355 | 0.00 | |
| 10 | 17.47 | 33.68 | 5.56a) | 353 | 10 | 17.47 | 33.68 | 5.56 | 24.41 | 353 | 0.04 | |
| 30 | 17.12 | 33.66 | 5.54 | 346 | 20 | 17.34 | 33.67 | 5.56 | 24.44 | 350 | 0.07 | |
| 58 | 15.71 | 33.60 | 5.78 | 320 | 30 | 17.12 | 33.66 | 5.54 | 24.48 | 346 | 0.10 | |
| 67 | 13.48 | 33.49 | 5.53 | 283 | 50 | 16.50 | 33.63 | 5.64 | 24.60 | 335 | 0.17 | |
| 76 | 12.74 | 33.48 | 5.00 | 269 | 75 | 12.80 | 33.48 | 5.03 | 25.27 | 271 | 0.25 | |
| 90 | 11.73 | 33.49 | 4.58 | 250 | 100 | 11.27 | 33.53 | 4.50 | 25.60 | 239 | 0.31 | |
| 104 | 11.09 | 33.54 | 4.46 | 236 | 150 | 9.80 | 33.80 | 3.16 | 26.07 | 195 | 0.42 | |
| 118 | 10.28 | 33.63 | 3.85 | 215 | 200 | 8.75 | 34.04 | 2.43 | 26.43 | 161 | 0.51 | |
| 136 | 9.88 | 33.76 | 3.40 | 200 | 250 | 7.98 | 34.12 | 2.00 | 26.61 | 144 | 0.59 | |
| 156 | 9.70 | 33.84 | 3.00 | 190 | 300 | 7.39 | 34.19 | 1.34 | 26.75 | 130 | 0.66 | |
| 184 | 8.84 | 33.96 | 2.68 | 168 | 400 | 6.77 | 34.27 | 0.67 | 26.90 | 116 | 0.79 | |
| 208 | 8.67 | 34.06 | 2.30 | 158 | 500 | 6.19 | 34.32 | 0.36 | 27.02 | 105 | 0.90 | |
| 260 | 7.80 | 34.13 | 1.79 | 141 | 600 | (5.59) | (34.34) | | (27.11) | (96) | (1.01) | |
| 341 | 7.04 | 34.24 | 0.96 | 123 | | | | | | | | |
| 449 | 6.47 | 34.30 | 0.45 | 110 | | | | | | | | |
| 587 | 5.66 | 34.34 | 0.30 | 97 | | | | | | | | |
| STRANGER; April 25, 1958; 0553 GCT; 28°22'N, 117°16.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 23°. | | | | | | | | | | | | 113.60 |
| 0 | 17.18 | 33.63 | 5.23 | 350 | 0 | 17.18 | 33.63 | 5.23 | 24.44 | 350 | 0.00 | |
| 9 | 17.18 | 33.63 | 5.50 | 350 | 10 | 17.18 | 33.63 | 5.50 | 24.44 | 350 | 0.04 | |
| 32 | 17.08 | 33.61 | 5.31 | 350 | 20 | 17.15 | 33.62 | 5.40 | 24.44 | 350 | 0.07 | |
| 60 | 16.02 | 33.60 | 5.45 | 327 | 30 | 17.09 | 33.62 | 5.32 | 24.44 | 350 | 0.10 | |
| 68 | 15.88 | 33.58 | 5.56 | 325 | 50 | 16.18 | 33.60 | 5.41 | 24.65 | 330 | 0.17 | |
| 81 | 15.18 | 33.62 | 4.99 | 307 | 75 | 15.64 | 33.59 | 5.42 | 24.77 | 319 | 0.25 | |
| 90 | 14.00 | 33.50 | 5.56 | 292 | 100 | 12.60 | 33.48 | 5.16 | 25.31 | 267 | 0.33 | |
| 106 | 11.80 | 33.48 | 4.86 | 252 | 150 | 9.96 | 33.68 | 3.77 | 25.95 | 206 | 0.45 | |
| 118 | 11.06 | 33.48 | 4.65 | 239 | 200 | 8.92 | 34.02 | 2.50 | 26.38 | 165 | 0.54 | |
| 134 | 10.49 | 33.62 | 4.19 | 220 | 250 | 8.77 | 34.23 | 1.68 | 26.57 | 147 | 0.62 | |
| 153 | 9.90 | 33.69 | 3.70 | 205 | 300 | 8.38 | 34.32 | 1.04 | 26.70 | 135 | 0.70 | |
| 177 | 9.82 | 33.98 | 2.60 | 182 | 400 | 6.90 | 34.25 | 0.80 | 26.86 | 120 | 0.83 | |
| 202 | 8.91 | 34.02 | 2.50 | 165 | 500 | 6.05 | 34.27 | 0.65 | 26.99 | 107 | 0.95 | |
| 251 | 8.76 | 34.23 | 1.67 | 147 | | | | | | | | |
| 327 | 8.10 | 34.33 | 0.90 | 130 | | | | | | | | |
| 429 | 6.54 | 34.23 | 0.80 | 117 | | | | | | | | |
| 568 | 5.69 | 34.34 | 0.34 | 98 | | | | | | | | |
| STRANGER; April 25, 1958; 1151 GCT; 27°57'N, 117°56.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 09°. | | | | | | | | | | | | 113.70 |
| 0 | 18.04 | 33.84 | 5.31 | 355 | 0 | 18.04 | 33.84 | 5.31 | 24.39 | 355 | 0.00 | |
| 10 | 18.06 | 33.85 | 5.31 | 355 | 10 | 18.06 | 33.85 | 5.31 | 24.39 | 355 | 0.04 | |
| 30 | 18.04 | 33.86 | 5.36 | 353 | 20 | 18.05 | 33.86 | 5.34 | 24.40 | 354 | 0.07 | |
| 58 | 17.44 | 33.93 | 5.32 | 334 | 30 | 18.04 | 33.86 | 5.36 | 24.41 | 353 | 0.11 | |
| 67 | 17.37 | 33.96 | 5.41 | 330 | 50 | 17.65 | 33.90 | 5.33 | 24.54 | 341 | 0.18 | |
| 76 | 17.18 | 33.93 | 5.33 | 328 | 75 | 17.21 | 33.93 | 5.34 | 24.67 | 328 | 0.26 | |
| 90 | 16.07 | 33.87 | 5.25 | 308 | 100 | 15.20 | 33.79 | 5.09 | 25.02 | 295 | 0.34 | |
| 104 | 14.78 | 33.75 | 5.04 | 290 | 150 | 10.75 | 33.63 | 3.97 | 25.78 | 223 | 0.47 | |
| 118 | 13.06 | 33.63 | 4.68 | 264 | 200 | 10.46 | 34.17 | 1.85 | 26.24 | 178 | 0.57 | |
| 137 | 11.55 | 33.59 | 4.38 | 240 | 250 | 10.03 | 34.28 | 1.29 | 26.41 | 163 | 0.66 | |
| 155 | 10.52 | 33.66 | 3.85 | 217 | 300 | 9.15 | 34.29 | 1.18 | 26.56 | 149 | 0.74 | |
| 182 | 10.38 | 34.03 | 2.45 | 187 | 400 | 7.87 | 34.34 | 0.67 | 26.80 | 126 | 0.88 | |
| 205 | 10.32 | 34.18 | 1.81 | 177 | 500 | 7.01 | 34.38 | 0.32 | 26.95 | 112 | 1.01 | |
| 257 | 9.96 | 34.29 | 1.26 | 161 | 600 | (6.10) | (34.36) | | (27.06) | (101) | (1.12) | |
| 338 | 8.44 | 34.29 | 1.11 | 138 | | | | | | | | |
| 444 | 7.48 | 34.38 | 0.40 | 118 | | | | | | | | |
| 583 | 6.24 | 34.36 | 0.32 | 103 | | | | | | | | |

a) Mean value of 5.38 and 5.75 ml/L.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **113.80** | STRANGER; April 25, 1958; 1655 GCT; 27°40'N, 118°32'W; sounding, 2150 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 14°. | | | | | | | | | | |
| 0 | 18.20 | 33.93 | 5.34 | 351 | 0 | 18.20 | 33.93 | 5.34 | 24.43 | 351 | 0.00 |
| 9 | 18.20 | 33.95 | 5.47 | 350 | 10 | 18.20 | 33.95 | 5.47 | 24.44 | 350 | 0.04 |
| 28 | 18.18 | 33.93 | 5.44 | 351 | 20 | 18.19 | 33.94 | 5.46 | 24.44 | 350 | 0.07 |
| 55 | 17.62 | 33.93 | 5.48 | 338 | 30 | 18.17 | 33.93 | 5.44 | 24.44 | 350 | 0.10 |
| 64 | 17.50 | 33.94 | 5.56 | 334 | 50 | 17.74 | 33.93 | 5.45 | 24.54 | 341 | 0.17 |
| 73 | 17.26 | 33.91 | 5.56 | 332 | 75 | 17.22 | 33.90 | 5.55 | 24.64 | 331 | 0.26 |
| 86 | 16.99 | 33.86 | 5.50 | 329 | 100 | 16.82 | 33.96 | 5.46 | 24.78 | 318 | 0.34 |
| 99 | 16.83 | 33.96 | 5.46 | 318 | 150 | 11.57 | 33.72 | 3.94 | 25.70 | 230 | 0.48 |
| 113 | 14.64 | 33.73 | 5.05 | 288 | 200 | 9.60 | 33.91 | 2.75 | 26.20 | 183 | 0.58 |
| 130 | 12.87 | 33.60 | 4.70 | 263 | 250 | 8.72 | 34.09 | 2.05 | 26.47 | 157 | 0.67 |
| 148 | 11.66 | 33.73 | 3.96 | 232 | 300 | 8.58 | 34.18 | 1.50 | 26.56 | 148 | 0.75 |
| 176 | 10.29 | 33.77 | 3.38 | 205 | 400 | 7.64 | 34.34 | 0.52 | 26.83 | 123 | 0.89 |
| 198 | 9.62 | 33.90 | 2.77 | 185 | 500 | 6.77 | 34.35 | 0.36 | 26.96 | 111 | 1.01 |
| 249 | 8.72 | 34.09 | 2.05 | 157 | | | | | | | |
| 329 | 8.40 | 34.27 | 0.80 | 139 | | | | | | | |
| 433 | 7.36 | 34.42u | 0.48 | | | | | | | | |
| 568 | 6.09 | 34.33 | 0.26 | 103 | | | | | | | |
| **113.90** | STRANGER; April 25, 1958; 2213 GCT; 27°23'N, 119°12'W; sounding, 2300 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 18.60 | 33.98 | 5.32 | 357 | 0 | 18.60 | 33.98 | 5.32 | 24.36 | 357 | 0.00 |
| 10 | 18.58 | 34.07 | 5.33 | 351 | 10 | 18.58 | 34.07 | 5.33 | 24.43 | 351 | 0.04 |
| 30 | 18.49 | 33.97 | 5.32 | 355 | 20 | 18.55 | 34.03 | 5.33 | 24.42 | 352 | 0.07 |
| 59 | 18.45 | 34.02 | 5.40 | 351 | 30 | 18.49 | 33.97 | 5.32 | 24.39 | 355 | 0.10 |
| 68 | 18.06 | 34.05 | 5.41 | 340 | 50 | 18.47 | 34.00 | 5.36 | 24.41 | 353 | 0.18 |
| 77 | 17.33 | 33.94 | 5.49 | 330 | 75 | 17.54 | 33.97 | 5.47 | 24.62 | 333 | 0.26 |
| 91 | 16.02 | 33.82 | 5.48 | 311 | 100 | 15.23 | 33.73 | 5.34 | 24.96 | 301 | 0.34 |
| 104 | 14.90 | 33.69 | 5.28 | 296 | 150 | 11.04 | 33.54 | 4.91 | 25.66 | 234 | 0.48 |
| 118 | 13.13 | 33.60 | 4.91 | 268 | 200 | 9.42 | 33.82 | 3.51 | 26.15 | 188 | 0.58 |
| 136 | 11.84 | 33.57 | 4.92 | 246 | 250 | 8.58 | 34.01 | 2.66 | 26.43 | 161 | 0.67 |
| 155 | 10.75 | 33.53 | 4.84 | 231 | 300 | 8.40 | 34.20 | 1.70 | 26.61 | 144 | 0.75 |
| 183 | 9.62 | 33.68 | 3.74 | 201 | 400 | 7.68 | 34.33 | 0.64 | 26.81 | 125 | 0.89 |
| 206 | 9.35 | 33.85 | 3.41 | 184 | 500 | 6.79 | 34.34 | 0.36 | 26.95 | 112 | 1.02 |
| 257 | 8.48 | 34.02 | 2.59 | 159 | | | | | | | |
| 337 | 8.28 | 34.30 | 1.03 | 135 | | | | | | | |
| 442 | 7.23 | 34.33 | 0.45 | 118 | | | | | | | |
| 579 | 6.09 | 34.34 | 0.31 | 103 | | | | | | | |
| **117.26** | STRANGER; April 24, 1958; 0508 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 300°, force 4; weather, clear; sea, very rough; wire angle, 09°. | | | | | | | | | | |
| 0 | 17.68 | 33.81 | 5.76 | 348 | 0 | 17.68 | 33.81 | 5.76 | 24.46 | 348 | 0.00 |
| 10 | 17.70 | 33.89 | 5.81 | 343 | 10 | 17.70 | 33.89 | 5.81 | 24.51 | 343 | 0.03 |
| 20 | 17.42 | 33.78 | 5.84 | 344 | 20 | 17.42 | 33.78 | 5.84 | 24.50 | 344 | 0.07 |
| 40 | 14.06 | 33.57 | 5.38 | 288 | 30 | 15.00 | 33.61 | 5.53 | 24.92 | 305 | 0.10 |
| 60 | 12.39 | 33.84 | 2.18 | 237 | 50 | 12.20 | 33.68 | 4.00 | 25.54 | 245 | 0.16 |
| **117.30** | STRANGER; April 24, 1958; 0210 GCT; 28°48'N, 114°56'W; sounding, 50 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 16.94 | 33.68 | 5.87 | 340 | 0 | 16.94 | 33.68 | 5.87 | 24.55 | 340 | 0.00 |
| 10 | 16.88 | 33.82 | 5.97 | 330 | 10 | 16.88 | 33.82 | 5.97 | 24.65 | 330 | 0.03 |
| 20 | 16.26 | 33.69 | 5.96 | 325 | 20 | 16.26 | 33.69 | 5.96 | 24.70 | 325 | 0.07 |
| 39 | 12.40 | 33.52 | 4.53 | 260 | 30 | 14.30 | 33.57 | 5.28 | 25.06 | 292 | 0.10 |
| 59 | 11.08 | 33.68 | 3.56 | 225 | 50 | 11.34 | 33.60 | 3.84 | 25.64 | 236 | 0.15 |
| 84 | 11.10 | 34.07a) | 1.89 | 197 | 75 | 11.09 | 33.94 | 2.40 | 25.95 | 206 | 0.20 |

a) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; April 23, 1958; 2326 GCT; 28°38'N, 115°16'W; sounding, 94 fm; wind, 310°, force 4; weather, cloudy; sea, high; wire angle, 10°. 117.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.18 | 33.58 | 5.66 | 353 | 0 | 17.18 | 33.58 | 5.66 | 24.40 | 353 | 0.00 |
| 10 | 16.88 | 33.62 | 5.88 | 344 | 10 | 16.88 | 33.62 | 5.88 | 24.50 | 344 | 0.03 |
| 30 | 16.30 | 33.61 | 5.66 | 332 | 20 | 16.30 | 33.61 | 5.66 | 24.63 | 332 | 0.07 |
| 49 | 15.38 | 33.58 | 5.71 | 314 | 30 | 16.30 | 33.61 | 5.66 | 24.63 | 332 | 0.10 |
| 72 | 12.58 | 33.46 | 5.16 | 268 | 50 | 15.26 | 33.57 | 5.71 | 24.84 | 312 | 0.17 |
| 96 | 11.16 | 33.57 | 4.17 | 234 | 75 | 12.32 | 33.46 | 5.02 | 25.35 | 263 | 0.24 |
| 119 | 10.09 | 33.84 | 3.19 | 197 | 100 | 10.88 | 33.62 | 3.94 | 25.74 | 226 | 0.30 |
| 147 | 10.24 | 34.06 | 2.02 | 183 | 150 | (10.28) | (34.10) | (1.87) | (26.22) | (181) | (0.40) |

STRANGER; April 23, 1958; 2013 GCT; 28°28'N, 115°35.5'W; sounding, 520 fm; wind, 310°, force 3; weather, cloudy; sea, high; wire angle, 06°. 117.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.57 | 33.65 | 5.58 | 357 | 0 | 17.57 | 33.65 | 5.58 | 24.36 | 357 | 0.00 |
| 10 | 17.48 | 33.73 | 5.50 | 350 | 10 | 17.48 | 33.73 | 5.50 | 24.44 | 350 | 0.04 |
| 29 | 17.16 | 33.65 | 5.50a) | 348 | 20 | 17.33 | 33.70 | 5.50 | 24.45 | 349 | 0.07 |
| 58 | 16.44 | 33.61 | 5.71 | 335 | 30 | 17.14 | 33.65 | 5.50 | 24.46 | 348 | 0.10 |
| 68 | 16.04 | 33.58 | 5.81b) | 328 | 50 | 16.66 | 33.62 | 5.64 | 24.56 | 339 | 0.17 |
| 77 | 14.99 | 33.62 | 5.69 | 303 | 75 | 15.30 | 33.60 | 5.74 | 24.84 | 312 | 0.26 |
| 91 | 12.86 | 33.54 | 5.20c) | 267 | 100 | 11.98 | 33.54 | 4.73 | 25.48 | 251 | 0.33 |
| 105 | 11.64 | 33.56 | 4.52 | 244 | 150 | 10.05 | 33.95 | 2.64 | 26.14 | 188 | 0.44 |
| 118 | 11.07 | 33.66 | 3.90 | 226 | 200 | 9.52 | 34.21 | 1.49 | 26.43 | 161 | 0.53 |
| 137 | 10.64 | 33.86 | 3.02 | 204 | 250 | 9.39 | 34.32 | 1.02 | 26.54 | 150 | 0.61 |
| 155 | 9.83 | 33.98 | 2.53 | 182 | 300 | 8.93 | 34.42 | 0.80 | 26.69 | 136 | 0.68 |
| 183 | 9.72 | 34.15 | 1.73 | 168 | 400 | 7.66 | 34.40 | 0.47 | 26.87 | 119 | 0.81 |
| 207 | 9.47 | 34.22 | 1.48 | 159 | 500 | 6.48 | 34.36 | 0.33 | 27.01 | 106 | 0.93 |
| 259 | 9.34 | 34.37 | 0.95 | 145 | 600 | (5.48) | (34.40) | | (27.16) | (91) | (1.04) |
| 339 | 8.46 | 34.43 | 0.66 | 127 | | | | | | | |
| 444 | 7.04 | 34.36 | 0.38 | 114 | | | | | | | |
| 583 | 5.66 | 34.39 | 0.30 | 94 | | | | | | | |

STRANGER; April 23, 1958; 1527 GCT; 28°02.5'N, 116°22'W; sounding, 2200 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 20°. 117.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.32 | 33.62 | 5.49 | 353 | 0 | 17.32 | 33.62 | 5.49 | 24.40 | 353 | 0.00 |
| 10 | 17.34 | 33.69 | 5.53 | 349 | 10 | 17.34 | 33.69 | 5.53 | 24.45 | 349 | 0.04 |
| 28 | 17.24 | 33.64 | 5.60 | 351 | 20 | 17.32 | 33.68 | 5.54 | 24.44 | 350 | 0.07 |
| 56 | 16.38 | 33.61 | 5.70 | 334 | 30 | 17.19 | 33.64 | 5.62 | 24.44 | 350 | 0.10 |
| 63 | 16.28 | 33.59 | 5.66 | 333 | 50 | 16.55 | 33.63 | 5.69 | 24.59 | 336 | 0.17 |
| 73 | 15.92 | 33.55 | 5.69 | 328 | 75 | 15.82 | 33.55 | 5.69 | 24.70 | 326 | 0.26 |
| 87 | 15.21 | 33.58 | 5.64 | 311 | 100 | 13.23 | 33.51 | 5.21 | 25.21 | 277 | 0.33 |
| 99 | 13.28 | 33.51 | 5.24 | 278 | 150 | 10.34 | 33.68 | 3.65 | 25.89 | 212 | 0.46 |
| 111 | 12.40 | 33.49 | 5.08 | 262 | 200 | 9.45 | 33.99 | 2.60 | 26.27 | 176 | 0.55 |
| 129 | 11.16 | 33.62 | 4.73 | 230 | 250 | 9.01 | 34.16 | 1.80 | 26.48 | 156 | 0.64 |
| 145 | 10.46 | 33.65 | 3.90 | 217 | 300 | 8.57 | 34.31 | 1.38 | 26.67 | 138 | 0.72 |
| 172 | 9.86 | 33.82 | 3.18 | 195 | 400 | 7.12 | 34.33 | 0.82 | 26.90 | 117 | 0.85 |
| 194 | 9.51 | 33.96 | 2.68 | 178 | 500 | 6.30 | 34.33 | 0.55 | 27.01 | 106 | 0.96 |
| 241 | 9.06 | 34.14 | 1.89 | 158 | | | | | | | |
| 317 | 8.38 | 34.33 | 1.26 | 134 | | | | | | | |
| 418 | 6.89 | 34.33 | 0.76 | 114 | | | | | | | |
| 558 | 5.84 | 34.33 | 0.37 | 100 | | | | | | | |

a) Mean value of 5.18 and 5.81 ml/L.
b) Alternate value, 5.66 ml/L, not used in interpolation.
c) Alternate value, 4.96 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

117.60 STRANGER; April 23, 1958; 0800 GCT; 27°41'N, 117°00'W; sounding, 2150 fm; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.01 | 33.81 | 5.25a) | 356 | 0 | 18.01 | 33.81 | 5.25 | 24.38 | 356 | 0.00 |
| 10 | 18.02 | 33.88 | 5.04b) | 351 | 10 | 18.02 | 33.88 | 5.04 | 24.43 | 351 | 0.04 |
| 29 | 17.64 | 33.79 | 5.52 | 349 | 20 | 18.02 | 33.88 | 5.04 | 24.43 | 351 | 0.07 |
| 57 | 17.16 | 33.86 | 5.56 | 332 | 30 | 17.63 | 33.79 | 5.53 | 24.45 | 349 | 0.10 |
| 66 | 17.18 | 33.89 | 5.26 | 331 | 50 | 17.18 | 33.85 | 5.56 | 24.61 | 334 | 0.17 |
| 75 | 17.16 | 33.95 | 5.22 | 326 | 75 | 17.16 | 33.95 | 5.22 | 24.69 | 326 | 0.26 |
| 89 | 16.56 | 33.96 | 4.95 | 312 | 100 | 14.80 | 33.79 | 4.86 | 25.10 | 287 | 0.34 |
| 101 | 14.68 | 33.78 | 4.85 | 286 | 150 | 10.95 | 33.77 | 3.33 | 25.84 | 216 | 0.46 |
| 116 | 12.46 | 33.65 | 4.12 | 252 | 200 | 9.48 | 33.97 | 2.65 | 26.25 | 178 | 0.56 |
| 133 | 11.72 | 33.68 | 3.73 | 236 | 250 | 9.32 | 34.18 | 1.77 | 26.45 | 159 | 0.65 |
| 151 | 10.94 | 33.77 | 3.32 | 216 | 300 | 8.27 | 34.28 | 1.45 | 26.69 | 136 | 0.72 |
| 178 | 9.98 | 33.87 | 3.02 | 192 | 400 | 7.36 | 34.30 | 0.82 | 26.83 | 123 | 0.86 |
| 200 | 9.48 | 33.97 | 2.65 | 178 | 500 | 6.66 | 34.32 | 0.50 | 26.95 | 112 | 0.98 |
| 250 | 9.32 | 34.18 | 1.77 | 159 | | | | | | | |
| 327 | 7.78 | 34.29 | 1.32 | 128 | | | | | | | |
| 430 | 7.20 | 34.30 | 0.64 | 120 | | | | | | | |
| 566 | 6.14 | 34.33 | 0.46 | 104 | | | | | | | |

117.70 STRANGER; April 23, 1958; 0155 GCT; 27°20'N, 117°39.5'W; sounding, 2100+ fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.24 | 33.85 | 5.44 | 358 | 0 | 18.24 | 33.85 | 5.44 | 24.36 | 358 | 0.00 |
| 10 | 18.24 | 33.96 | 5.48 | 350 | 10 | 18.24 | 33.96 | 5.48 | 24.44 | 350 | 0.04 |
| 30 | 17.88 | 33.89 | 5.48 | 347 | 20 | 18.08 | 33.92 | 5.48 | 24.45 | 349 | 0.07 |
| 59 | 17.31 | 33.93 | 5.52 | 331 | 30 | 17.88 | 33.89 | 5.48 | 24.47 | 347 | 0.10 |
| 69 | 17.26 | 34.07 | 5.42 | 320 | 50 | 17.46 | 33.91 | 5.52 | 24.59 | 336 | 0.17 |
| 88p | 16.88 | 33.99 | 5.02 | 317 | 75 | 17.19 | 34.06 | 5.34 | 24.77 | 319 | 0.26 |
| 102p | 14.94 | 33.84 | 4.35 | 286 | 100 | 15.25 | 33.97 | 4.40 | 25.06 | 291 | 0.33 |
| 116p | 12.57 | 33.63 | 4.20 | 255 | 150 | 10.70 | 33.66 | 3.75 | 25.80 | 220 | 0.46 |
| 135p | 11.04 | 33.58 | 4.20 | 232 | 200 | 10.37 | 34.20 | 1.48 | 26.29 | 174 | 0.56 |
| 153p | 10.62 | 33.72 | 3.54 | 214 | 250 | 9.72 | 34.41 | 1.00 | 26.56 | 149 | 0.64 |
| 182p | 10.55 | 33.97 | 2.30 | 195 | 300 | 9.27 | 34.43 | 0.66 | 26.65 | 140 | 0.72 |
| 205p | 10.32 | 34.22 | 1.47 | 172 | 400 | 8.10 | 34.42 | 0.36 | 26.83 | 123 | 0.85 |
| 257p | 9.64 | 34.42 | 0.95 | 147 | 500 | 7.00 | 34.40 | 0.30 | 26.97 | 110 | 0.98 |
| 337p | 8.83 | 34.43 | 0.44 | 134 | | | | | | | |
| 444p | 7.55 | 34.42 | 0.34 | 115 | | | | | | | |
| 582p | 6.18 | 34.36 | 0.25 | 102 | | | | | | | |

117.80 STRANGER; April 22, 1958; 1900, 1946 GCT; 27°02.5'N, 118°14.5'W; sounding, 2400 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 12°, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.14 | 33.77 | 5.56 | 362 | 0 | 18.14 | 33.77 | 5.56 | 24.31 | 362 | 0.00 |
| 10 | 18.14 | 33.73 | 5.44 | 365 | 10 | 18.14 | 33.73 | 5.44 | 24.28 | 365 | 0.04 |
| 29 | 17.59 | 33.77 | 5.58c) | 349 | 20 | 17.92 | 33.75 | 5.46 | 24.35 | 358 | 0.07 |
| 58 | 17.02 | 33.76 | 5.73d) | 337 | 30 | 17.57 | 33.76 | 5.59 | 24.46 | 348 | 0.11 |
| 67 | 17.14 | 33.87 | 5.52 | 331 | 50 | 16.83 | 33.67 | 5.76 | 24.54 | 340 | 0.18 |
| 77 | 16.72 | 33.82 | 5.48 | 326 | 75 | 16.75 | 33.82 | 5.49 | 24.69 | 326 | 0.26 |
| 90 | 17.10 | 34.04 | 5.31 | 318 | 100 | 15.40 | 33.80 | 5.12 | 24.98 | 298 | 0.34 |
| 104 | 14.85 | 33.73 | 5.09 | 292 | 150 | 11.48 | 33.63 | 4.56 | 25.64 | 236 | 0.47 |
| 117 | 13.51 | 33.64 | 4.97 | 272 | 200 | 9.39 | 33.95 | 2.74 | 26.25 | 178 | 0.58 |
| 135 | 12.17 | 33.62 | 4.23 | 248 | 250 | 8.99 | 34.16 | 1.99 | 26.48 | 156 | 0.66 |
| 154 | 11.30 | 33.64 | 4.65 | 232 | 300 | 8.47 | 34.24 | 1.47 | 26.63 | 142 | 0.74 |
| | | | | | 400 | 7.40 | 34.28 | 0.77 | 26.82 | 124 | 0.88 |
| 179 | 9.85 | 33.83 | 3.20 | 194 | 500 | 6.59 | 34.30 | 0.49 | 26.95 | 112 | 1.00 |
| 202 | 9.39 | 33.95 | 2.74 | 177 | | | | | | | |
| 253 | 8.98 | 34.16 | 1.98 | 156 | | | | | | | |
| 333 | 8.11 | 34.26 | 1.13 | 135 | | | | | | | |
| 438 | 7.04 | 34.28 | 0.63 | 120 | | | | | | | |
| 575 | 5.94 | 34.33 | 0.33 | 101 | | | | | | | |

a) Alternate value, 5.52 ml/L, not used in interpolation.
b) Alternate value, 5.74 ml/L, not used in interpolation.
c) Alternate value, 5.12 ml/L, not used in interpolation.
d) Alternate value, 5.15 ml/L, not used in interpolation.

SIO
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5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; April 22, 1958; 1208 GCT; 26°39.5'N, 118°54.5'W; sounding, 2200 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°. | | | | | | | | | | | 117.90 |
| 0 | 18.56 | 34.04 | 5.22 | 352 | 0 | 18.56 | 34.04 | 5.22 | 24.42 | 352 | 0.00 |
| 10 | 18.58 | 34.02 | 5.22 | 354 | 10 | 18.58 | 34.02 | 5.22 | 24.40 | 354 | 0.04 |
| 28 | 18.38 | 34.02 | 5.22 | 349 | 20 | 18.44 | 34.02 | 5.22 | 24.43 | 351 | 0.07 |
| 57 | 18.38 | 34.09 | 5.20 | 344 | 30 | 18.38 | 34.02 | 5.22 | 24.45 | 349 | 0.10 |
| 66 | 18.33 | 34.14 | 5.20 | 339 | 50 | 18.38 | 34.07 | 5.20 | 24.48 | 346 | 0.17 |
| 74 | 18.21 | 34.10 | 4.88 | 339 | 75 | 18.20 | 34.10 | 4.88 | 24.55 | 339 | 0.26 |
| 88 | 17.82 | 34.04 | 5.28 | 335 | 100 | 16.69 | 33.89 | 5.28 | 24.76 | 320 | 0.34 |
| 100 | 16.69 | 33.89 | 5.28 | 320 | 150 | 11.84 | 33.58 | 4.68 | 25.54 | 246 | 0.48 |
| 115 | 14.18 | 33.68 | 5.08 | 282 | 200 | 9.91 | 33.93 | 2.97 | 26.16 | 187 | 0.60 |
| 132 | 13.20 | 33.64 | 4.92 | 266 | 250 | 9.02 | 34.08 | 2.42 | 26.41 | 163 | 0.68 |
| 150 | 11.84 | 33.58 | 4.68 | 246 | 300 | 8.68 | 34.18 | 1.60 | 26.55 | 150 | 0.77 |
| 176 | 10.35 | 33.64 | 4.11 | 216 | 400 | 7.70 | 34.28 | 0.87 | 26.78 | 128 | 0.91 |
| 200 | 9.91 | 33.93 | 2.97 | 187 | 500 | 6.79 | 34.32 | 0.45 | 26.94 | 113 | 1.04 |
| 248 | 9.06 | 34.07 | 2.49 | 164 | | | | | | | |
| 327 | 8.48 | 34.23 | 1.30 | 143 | | | | | | | |
| 428 | 7.38 | 34.29 | 0.72 | 123 | | | | | | | |
| 563 | 6.36 | 34.34 | 0.27 | 106 | | | | | | | |
| STRANGER; April 20, 1958; 1817 GCT; 28°18.5'N, 115°24'W; sounding, 150 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 08°. | | | | | | | | | | | 118.39 |
| 0 | 16.99 | 33.62 | 5.32 | 346 | 0 | 16.99 | 33.62 | 5.32 | 24.48 | 346 | 0.00 |
| 10 | 16.88 | 33.58 | 5.28 | 347 | 10 | 16.88 | 33.58 | 5.28 | 24.47 | 347 | 0.03 |
| 30 | 16.72 | 33.61 | 5.27 | 341 | 20 | 16.77 | 33.60 | 5.27 | 24.51 | 343 | 0.07 |
| 49 | 14.37 | 33.59 | 5.10 | 293 | 30 | 16.72 | 33.61 | 5.27 | 24.54 | 341 | 0.10 |
| 73 | 11.30 | 33.59 | 4.04 | 235 | 50 | 14.15 | 33.59 | 5.10 | 25.09 | 288 | 0.17 |
| 96 | 11.04 | 33.87 | 2.55 | 210 | 75 | 11.38 | 33.63 | 3.72 | 25.66 | 234 | 0.23 |
| 118 | 11.16 | 34.17 | 1.70 | 190 | 100 | 10.80 | 33.90 | 2.40 | 25.97 | 204 | 0.29 |
| 155 | 10.74 | 34.20 | 1.59 | 181 | 150 | 10.78 | 34.20 | 1.59 | 26.21 | 182 | 0.38 |
| 192 | 10.36 | 34.33 | 1.15 | 165 | 200 | 10.26 | 34.36 | 1.08 | 26.43 | 161 | 0.47 |
| 240 | 9.93 | 34.42 | 0.73 | 151 | 250 | (9.83) | (34.43) | (0.68) | (26.56) | (149) | (0.55) |
| STRANGER; April 11, 1958; 1856 GCT; 28°19'N, 114°53'W; sounding, 50 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | 119.33 |
| 0 | 16.71 | 33.75 | 5.83 | 330 | 0 | 16.71 | 33.75 | 5.83 | 24.65 | 330 | 0.00 |
| 25 | 16.46 | 33.75 | 5.73 | 325 | 10 | 16.50 | 33.75 | 5.75 | 24.69 | 326 | 0.03 |
| 45 | 15.77 | 33.69 | 5.75 | 314 | 20 | 16.48 | 33.75 | 5.73 | 24.70 | 326 | 0.06 |
| 65 | 13.94 | 33.68 | 4.49 | 280 | 30 | 16.40 | 33.75 | 5.73 | 24.72 | 324 | 0.10 |
| 77 | 13.72 | 33.65 | 4.44 | 275 | 50 | 15.35 | 33.69 | 5.57 | 24.92 | 305 | 0.16 |
| | | | | | 75 | 13.75 | 33.66 | 4.45 | 25.22 | 276 | 0.23 |
| STRANGER; April 11, 1958; 1507 GCT; 28°23'N, 114°14.5'W; sounding, 30 fm; wind, direction missing, force 1; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | 120.25 |
| 0 | 16.52 | 33.79 | 5.45a) | 324 | 0 | 16.52 | 33.79 | 5.45 | 24.72 | 324 | 0.00 |
| 10 | 16.49 | 33.78 | 5.60 | 324 | 10 | 16.49 | 33.78 | 5.60 | 24.72 | 324 | 0.03 |
| 20 | 16.42 | 33.74 | 5.59 | 325 | 20 | 16.42 | 33.74 | 5.59 | 24.70 | 325 | 0.06 |
| 30 | 16.23 | 33.74 | 5.68 | 321 | 30 | 16.23 | 33.74 | 5.68 | 24.75 | 321 | 0.10 |
| 40 | 15.20 | 33.70 | 5.36 | 302 | | | | | | | |
| STRANGER; April 11, 1958; 1242 GCT; 28°13'N, 114°35'W; sounding, 45 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | 120.30 |
| 0 | 16.24 | 33.84 | 5.61 | 314 | 0 | 16.24 | 33.84 | 5.61 | 24.82 | 314 | 0.00 |
| 10 | 16.22 | 33.81 | 5.68 | 315 | 10 | 16.22 | 33.81 | 5.68 | 24.81 | 315 | 0.03 |
| 30 | 15.95 | 33.78 | 5.53 | 312 | 20 | 16.10 | 33.80 | 5.58 | 24.82 | 314 | 0.06 |
| 40 | 15.70 | 33.73 | 5.66 | 310 | 30 | 15.95 | 33.78 | 5.53 | 24.84 | 312 | 0.09 |
| 50 | 14.96 | 33.80 | 4.94 | 290 | 50 | 14.96 | 33.80 | 4.94 | 25.07 | 290 | 0.15 |
| 60 | 13.04 | 33.63 | 4.59 | 264 | | | | | | | |

a) Alternate value, 5.94 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **120.35** | STRANGER; April 11, 1958; 0951 GCT; 28°02'N, 114°59.5'W; sounding, 43 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 16.12 | - | 5.76 | | 0 | 16.12 | (33.89) | 5.76 | (24.88) | (308) | (0.00) |
| 10 | 16.10 | 33.89 | 5.86 | 308 | 10 | 16.10 | 33.89 | 5.86 | 24.88 | 308 | 0.03 |
| 20 | 16.12 | 33.78 | 5.81 | 315 | 20 | 16.12 | 33.78 | 5.81 | 24.81 | 315 | 0.06 |
| 30 | 16.08 | 33.78 | 5.60 | 314 | 30 | 16.08 | 33.78 | 5.60 | 24.82 | 314 | 0.09 |
| 50 | 14.24 | 33.66 | 5.26 | 285 | 50 | 14.24 | 33.66 | 5.26 | 25.12 | 285 | 0.15 |
| 60 | 13.06 | 33.65 | 4.97 | 263 | | | | | | | |
| **120.45** | STRANGER; April 20, 1958; 2339 GCT; 27°43'N, 115°33'W; sounding, 1500 fm; wind, 310°, force 3; weather, fog; sea, moderate; wire angle, 21°. | | | | | | | | | | |
| 0 | 17.13 | 33.62 | 5.36 | 350 | 0 | 17.13 | 33.62 | 5.36 | 24.44 | 350 | 0.00 |
| 9 | 17.15 | 33.62 | 5.44 | 350 | 10 | 17.14 | 33.62 | 5.44 | 24.44 | 350 | 0.04 |
| 28 | 16.66 | 33.64 | 5.44 | 338 | 20 | 16.92 | 33.63 | 5.44 | 24.50 | 344 | 0.07 |
| 56 | 14.98 | 33.60 | 5.32 | 304 | 30 | 16.56 | 33.64 | 5.43 | 24.60 | 335 | 0.10 |
| 65 | 14.84 | 33.77 | 4.63 | 289 | 50 | 15.25 | 33.60 | 5.34 | 24.86 | 310 | 0.17 |
| 66p | 13.80 | 33.84 | 4.64 | 263 | 75 | 12.80 | 33.73 | 4.07 | 25.47 | 252 | 0.24 |
| 75p | 12.80 | 33.73 | 4.07 | 252 | 100 | 11.66 | 33.94 | 2.62 | 25.85 | 216 | 0.30 |
| 82p | 12.34 | 33.84 | 3.10 | 236 | 150 | 11.38 | 34.42 | 0.80 | 26.28 | 175 | 0.40 |
| 91p | 11.98 | 33.84 | 3.14 | 229 | 200 | 10.52 | 34.50 | 0.84 | 26.49 | 155 | 0.48 |
| 103p | 11.60 | 34.00 | 2.42 | 210 | 250 | 9.93 | 34.57 | 0.51 | 26.65 | 140 | 0.56 |
| 113p | 11.52 | 34.07 | 2.08 | 204 | 300 | 9.22 | 34.50 | 0.43 | 26.71 | 134 | 0.63 |
| 132pa) | 11.45 | 34.34 | 1.13 | 183 | 400 | 7.70 | 34.41 | 0.44 | 26.88 | 118 | 0.76 |
| 148p | 11.40 | 34.41 | 0.80 | 177 | | | | | | | |
| 183p | 10.74 | 34.47 | 0.93 | 161 | | | | | | | |
| 239p | 10.05 | 34.58 | 0.56 | 142 | | | | | | | |
| 319p | 8.96 | 34.48 | 0.41 | 132 | | | | | | | |
| 428p | 7.22 | 34.39 | 0.48 | 114 | | | | | | | |
| **120.50** | STRANGER; April 21, 1958; 0313 GCT; 27°32'N, 115°50.5'W; sounding, 2300 fm; wind, 320°, force 3; weather, fog; sea, very rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 17.84 | 33.93b) | 5.24 | 343 | 0 | 17.84 | 33.93 | 5.24 | 24.51 | 343 | 0.00 |
| 10 | 17.84 | 33.90 | 5.67 | 345 | 10 | 17.84 | 33.90 | 5.67 | 24.49 | 345 | 0.03 |
| 30 | 17.70 | 33.93 | 5.05 | 340 | 20 | 17.79 | 33.92 | 5.32 | 24.52 | 343 | 0.07 |
| 45 | 17.26 | 33.86 | 5.11 | 335 | 30 | 17.70 | 33.93 | 5.05 | 24.55 | 340 | 0.10 |
| 55 | 16.50 | 33.87 | 5.46 | 317 | 50 | 16.95 | 33.86 | 5.23 | 24.67 | 328 | 0.17 |
| 65 | 14.48 | 33.73 | 5.28c) | 285 | 75 | 13.94 | 33.92 | 3.30 | 25.38 | 260 | 0.24 |
| 74 | 14.06 | 33.93 | 3.31 | 262 | 100 | 12.06 | 33.85 | 2.70 | 25.70 | 230 | 0.30 |
| 93 | 12.10 | 33.78 | 3.20 | 235 | 150 | 10.10 | 34.02 | 2.20 | 26.19 | 184 | 0.41 |
| 106 | 12.04 | 33.93 | 2.55d) | 224 | 200 | 9.06 | 34.18 | 1.98 | 26.48 | 156 | 0.50 |
| 120 | 11.29 | 34.05b) | 2.04e) | 201 | 250 | 8.83 | 34.30 | 1.36 | 26.62 | 143 | 0.57 |
| 144 | 10.33 | 34.02 | 2.17 | 187 | 300 | 8.61 | 34.33 | 0.87 | 26.68 | 138 | 0.64 |
| 172 | 9.38 | 34.04 | 2.27 | 171 | 400 | 7.72 | 34.34 | 0.46 | 26.82 | 124 | 0.78 |
| 209 | 9.03 | 34.21 | 1.94 | 153 | 500 | 6.77 | 34.36 | 0.34 | 26.96 | 110 | 0.90 |
| 261 | 8.81 | 34.31 | 1.32 | 142 | 600 | (5.92) | (34.41) | | (27.12) | (95) | (1.01) |
| 342 | 8.28 | 34.34 | 0.62 | 132 | | | | | | | |
| 443 | 7.24 | 34.34 | 0.41 | 118 | | | | | | | |
| 587 | 6.06 | 34.40 | 0.27 | 98 | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.
b) Possible evaporation; value falls on property curve.
c) Alternate value, 4.78 ml/L, not used in interpolation.
d) Alternate value, 3.30 ml/L, not used in interpolation.
e) Alternate value, 2.67 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; April 21, 1958; 1106 GCT; 27°09.5'N, 116°29'W; sounding, 2020 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 08°. | | | | | | | | | | | 120.60 |
| 0 | 17.40 | 33.67 | 5.32 | 352 | 0 | 17.40 | 33.67 | 5.32 | 24.42 | 352 | 0.00 |
| 10 | 17.40 | 33.67 | 5.42 | 352 | 10 | 17.40 | 33.67 | 5.42 | 24.42 | 352 | 0.04 |
| 30 | 16.82 | 33.64 | 5.43 | 341 | 20 | 17.40 | 33.67 | 5.42 | 24.43 | 351 | 0.07 |
| 59 | 16.49 | 33.73 | 5.36 | 328 | 30 | 16.82 | 33.64 | 5.43 | 24.53 | 341 | 0.10 |
| 73 | 15.96 | 33.67 | 5.57 | 320 | 50 | 16.59 | 33.71 | 5.37 | 24.64 | 331 | 0.17 |
| 86 | 15.02 | 33.69 | 5.36 | 299 | 75 | 15.85 | 33.67 | 5.55 | 24.79 | 317 | 0.25 |
| 104 | 12.12 | 33.50 | 4.94 | 256 | 100 | 12.82 | 33.54 | 5.10 | 25.32 | 267 | 0.33 |
| 121 | 10.98 | 33.58 | 4.16 | 230 | 150 | 10.95 | 33.97 | 2.63 | 26.00 | 202 | 0.44 |
| 139 | 10.71 | 33.83 | 3.20 | 208 | 200 | (9.44) | (34.12) | (2.03) | (26.38) | (166) | (0.54) |
| 148 | 10.92 | 33.95 | 2.79 | 202 | 250 | (9.59) | (34.31) | (1.00) | (26.50) | (154) | (0.62) |
| 156 | 11.06 | 34.01 | 2.32 | 200 | 300 | (8.93) | (34.32) | (0.78) | (26.62) | (143) | (0.70) |
| 165 | 11.06 | 34.12 | 1.84 | 192 | 400 | 7.80 | 34.34 | 0.46 | 26.82 | 124 | (0.84) |
| 174 | 10.54 | 34.11 | 2.01 | 184 | 500 | 6.81 | 34.36 | 0.33 | 26.96 | 110 | (0.96) |
| 183 | 9.70 | 34.06 | 2.61 | 174 | | | | | | | |
| 193 | 9.53 | 34.11 | 2.11 | 167 | | | | | | | |
| 366 | 8.12 | 34.34 | 0.56 | 130 | | | | | | | |
| 526 | 6.57 | 34.36 | 0.30 | 107 | | | | | | | |
| STRANGER; April 21, 1958; 1849 GCT; 26°47'N, 117°08.5'W; sounding, 2100 fm; wind, 310°, force 3; weather, fog; sea, rough; wire angle, 08°. | | | | | | | | | | | 120.70 |
| 0 | 17.92 | 33.69 | 5.81 | 362 | 0 | 17.92 | 33.69 | 5.81 | 24.31 | 362 | 0.00 |
| 10 | 17.88 | 33.71 | 5.28 | 360 | 10 | 17.88 | 33.71 | 5.28 | 24.33 | 360 | 0.04 |
| 30 | 17.06 | 33.68 | 5.20 | 342 | 20 | 17.46 | 33.70 | 5.20 | 24.42 | 352 | 0.07 |
| 59 | 16.66 | 33.72 | 5.44 | 332 | 30 | 17.06 | 33.68 | 5.20 | 24.51 | 343 | 0.11 |
| 68 | 16.88 | 33.84 | 5.22 | 328 | 50 | 16.74 | 33.70 | 5.40 | 24.60 | 335 | 0.17 |
| 78 | 16.78 | 33.87 | 5.16 | 324 | 75 | 16.83 | 33.87 | 5.17 | 24.70 | 325 | 0.26 |
| 92 | 15.16 | 33.71 | 5.14 | 300 | 100 | 13.39 | 33.74 | 4.82 | 25.36 | 263 | 0.33 |
| 105 | 12.87 | 33.75a) | 4.71 | 252 | 150 | 10.43 | 33.63 | 3.70 | 25.84 | 217 | 0.45 |
| 119 | 11.62 | 33.53 | 4.55 | 246 | 200 | 9.86 | 34.13 | 2.00 | 26.32 | 171 | 0.55 |
| 137 | 10.72 | 33.59 | 3.90 | 226 | 250 | 9.64 | 34.22 | 1.11 | 26.50 | 154 | 0.64 |
| 156 | 10.33 | 33.66 | 3.64 | 214 | 300 | 8.72 | 34.33 | 1.02 | 26.66 | 139 | 0.71 |
| 184 | 9.66 | 33.94 | 2.66 | 183 | 400 | 7.30 | 34.31 | 0.70 | 26.86 | 120 | 0.85 |
| 207 | 9.94 | 34.19 | 1.72 | 168 | 500 | 6.63 | 34.31 | 0.38 | 26.96 | 111 | 0.97 |
| 258 | 9.48 | 34.34 | 1.05 | 150 | | | | | | | |
| 338 | 8.00 | 34.32 | 0.97 | 129 | | | | | | | |
| 443 | 6.97 | 34.31 | 0.48 | 116 | | | | | | | |
| 578 | 5.98 | 34.34 | 0.30 | 101 | | | | | | | |
| STRANGER; April 21, 1958; 2350 GCT; 26°29'N, 117°47'W; sounding, 2160 fm; wind, 270°, force 4; weather, cloudy; sea, rough; wire angle, 09°. | | | | | | | | | | | 120.80 |
| 0 | 18.21 | 33.72 | 5.28 | 367 | 0 | 18.21 | 33.72 | 5.28 | 24.25 | 367 | 0.00 |
| 10 | 18.14 | 33.73 | 5.26 | 365 | 10 | 18.14 | 33.73 | 5.26 | 24.28 | 365 | 0.04 |
| 30 | 17.62 | 33.77 | 5.44 | 350 | 20 | 17.85 | 33.75 | 5.35 | 24.37 | 356 | 0.07 |
| 59 | 17.18 | 33.82 | 5.46 | 336 | 30 | 17.62 | 33.77 | 5.44 | 24.44 | 350 | 0.11 |
| 68 | 17.14 | 33.86 | 5.38 | 332 | 50 | 17.36 | 33.80 | 5.45 | 24.56 | 339 | 0.18 |
| 77 | 16.88 | 33.86 | 5.27 | 327 | 75 | 16.91 | 33.86 | 5.28 | 24.68 | 328 | 0.26 |
| 90 | 16.88 | 33.97 | 5.15 | 319 | 100 | 15.98 | 33.84 | 5.02 | 24.88 | 308 | 0.34 |
| 104 | 15.17 | 33.75b) | 4.94 | 297 | 150 | 11.37 | 33.85 | 2.98 | 25.84 | 217 | 0.47 |
| 118 | 13.19 | 33.66 | 4.30 | 264 | 200 | 9.10 | 33.93 | 2.96 | 26.29 | 174 | 0.57 |
| 136 | 12.04 | 33.72 | 3.43 | 239 | 250 | 8.99 | 34.18 | 1.80 | 26.49 | 155 | 0.66 |
| 155 | 11.12 | 33.89 | 2.94 | 210 | 300 | 8.86 | 34.32 | 0.80 | 26.63 | 142 | 0.73 |
| 183 | 9.38 | 33.81 | 3.37 | 187 | 400 | 7.86 | 34.36 | 0.37 | 26.82 | 124 | 0.87 |
| 206 | 9.04 | 33.96 | 2.89 | 172 | 500 | 6.95 | 34.36 | 0.32 | 26.95 | 112 | 1.00 |
| 258 | 8.99 | 34.20 | 1.59 | 153 | 600 | (5.97) | (34.36) | | (27.08) | (99) | (1.11) |
| 337 | 8.69 | 34.36 | 0.56 | 137 | | | | | | | |
| 441 | 7.42 | 34.36 | 0.35 | 119 | | | | | | | |
| 580 | 6.20 | 34.36 | 0.25 | 103 | | | | | | | |

a) This value was accepted after careful investigation.
b) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

120.90 STRANGER; April 22, 1958; 0558, 0629 GCT; 26°13'N, 118°27'W; sounding, 2250 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.60 | 33.96 | 5.19 | 359 | 0 | 18.60 | 33.96 | 5.19 | 24.34 | 359 | 0.00 |
| 10 | 18.62 | 34.00 | 5.19 | 356 | 10 | 18.62 | 34.00 | 5.19 | 24.38 | 356 | 0.04 |
| 30 | 18.29 | 33.96 | 5.17 | 352 | 20 | 18.45 | 33.98 | 5.18 | 24.40 | 354 | 0.07 |
| 59 | 18.12 | 33.99 | 5.22 | 345 | 30 | 18.29 | 33.96 | 5.17 | 24.42 | 352 | 0.11 |
| 68 | 18.27 | 34.11 | 5.20 | 340 | 50 | 18.14 | 33.98 | 5.21 | 24.48 | 346 | 0.18 |
| 77 | 17.92 | 34.06 | 5.19 | 335 | 75 | 18.03 | 34.08 | 5.19 | 24.58 | 337 | 0.26 |
| 91 | 17.44 | 34.00 | 5.04 | 329 | 100 | 16.08 | 33.83 | 5.07 | 24.85 | 311 | 0.34 |
| 104 | 15.46 | 33.77 | 5.09 | 302 | 150 | 11.02 | 33.72 | 3.63 | 25.80 | 221 | 0.48 |
| 117 | 13.82 | 33.66 | 4.74 | 277 | 200 | 9.91 | 33.99 | 2.58 | 26.20 | 183 | 0.58 |
| 135 | 11.84 | 33.64 | 4.33 | 241 | 250 | 9.95 | 34.28 | 1.50 | 26.42 | 162 | 0.67 |
| 153 | 10.90 | 33.73 | 3.50 | 118 | 300 | 9.54 | 34.37 | 0.84 | 26.56 | 148 | 0.75 |
| 180 | 10.24 | 33.86 | 2.99 | 198 | 400 | 8.28 | 34.42 | 0.45 | 26.80 | 126 | 0.89 |
| | | | | | 500 | 7.20 | 34.41 | 0.34 | 26.95 | 112 | 1.02 |
| 203 | 9.89 | 34.00 | 2.52 | 182 | | | | | | | |
| 255 | 9.95 | 34.30 | 1.38 | 160 | | | | | | | |
| 334 | 9.14 | 34.41 | 0.62 | 140 | | | | | | | |
| 440 | 7.84 | 34.42a) | 0.40 | 120 | | | | | | | |
| 575 | 6.34 | 34.38 | 0.27 | 103 | | | | | | | |

123.37 STRANGER; April 11, 1958; 0229 GCT; 25°24.5'N, 114°42'W; sounding, 35 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.81 | 34.04 | 5.64 | 312 | 0 | 16.81 | 34.04 | 5.64 | 24.84 | 312 | 0.00 |
| 10 | 16.77 | 34.05 | 5.69 | 310 | 10 | 16.77 | 34.05 | 5.69 | 24.86 | 310 | 0.03 |
| 30 | 13.34 | 33.78 | 3.92 | 258 | 20 | 16.00 | 33.98 | 5.46 | 24.98 | 298 | 0.06 |
| 50 | 12.12 | 34.05 | 2.37 | 216 | 30 | 13.34 | 33.78 | 3.92 | 25.40 | 258 | 0.09 |
| | | | | | 50 | 12.12 | 34.05 | 2.37 | 25.85 | 216 | 0.14 |

123.42 STRANGER; April 11, 1958; 0002 GCT; 27°18'N, 114°57'W; sounding, 400 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.94 | 34.07 | 5.53 | 336 | 0 | 17.94 | 34.07 | 5.53 | 24.59 | 336 | 0.00 |
| 9 | 17.90 | 34.14 | 5.60 | 329 | 10 | 17.88 | 34.14 | 5.59 | 24.65 | 330 | 0.03 |
| 28 | 17.65 | 34.05b) | 5.45 | 330 | 20 | 17.74 | 34.09 | 5.49 | 24.65 | 330 | 0.07 |
| 55 | 17.69 | 34.10 | 5.49 | 327 | 30 | 17.66 | 34.05 | 5.47 | 24.65 | 330 | 0.10 |
| 64 | 17.12 | 34.20 | 4.73 | 307 | 50 | 17.69 | 34.09 | 5.49 | 24.66 | 329 | 0.16 |
| 74 | 15.42 | 33.96 | 4.32 | 288 | 75 | 15.38 | 33.96 | 4.31 | 25.10 | 287 | 0.24 |
| 88 | 13.96 | 33.90 | 3.64 | 262 | 100 | 13.13 | 33.84 | 3.64 | 25.49 | 250 | 0.31 |
| 101 | 13.04 | 33.83 | 3.64 | 250 | 150 | 9.95 | 34.03 | 2.57 | 26.22 | 181 | 0.42 |
| 115 | 12.05 | 34.04 | 2.46 | 216 | 200 | 9.95 | 34.33 | 1.24 | 26.46 | 158 | 0.50 |
| 131 | 11.62 | 34.20 | 1.79 | 196 | 250 | 9.51 | 34.47 | 0.77 | 26.64 | 141 | 0.58 |
| 146 | 10.01 | 34.02 | 2.60 | 182 | 300 | 9.21 | 34.50 | 0.53 | 26.71 | 134 | 0.65 |
| 169 | 10.26 | 34.29 | 1.76 | 166 | 400 | 7.42 | 34.42 | 0.44 | 26.92 | 114 | 0.78 |
| 188 | 10.04 | 34.31 | 1.38 | 162 | 500 | 6.77 | 34.43 | 0.26 | 27.02 | 105 | 0.89 |
| 231 | 9.61 | 34.44 | 0.88 | 145 | | | | | | | |
| 299 | 9.22 | 34.50 | 0.53 | 134 | | | | | | | |
| 392 | 7.53 | 34.42 | 0.47 | 115 | | | | | | | |
| 518 | 6.64 | 34.43 | 0.25 | 103 | | | | | | | |

a) Possible evaporation; value falls on property curve.
b) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}_{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}_{3}$ 10 cm/g | ΔD dyn. m |
| STRANGER; April 10, 1958; 2027 GCT; 27°05.5'N, 115°16'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, rough; wire angle, 02°. | | | | | | | | | | | 123.50 |
| 0 | 17.45 | 33.99 | 5.54 | 330 | 0 | 17.45 | 33.99 | 5.54 | 24.65 | 330 | 0.00 |
| 10 | 17.44 | 33.96 | 5.50 | 332 | 10 | 17.44 | 33.96 | 5.50 | 24.63 | 332 | 0.03 |
| 30 | 17.21 | 33.99 | 5.49 | 324 | 20 | 17.37 | 33.97 | 5.49 | 24.66 | 329 | 0.07 |
| 45 | 16.88 | 34.00 | 5.62 | 316 | 30 | 17.21 | 33.99 | 5.49 | 24.71 | 324 | 0.10 |
| 55 | 13.64 | 33.58 | 4.98 | 279 | 50 | 14.00 | 33.62 | 5.08 | 25.14 | 283 | 0.16 |
| 64 | 14.10 | 33.95 | 4.19 | 261 | 75 | 13.28 | 33.89 | 2.87 | 25.49 | 250 | 0.23 |
| 74 | 13.38 | 33.89 | 2.92 | 252 | 100 | 12.18 | 33.96 | 2.56 | 25.77 | 224 | 0.29 |
| 93 | 12.51 | 33.97 | 2.60 | 229 | 150 | 10.22 | 34.08 | 2.20 | 26.22 | 181 | 0.39 |
| 108 | 11.78 | 33.95 | 2.56 | 217 | 200 | 9.41 | 34.24 | 1.43 | 26.48 | 156 | 0.48 |
| 122 | 11.28 | 34.01 | 2.33 | 204 | 250 | 9.19 | 34.41 | 0.96 | 26.65 | 140 | 0.55 |
| 145 | 10.38 | 34.06 | 2.21 | 185 | 300 | 8.63 | 34.43 | 0.62 | 26.75 | 130 | 0.62 |
| 173 | 9.74 | 34.15 | 1.85 | 168 | 400 | 7.58 | 34.42 | 0.37 | 26.91 | 116 | 0.75 |
| 210 | 9.30 | 34.28 | 1.29 | 152 | 500 | 6.80 | 34.43 | 0.30 | 27.02 | 105 | 0.86 |
| 261 | 9.15 | 34.42 | 0.87 | 139 | | | | | | | |
| 339 | 8.09 | 34.43 | 0.48 | 122 | | | | | | | |
| 439 | 7.26 | 34.42 | 0.34 | 112 | | | | | | | |
| 579 | 6.14 | 34.45 | 0.29 | 95 | | | | | | | |
| STRANGER; April 10, 1958; 1458 GCT; 26°45'N, 116°04.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | | 123.60 |
| 0 | 17.15 | 33.88 | 5.45 | 331 | 0 | 17.15 | 33.88 | 5.45 | 24.64 | 331 | 0.00 |
| 10 | 17.16 | 33.81 | 5.56 | 336 | 10 | 17.16 | 33.81 | 5.56 | 24.59 | 336 | 0.03 |
| 35 | 17.15 | 33.88 | 5.51 | 331 | 20 | 17.16 | 33.84 | 5.54 | 24.61 | 334 | 0.07 |
| 64 | 14.75 | 33.59 | 5.42 | 301 | 30 | 17.16 | 33.87 | 5.53 | 24.63 | 332 | 0.10 |
| 74 | 13.83 | 33.58 | 5.16 | 283 | 50 | 17.00 | 33.87 | 5.47 | 24.67 | 328 | 0.17 |
| 88 | 12.68 | 33.55 | 4.71 | 263 | 75 | 13.78 | 33.58 | 5.13 | 25.16 | 282 | 0.24 |
| 98a) | 11.98 | 33.58 | 4.54 | 248 | 100 | 11.82 | 33.60 | 4.48 | 25.55 | 244 | 0.31 |
| 117 | 11.30 | 33.80 | 3.33 | 220 | 150 | 11.47 | 34.27 | 1.45 | 26.14 | 188 | 0.42 |
| 131 | 11.49 | 34.07 | 2.24 | 204 | 200 | 10.22 | 34.36 | 1.19 | 26.43 | 161 | 0.51 |
| 149 | 11.52 | 34.27 | 1.44 | 189 | 250 | 9.71 | 34.44 | 0.94 | 26.59 | 146 | 0.58 |
| 171 | 10.52 | 34.27 | 1.66 | 172 | 300 | 8.92 | 34.42 | 0.96 | 26.70 | 135 | 0.66 |
| 197a) | 10.26 | 34.34 | 1.21 | 162 | 400 | 7.55 | 34.39 | 0.53 | 26.88 | 118 | 0.79 |
| 223 | 10.14 | 34.45 | 0.87 | 152 | 500 | 6.55 | 34.36 | 0.40 | 27.00 | 107 | 0.91 |
| 276 | 9.25 | 34.43 | 1.06 | 140 | 600 | 5.89 | 34.42 | 0.27 | 27.13 | 94 | 1.01 |
| 356 | 8.07 | 34.41 | 0.63 | 124 | | | | | | | |
| 460 | 6.84 | 34.36 | 0.46 | 111 | | | | | | | |
| 601 | 5.88 | 34.42 | 0.27 | 94 | | | | | | | |
| STRANGER; April 10, 1958; 0947 GCT; 26°25.5'N, 116°43'W; sounding, 2000+ fm; wind, 360°, force 4; weather, partly cloudy; sea, high; wire angle, 17°. | | | | | | | | | | | 123.70 |
| 0 | 17.56 | 34.00 | 5.54 | 332 | 0 | 17.56 | 34.00 | 5.54 | 24.63 | 332 | 0.00 |
| 10 | 17.56 | 33.92 | 5.60 | 338 | 10 | 17.56 | 33.92 | 5.60 | 24.57 | 338 | 0.03 |
| 29 | 17.56 | 33.98 | 5.60 | 333 | 20 | 17.56 | 33.95 | 5.60 | 24.60 | 335 | 0.07 |
| 57 | 17.56 | 33.95 | 5.55 | 335 | 30 | 17.56 | 33.98 | 5.60 | 24.62 | 333 | 0.10 |
| 67 | 17.32 | 33.98 | 5.59 | 328 | 50 | 17.56 | 33.96 | 5.56 | 24.60 | 335 | 0.17 |
| 77 | 17.02 | 34.00 | 5.63 | 320 | 75 | 17.07 | 34.00 | 5.63 | 24.74 | 322 | 0.25 |
| 91 | 16.48 | 33.98 | 5.49 | 309 | 100 | 15.20 | 33.87 | 4.98 | 25.09 | 288 | 0.33 |
| 105 | 14.39 | 33.81 | 4.67 | 277 | 150 | 10.62 | 33.76 | 3.92 | 25.89 | 212 | 0.45 |
| 120 | 12.35 | 33.74 | 4.20 | 244 | 200 | 9.59 | 34.12 | 2.67 | 26.36 | 168 | 0.55 |
| 138 | 11.40 | 33.76 | 3.94 | 225 | 250 | 9.53 | 34.40 | 1.50 | 26.58 | 146 | 0.63 |
| 156 | 10.18 | 33.78 | 3.90 | 202 | 300 | 8.83 | 34.38 | 1.07 | 26.68 | 137 | 0.70 |
| 183a) | 9.65 | 33.99 | 3.17 | 178 | 400 | 7.80 | 34.40 | 0.66 | 26.86 | 120 | 0.84 |
| 205 | 9.58 | 34.15 | 2.61 | 165 | 500 | 6.99 | 34.44 | 0.43 | 27.00 | 106 | 0.95 |
| 253 | 9.52 | 34.41 | 1.43 | 145 | | | | | | | |
| 330 | 8.39 | 34.37 | 0.88 | 131 | | | | | | | |
| 433 | 7.54 | 34.42 | 0.58 | 116 | | | | | | | |
| 567 | 6.36 | 34.46 | 0.32 | 97 | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_{-5}^{3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_{-5}^{3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

123.80 STRANGER; April 10, 1958; 0413 GCT; 26°06'N, 117°21'W; sounding, 2000+ fm; wind, 360°, force 4, weather, clear; sea, very rough; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.55 | 33.86 | 5.54 | 342 | 0 | 17.55 | 33.86 | 5.54 | 24.52 | 342 | 0.00 |
| 10 | 17.56 | 33.82 | 5.52 | 344 | 10 | 17.56 | 33.82 | 5.52 | 24.50 | 344 | 0.03 |
| 30 | 17.46 | 33.86 | 4.11u | 339 | 20 | 17.53 | 33.84 | 5.52 | 24.52 | 342 | 0.07 |
| 59 | 16.60 | 33.78 | 5.59 | 326 | 30 | 17.46 | 33.86 | 5.53 | 24.55 | 339 | 0.10 |
| 68 | 16.78 | 33.89 | 5.55 | 322 | 50 | 16.80 | 33.80 | 5.59 | 24.65 | 330 | 0.17 |
| 78 | 16.56 | 33.81u | 5.19 | | 75 | 16.63 | 33.88 | 5.28 | 24.76 | 320 | 0.25 |
| 92 | 14.98 | 33.69 | 4.18 | 298 | 100 | 13.97 | 33.71 | 4.15 | 25.23 | 275 | 0.33 |
| 106 | 13.28 | 33.72 | 4.16 | 262 | 150 | 10.70 | 33.88 | 3.18 | 25.98 | 204 | 0.45 |
| 120a) | 12.08 | 33.67 | 4.19 | 243 | 200 | 9.77 | 34.15 | 2.26 | 26.35 | 169 | 0.54 |
| 137 | 10.96 | 33.71 | 3.95 | 221 | 250 | 9.20 | 34.33 | 1.55 | 26.58 | 146 | 0.62 |
| 155 | 10.62 | 33.93 | 2.96 | 199 | 300 | 8.88 | 34.41 | 1.42 | 26.70 | 135 | 0.70 |
| 181 | 10.12 | 34.10 | 2.39 | 178 | 400 | 7.90 | 34.45 | 0.61 | 26.88 | 118 | 0.83 |
| 204a) | 9.70 | 34.16 | 2.24 | 167 | 500 | 6.46 | 34.47 | 0.24 | 27.09 | 98 | 0.94 |
| 254 | 9.17 | 34.34 | 1.52 | 145 | | | | | | | |
| 330 | 8.70 | 34.44 | 1.36 | 130 | | | | | | | |
| 432 | 7.46 | 34.45 | 0.29 | 112 | | | | | | | |
| 566 | 6.27 | 34.47 | 0.23 | 95 | | | | | | | |

127.34 STRANGER; April 8, 1958; 1839 GCT; 26°56'N, 114°08'W; sounding, 40 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.63 | 34.04 | 4.81 | 286 | 0 | 15.63 | 34.04 | 4.81 | 25.11 | 286 | 0.00 |
| 10 | 15.32 | 34.00 | 4.90 | 282 | 10 | 15.32 | 34.00 | 4.90 | 25.16 | 282 | 0.03 |
| 20 | 15.24 | 34.05 | 4.81 | 277 | 20 | 15.24 | 34.05 | 4.81 | 25.21 | 277 | 0.06 |
| 30 | 15.20 | 34.05 | 4.62 | 276 | 30 | 15.20 | 34.05 | 4.62 | 25.22 | 276 | 0.08 |
| 50 | 13.64 | 34.18 | 2.11 | 235 | 50 | 13.64 | 34.18 | 2.11 | 25.65 | 235 | 0.14 |
| 60 | 13.14 | 34.12 | 2.17 | 230 | | | | | | | |

127.40 STRANGER; April 8, 1958; 2342 GCT; 26°44'N, 114°27'W; sounding, 1600 fm; wind, 270°, force 5; weather, clear; sea, high; wire angle, 41°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.08 | 33.91 | 5.53 | 327 | 0 | 17.08 | 33.91 | 5.53 | 24.68 | 327 | 0.00 |
| 8 | 17.06 | 33.88 | - | 329 | 10 | 17.06 | 33.88 | 5.57 | 24.67 | 328 | 0.03 |
| 27 | 17.06 | 33.93 | 5.57 | 325 | 20 | 17.06 | 33.91 | 5.57 | 24.69 | 326 | 0.06 |
| 49 | 17.06 | 34.11 | 5.40 | 312 | 30 | 17.09 | 33.95 | 5.56 | 24.71 | 324 | 0.10 |
| 57 | 15.66 | 33.91 | 4.94 | 296 | 50 | 16.79 | 34.08 | 5.35 | 24.88 | 308 | 0.16 |
| 68 | 14.26 | 33.81 | 4.57 | 274 | 75 | 13.45 | 33.76 | 4.24 | 25.36 | 262 | 0.23 |
| 76 | 13.40 | 33.76 | 4.22 | 261 | 100 | (12.68) | (33.96) | (3.02) | (25.67) | (233) | (0.30) |
| 89 | 12.86 | 33.78 | 3.96 | 250 | | | | | | | |
| 98 | 12.76 | 33.96 | 3.02 | 234 | | | | | | | |
| 110p | 11.20 | 33.86 | 3.11 | 214 | | | | | | | |
| 123p | 10.46 | 33.95 | 2.71 | 194 | | | | | | | |
| 148p | 10.34 | 34.11 | 2.29 | 181 | | | | | | | |
| 256p | 9.38 | 34.38 | 1.00 | 145 | | | | | | | |
| 360p | 8.32 | 34.42 | 0.58 | 126 | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; April 9, 1958; 0518 GCT; 26°25'N, 115°03'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 22°. 127.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.52 | 34.00 | 6.46 | 330 | 0 | 17.52 | 34.00 | 6.46 | 24.65 | 330 | 0.00 |
| 9 | 17.52 | 33.98 | 6.44 | 332 | 10 | 17.52 | 33.98 | 6.43 | 24.63 | 332 | 0.03 |
| 32 | 17.52 | 33.96 | 6.37 | 333 | 20 | 17.52 | 33.97 | 6.41 | 24.63 | 332 | 0.07 |
| 60 | 17.44 | 33.96 | 6.35 | 332 | 30 | 17.52 | 33.96 | 6.38 | 24.62 | 333 | 0.10 |
| 69 | 17.44 | 33.99 | 6.48 | 330 | 50 | 17.48 | 33.96 | 6.36 | 24.63 | 332 | 0.17 |
| 83 | 17.46 | 34.14 | 6.31 | 319 | 75 | 17.45 | 34.05 | 6.41 | 24.70 | 325 | 0.25 |
| 91 | 16.33 | 34.05 | 5.59 | 300 | 100 | 15.08 | 33.96 | 5.21 | 25.18 | 280 | 0.33 |
| 108 | 14.16 | 33.91 | 4.97 | 265 | 150 | 11.66 | 34.09 | 3.17 | 25.96 | 206 | 0.45 |
| 121 | 12.96 | 33.90 | 4.22 | 242 | 200 | 10.98 | 34.39 | 2.11 | 26.33 | 170 | 0.54 |
| 138 | 12.16 | 34.02 | 3.57 | 218 | 250 | 10.03 | 34.45 | 1.80 | 26.54 | 151 | 0.62 |
| 159a) | 11.34 | 34.14 | 2.94 | 195 | 300 | 9.37 | 34.44 | 1.73 | 26.65 | 140 | 0.70 |
| 185 | 11.12 | 34.31 | 2.33 | 179 | 400 | 8.18 | 34.42 | 0.91 | 26.82 | 124 | 0.84 |
| 209 | 10.88 | 34.41 | 1.97 | 168 | 500 | 7.11 | 34.43 | 0.28 | 26.98 | 109 | 0.96 |
| 260 | 9.84 | 34.45 | 1.79 | 147 | 600 | (6.27) | (34.45) | | (27.10) | (97) | (1.07) |
| 339 | 8.87 | 34.43 | 1.64 | 134 | | | | | | | |
| 441 | 7.62 | 34.42 | 0.41 | 117 | | | | | | | |
| 581 | 6.40 | 34.45 | 0.22 | 98 | | | | | | | |

STRANGER; April 9, 1958; 1120 GCT; 26°05.5'N, 115°38.5'W; sounding, 2000+ fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 34°. 127.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.36 | 34.27 | 5.21 | 330 | 0 | 18.36 | 34.27 | 5.21 | 24.65 | 330 | 0.00 |
| 8 | 18.34 | 34.25 | 5.28 | 331 | 10 | 18.34 | 34.25 | 5.27 | 24.64 | 331 | 0.03 |
| 29 | 18.36 | 34.26 | 5.13 | 330 | 20 | 18.35 | 34.26 | 5.25 | 24.64 | 331 | 0.07 |
| 54 | 18.41 | 34.27 | 5.36 | 332 | 30 | 18.37 | 34.27 | 5.16 | 24.64 | 331 | 0.10 |
| 61 | 18.38 | 34.25 | - | 332 | 50 | 18.40 | 34.27 | 5.31 | 24.63 | 332 | 0.16 |
| 72 | 18.42 | 34.25 | - | 333 | 75 | 18.42 | 34.27 | | 24.63 | 332 | 0.25 |
| 79 | 18.42 | 34.27 | - | 332 | 100 | 17.56 | 34.27 | | 24.84 | 312 | 0.33 |
| 94 | 17.96 | 34.28 | - | 320 | 150 | 11.97 | 33.88 | | 25.74 | 226 | 0.47 |
| 104 | 17.18 | 34.26 | - | 304 | 200 | 11.13 | 34.07 | | 26.05 | 197 | 0.57 |
| 118 | 14.82 | 33.91 | - | 278 | 250 | 10.60 | 34.22 | | 26.26 | 177 | 0.67 |
| 136 | 13.20 | 33.83 | - | 252 | 300 | 10.07 | 34.42 | | 26.51 | 153 | 0.76 |
| 157 | 11.40 | 33.89 | - | 215 | 400 | 8.99 | 34.53 | | 26.77 | 129 | 0.90 |
| 179a) | 10.70 | 33.83 | - | 208 | | | | | | | |
| 189p | 11.19 | 34.29r | - | | | | | | | | |
| 262p | 10.44 | 34.27 | - | 171 | | | | | | | |
| 357p | 9.57 | 34.54 | - | 136 | | | | | | | |
| 486p | 7.59 | 34.46 | - | 114 | | | | | | | |

STRANGER; April 9, 1958; 1630 GCT; 25°44.5'N, 116°16.5'W; sounding, 2000 fm; wind, 360°, force 4; weather, cloudy; sea, high; wire angle, 14°. 127.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.68 | 34.02 | 5.57 | 333 | 0 | 17.68 | 34.02 | 5.57 | 24.62 | 333 | 0.00 |
| 10 | 17.66 | 34.00 | 5.58 | 334 | 10 | 17.66 | 34.00 | 5.58 | 24.61 | 334 | 0.03 |
| 34 | 17.66 | 34.04b) | 5.47 | 331 | 20 | 17.66 | 34.01 | 5.53 | 24.62 | 333 | 0.07 |
| 63 | 17.60 | 34.03 | 5.29 | 330 | 30 | 17.66 | 34.03 | 5.48 | 24.63 | 332 | 0.10 |
| 73 | 17.32 | 34.04 | 5.41 | 323 | 50 | 17.64 | 34.03 | 5.36 | 24.64 | 331 | 0.17 |
| 87 | 16.72 | 33.95 | 5.21 | 316 | 75 | 17.22 | 34.03 | 5.40 | 24.74 | 322 | 0.25 |
| 97 | 15.35 | 33.86 | 4.92 | 294 | 100 | 14.98 | 33.86 | 4.74 | 25.12 | 285 | 0.33 |
| 115 | 13.18 | 33.89 | 3.51 | 247 | 150 | 11.04 | 33.96 | 2.66 | 25.98 | 203 | 0.45 |
| 129 | 12.32 | 33.86 | 3.25 | 234 | 200 | 11.05 | 34.34 | 1.30 | 26.27 | 176 | 0.54 |
| 147 | 11.10 | 33.93 | 2.73 | 207 | 250 | 10.38 | 34.49 | 0.81 | 26.50 | 154 | 0.63 |
| 170 | 10.94 | 34.08 | 2.19 | 193 | 300 | 9.63 | 34.49 | 0.74 | 26.64 | 141 | 0.70 |
| 196 | 11.06 | 34.31 | - | 178 | 400 | 8.60 | 34.48 | 0.37 | 26.80 | 126 | 0.84 |
| 222 | 10.86 | 34.47 | 0.79 | 163 | 500 | 7.45 | 34.46 | 0.31 | 26.95 | 112 | 0.97 |
| 274 | 9.94 | 34.49 | 0.85 | 146 | 600 | 6.21 | 34.41 | 0.42 | 27.08 | 99 | 1.08 |
| 354 | 9.08 | 34.49 | 0.48 | 133 | | | | | | | |
| 460 | 7.93 | 34.47 | 0.30 | 117 | | | | | | | |
| 600 | 6.21 | 34.41 | 0.42 | 99 | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

b) Possible evaporation; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_{3}^{-5}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_{3}^{-5}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

127.80 STRANGER; April 9, 1958; 2147 GCT; 25°25'N, 116°51'W; sounding, 2000 fm; wind, 300°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.36 | 34.49 | 5.32 | 339 | 0 | 19.36 | 34.49 | 5.32 | 24.56 | 339 | 0.00 |
| 10 | 19.29 | 34.49 | 5.34 | 337 | 10 | 19.29 | 34.49 | 5.34 | 24.58 | 337 | 0.03 |
| 30 | 19.14 | 34.49 | 5.06 | 334 | 20 | 19.20 | 34.49 | 5.19 | 24.60 | 335 | 0.07 |
| 59 | 19.12 | 34.48 | 5.24 | 333 | 30 | 19.14 | 34.49 | 5.06 | 24.61 | 334 | 0.10 |
| 69 | 19.06 | 34.47 | 5.18 | 332 | 50 | 19.13 | 34.49 | 5.13 | 24.61 | 334 | 0.17 |
| 79 | 17.55 | 34.23 | 4.87 | 315 | 75 | 18.78 | 34.43 | 5.08 | 24.65 | 330 | 0.25 |
| 93 | 14.68 | 33.84 | 4.55 | 281 | 100 | 14.42 | 33.80 | 4.50 | 25.24 | 274 | 0.33 |
| 108 | 13.70 | 33.77 | 4.37 | 266 | 150 | 11.60 | 33.94 | 2.83 | 25.86 | 214 | 0.45 |
| 123 | 12.68 | 33.77 | 3.79 | 247 | 200 | 11.12 | 34.37 | 1.31 | 26.28 | 175 | 0.55 |
| 141 | 11.74 | 33.88 | 3.08 | 221 | 250 | 10.56 | 34.47 | 0.87 | 26.46 | 158 | 0.64 |
| 159 | 11.50 | 34.01 | 2.51 | 208 | 300 | 9.82 | 34.51 | 0.56 | 26.62 | 143 | 0.71 |
| 186 | 11.16 | 34.23 | 1.62 | 186 | 400 | 8.42 | 34.46 | 0.39 | 26.81 | 125 | 0.85 |
| 208 | 11.08 | 34.40 | 1.18 | 172 | 500 | 7.30 | 34.44 | 0.34 | 26.96 | 110 | 0.98 |
| 257 | 10.42 | 34.48 | 0.82 | 155 | | | | | | | |
| 334 | 9.38 | 34.52 | 0.42 | 135 | | | | | | | |
| 437 | 7.92 | 34.43 | 0.39 | 120 | | | | | | | |
| 570 | 6.64 | 34.47 | 0.25 | 100 | | | | | | | |

130.30 STRANGER; April 7, 1958; 1823 GCT; 26°31'N, 113°35.5'W; sounding, 25 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.26 | 34.02 | 5.24 | 301 | 0 | 16.26 | 34.02 | 5.24 | 24.96 | 301 | 0.00 |
| 10 | 16.14 | 34.00 | 5.27 | 300 | 10 | 16.14 | 34.00 | 5.27 | 24.97 | 300 | 0.03 |
| 20 | 15.77 | 33.98 | 4.94 | 293 | 20 | 15.77 | 33.98 | 4.94 | 25.04 | 293 | 0.06 |
| 30 | 14.42 | - | 3.48 | | 30 | 14.42 | | 3.48 | | | |

130.35 STRANGER; April 7, 1958; 1613 GCT; 26°22.5'N, 113°48.5'W; sounding, 200 fm; wind, 320°, force 2; weather, cloudy; sea, very rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.94 | 33.97 | 5.28 | 320 | 0 | 16.94 | 33.97 | 5.28 | 24.76 | 320 | 0.00 |
| 10 | 16.92 | 33.99 | 5.36 | 318 | 10 | 16.92 | 33.99 | 5.36 | 24.78 | 318 | 0.03 |
| 30 | 17.00 | 34.02 | 5.04 | 317 | 20 | 16.97 | 34.00 | 5.20 | 24.78 | 318 | 0.06 |
| 50 | 17.02 | 34.09 | 5.32 | 313 | 30 | 17.00 | 34.02 | 5.04 | 24.79 | 317 | 0.10 |
| 60 | 16.31 | 34.05 | 4.87 | 300 | 50 | 17.02 | 34.09 | 5.32 | 24.83 | 313 | 0.16 |
| 74a) | 14.78 | 33.88 | 4.01 | 280 | 75 | 14.63 | 33.88 | 3.97 | 25.21 | 277 | 0.23 |
| 98 | 12.58 | 33.90 | 3.06 | 235 | 100 | 12.50 | 33.90 | 3.00 | 25.66 | 234 | 0.30 |
| 121 | 12.00 | 34.20 | 1.64 | 203 | 150 | 11.75 | 34.54 | 0.60 | 26.30 | 173 | 0.40 |
| 158 | 11.64 | 34.56 | 0.50 | 170 | 200 | 11.02 | (34.61) | 0.40 | (26.48) | (156) | (0.48) |
| 176 | 11.38 | 34.56 | 0.41 | 165 | 250 | 10.62 | | 0.36 | | | |
| 195 | 11.04 | 34.60 | 0.40 | 157 | 300 | (9.97) | | | | | |
| 242 | 10.74 | 34.69u | 0.38 | | | | | | | | |
| 290 | 10.08 | 34.57 | 0.24 | | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; April 7, 1958; 1256, 1317 GCT; 26°12'N, 114°07'W; sounding, 1000 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 09°, 09°. 130.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.26 | 33.99 | 5.50 | 325 | 0 | 17.26 | 33.99 | 5.50 | 24.71 | 325 | 0.00 |
| 10 | 17.26 | 34.02 | 5.56 | 323 | 10 | 17.26 | 34.02 | 5.56 | 24.73 | 323 | 0.03 |
| 30 | 17.27 | 34.06a) | 5.44 | | 20 | 17.27 | 34.02 | 5.49 | 24.73 | 323 | 0.06 |
| 60 | 17.18 | 34.02 | 5.33 | 321 | 30 | 17.27 | 34.02 | 5.44 | 24.73 | 323 | 0.10 |
| 69 | 16.02 | 33.86 | 5.08 | 307 | 50 | 17.23 | 34.02 | 5.37 | 24.74 | 322 | 0.16 |
| 79 | 14.86 | 33.82 | 4.59 | 286 | 75 | 15.30 | 33.83 | 4.78 | 25.03 | 294 | 0.24 |
| 93 | 13.14 | 33.81 | 3.53 | 252 | 100 | 12.43 | 33.79 | 3.49 | 25.58 | 241 | 0.31 |
| 107 | 12.02 | 33.77 | 3.48 | 235 | 150 | 11.60 | 34.34 | 1.04 | 26.17 | 185 | 0.42 |
| 120 | 11.66 | 33.88 | 3.10 | 220 | 200 | 10.98 | 34.51 | 0.57 | 26.42 | 162 | 0.50 |
| 138 | 11.80 | 34.20 | 1.63 | 199 | 250 | 10.39 | 34.56 | 0.53 | 26.56 | 149 | 0.58 |
| 156 | 11.52 | 34.40 | 0.91 | 180 | 300 | 9.67 | 34.56 | 0.52 | 26.68 | 137 | 0.66 |
| 184 | 11.27 | 34.51b) | 0.85 | 170 | 400 | 8.25 | 34.48 | 0.34 | 26.85 | 121 | 0.79 |
| 206 | 10.88 | 34.51 | 0.54 | 160 | 500 | 7.00 | 34.43 | 0.25 | 26.99 | 108 | 0.91 |
| 257 | 10.30 | 34.56 | 0.53c) | 147 | | | | | | | |
| 336 | 9.10 | 34.55 | 0.49 | 128 | | | | | | | |
| 439 | 7.76 | 34.44 | 0.28 | 117 | | | | | | | |
| 573 | 6.14 | 34.43 | 0.24 | 96 | | | | | | | |

STRANGER; April 7, 1958; 0712 GCT; 25°57.5'N, 114°49'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, very rough; wire angle, 15°. 130.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.34 | 33.89 | 5.36 | 334 | 0 | 17.34 | 33.89 | 5.36 | 24.61 | 334 | 0.00 |
| 10 | 17.35 | 33.95 | 5.05 | 330 | 10 | 17.35 | 33.95 | 5.05 | 24.65 | 330 | 0.03 |
| 29 | 17.35 | 33.94 | 5.34 | 331 | 20 | 17.35 | 33.94 | 5.20 | 24.64 | 331 | 0.07 |
| 58 | 17.60 | 34.07 | 5.30 | 327 | 30 | 17.35 | 33.94 | 5.34 | 24.64 | 331 | 0.10 |
| 68 | 17.56 | 34.11 | 5.28 | 323 | 50 | 17.35 | 33.94 | 5.34 | 24.64 | 331 | 0.16 |
| 77 | 17.01 | 34.04 | 5.22 | 316 | 75 | 17.20 | 34.07 | 5.23 | 24.78 | 318 | 0.25 |
| 92 | 16.09 | 33.98 | 4.59 | 300 | 100 | 14.57 | 33.96 | 4.48 | 25.28 | 270 | 0.32 |
| 104 | 13.94 | 33.95b) | 4.44 | 258 | 150 | 11.54 | 34.15 | 2.10 | 26.04 | 198 | 0.44 |
| 119 | 12.64 | 33.92 | 4.30 | 235 | 200 | 11.26 | 34.52 | 0.83 | 26.38 | 166 | 0.53 |
| 135 | 11.90 | 34.02 | 3.65 | 214 | 250 | 10.52 | 34.56 | 0.78 | 26.55 | 150 | 0.61 |
| 152 | 11.51 | 34.16 | 2.05 | 197 | 300 | 9.58 | 34.51 | 0.64 | 26.67 | 139 | 0.69 |
| 180 | 11.32 | 34.42 | 1.04 | 174 | 400 | 8.06 | 34.43 | 0.59 | 26.84 | 122 | 0.82 |
| 200 | 11.26 | 34.52 | - | 166 | 500 | 7.00 | 34.45 | 0.47 | 27.00 | 107 | 0.94 |
| 249 | 10.54 | 34.56 | 0.79 | 150 | | | | | | | |
| 325 | 9.08 | 34.48 | 0.61 | 134 | | | | | | | |
| 424 | 7.76 | 34.42 | 0.59 | 118 | | | | | | | |
| 558 | 6.59 | 34.48 | 0.37 | 98 | | | | | | | |

a) Possible evaporation; value does not fall on property curve.
b) Possible evaporation; value falls on property curve.
c) Alternate value, 0.71 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

130.60 STRANGER; April 7, 1958; 0133 GCT; 25°38'N, 115°28'W; sounding, 2000+ fm; wind, 320°, force 2; weather, partly cloudy; sea, high; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.63 | 34.55 | 5.28 | 341 | 0 | 19.63 | 34.55 | 5.28 | 24.54 | 341 | 0.00 |
| 10 | 19.68 | 34.46 | 5.23 | 349 | 10 | 19.68 | 34.46 | 5.23 | 24.45 | 349 | 0.03 |
| 29 | 19.67 | 34.58 | 5.34 | 340 | 20 | 19.68 | 34.52 | 5.25 | 24.50 | 344 | 0.07 |
| 58 | 18.61 | 34.29 | 5.28 | 336 | 30 | 19.66 | 34.58 | 5.34 | 24.55 | 339 | 0.10 |
| 68 | 17.88 | 34.19 | 5.32 | 325 | 50 | 19.08 | 34.43 | 5.31 | 24.58 | 337 | 0.17 |
| 78 | 17.70 | 34.19 | 5.40 | 321 | 75 | 17.77 | 34.19 | 5.39 | 24.74 | 322 | 0.25 |
| 92 | 16.35 | 33.99 | 4.84 | 305 | 100 | 15.20 | 33.90 | 4.43 | 25.09 | 288 | 0.33 |
| 106 | 14.48 | 33.85 | 4.22 | 276 | 150 | 11.28 | 33.95 | 2.68 | 25.92 | 209 | 0.46 |
| 120 | 13.14 | 33.78 | 3.93 | 254 | 200 | 10.78 | 34.32 | 1.70 | 26.30 | 173 | 0.55 |
| 138a) | 11.86 | 33.88 | 3.03 | 224 | 250 | 9.81 | 34.34 | 1.47 | 26.48 | 156 | 0.64 |
| 156 | 11.08 | 33.97 | 2.54 | 204 | 300 | 9.18 | 34.38 | 1.06 | 26.63 | 142 | 0.72 |
| 184 | 10.72 | 34.11 | 2.13 | 187 | 400 | 8.28 | 34.43 | 0.44 | 26.81 | 125 | 0.85 |
| 206a) | 10.79 | 34.36 | 1.24 | 170 | 500 | 7.27 | 34.47 | 0.27 | 26.98 | 109 | 0.98 |
| 257 | 9.64 | 34.34 | 1.49 | 153 | | | | | | | |
| 336 | 8.90 | 34.40 | 0.74b) | 136 | | | | | | | |
| 442 | 7.84 | 34.45 | 0.32 | 117 | | | | | | | |
| 578 | 6.58 | 34.49 | 0.23 | 98 | | | | | | | |

130.70 STRANGER; April 6, 1958; 1924, 1944 GCT; 25°12'N, 116°19'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, high; wire angle, 08°, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.57 | 34.51 | 5.34 | 342 | 0 | 19.57 | 34.51 | 5.34 | 24.52 | 342 | 0.00 |
| 10 | 19.54 | 34.52 | 5.30 | 341 | 10 | 19.54 | 34.52 | 5.30 | 24.53 | 341 | 0.03 |
| 30 | 19.26 | 34.44 | 5.27 | 340 | 20 | 19.40 | 34.48 | 5.27 | 24.53 | 341 | 0.07 |
| 60 | 19.17 | 34.43 | 5.24 | 338 | 30 | 19.26 | 34.44 | 5.27 | 24.54 | 340 | 0.10 |
| 70 | 19.14 | 34.43 | 5.38 | 338 | 50 | 19.19 | 34.43 | 5.25 | 24.56 | 338 | 0.17 |
| 80 | 18.30 | 34.34 | 5.38 | 324 | 75 | 18.98 | 34.42 | 5.38 | 24.60 | 335 | 0.25 |
| 94 | 15.94 | 34.01 | 4.69 | 295 | 100 | 15.18 | 33.93 | 4.69 | 25.14 | 284 | 0.33 |
| 108 | 14.06 | 33.84 | 4.69 | 268 | 150 | 11.56 | 33.99 | 2.80 | 25.91 | 210 | 0.46 |
| 123 | 12.56 | 33.78 | 3.82 | 244 | 200 | 10.67 | 34.30 | 1.56 | 26.31 | 172 | 0.55 |
| 143 | 11.78 | 33.89 | 3.21 | 222 | 250 | 10.30 | 34.49 | 1.02 | 26.52 | 152 | 0.64 |
| 162 | 11.28 | 34.13 | 2.13 | 196 | 300 | 9.50 | 34.50 | 0.67 | 26.66 | 139 | 0.71 |
| 192 | 10.80 | 34.29 | 1.60 | 175 | 400 | 8.20 | 34.46 | 0.47 | 26.85 | 121 | 0.85 |
| 215 | 10.82 | 34.40 | 1.14 | 168 | 500 | 7.18 | 34.47 | 0.45 | 27.00 | 107 | 0.97 |
| 255 | 10.14 | 34.49 | 1.00 | 149 | | | | | | | |
| 332 | 9.14 | 34.50 | 0.46 | 133 | | | | | | | |
| 433 | 7.74 | 34.45 | 0.49 | 116 | | | | | | | |
| 566 | 6.70 | 34.51 | 0.41 | 98 | | | | | | | |

130.80 STRANGER; April 6, 1958; 1426 GCT; 24°51'N, 116°56.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, high; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.26 | 34.45 | 5.25 | 339 | 0 | 19.26 | 34.45 | 5.25 | 24.56 | 339 | 0.00 |
| 10 | 19.24 | 34.42 | 5.23 | 341 | 10 | 19.24 | 34.42 | 5.23 | 24.54 | 341 | 0.03 |
| 30 | 19.25 | 34.42 | 5.20 | 341 | 20 | 19.25 | 34.42 | 5.22 | 24.54 | 341 | 0.07 |
| 60 | 19.25 | 34.39 | 5.09 | 343 | 30 | 19.25 | 34.42 | 5.20 | 24.54 | 341 | 0.10 |
| 70 | 19.24 | 34.42 | 4.94 | 341 | 50 | 19.25 | 34.40 | 5.15 | 24.52 | 342 | 0.17 |
| 80 | 18.79 | 34.30 | 5.28 | 338 | 75 | 19.13 | 34.39 | 5.00 | 24.54 | 340 | 0.26 |
| 94 | 17.62 | 34.22 | 5.00 | 317 | 100 | 16.52 | 34.10 | 4.89 | 24.91 | 305 | 0.34 |
| 109 | 14.42 | 33.77 | 4.78 | 280 | 150 | 11.33 | 33.86 | 3.47 | 25.85 | 216 | 0.47 |
| 123 | 12.83 | 33.71 | 4.00 | 254 | 200 | 10.17 | 34.18 | 1.97 | 26.31 | 172 | 0.57 |
| 142 | 11.61 | 33.78 | 3.69 | 227 | 250 | 9.67 | 34.40 | 1.28 | 26.56 | 149 | 0.65 |
| 160 | 11.07 | 33.93 | 3.22 | 206 | 300 | 9.05 | 34.42 | 0.91 | 26.68 | 137 | 0.72 |
| 189 | 10.33 | 34.09 | 2.44 | 182 | 400 | 8.03 | 34.43 | 0.42 | 26.84 | 122 | 0.86 |
| 210 | 10.10 | 34.25 | 1.63 | 167 | 500 | 7.07 | 34.45 | 0.33 | 27.00 | 107 | 0.98 |
| 260 | 9.54 | 34.41 | 1.27 | 146 | | | | | | | |
| 337 | 8.68 | 34.43 | 0.53 | 131 | | | | | | | |
| 440 | 7.60 | 34.43 | 0.36 | 116 | | | | | | | |
| 572 | 6.54 | 34.48 | 0.32 | 98 | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

b) Alternate value, 1.32 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

STRANGER; April 5, 1958; 0215 GCT; 26°02.5'N, 112°54.5'W; sounding, 57 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 05°. 133.25

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.97 | 34.37 | 4.59 | 338 | 0 | 18.97 | 34.37 | 4.59 | 24.57 | 338 | 0.00 | |
| 10 | 18.96 | 34.52 | 4.65 | 326 | 10 | 18.96 | 34.52 | 4.65 | 24.69 | 326 | 0.03 | |
| 30 | 18.98 | 34.50 | 4.71 | 328 | 20 | 18.97 | 34.51 | 4.68 | 24.67 | 328 | 0.06 | |
| 50 | 18.70 | 34.51 | - | 321 | 30 | 18.98 | 34.50 | 4.71 | 24.67 | 328 | 0.10 | |
| 75 | 14.96 | 34.08 | - | 269 | 50 | 18.70 | 34.51 | | 24.75 | 321 | 0.16 | |
| | | | | | 75 | 14.96 | 34.08 | | 25.29 | 269 | 0.24 | |

STRANGER; April 5, 1958; 0430 GCT; 25°54'N, 113°09.5'W; sounding, 100 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 12°. 133.30

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.52 | 34.46 | 5.38 | 320 | 0 | 18.52 | 34.46 | 5.38 | 24.76 | 320 | 0.00 | |
| 10 | 18.52 | 34.41 | 5.42 | 324 | 10 | 18.52 | 34.41 | 5.42 | 24.71 | 324 | 0.03 | |
| 29 | 18.54 | 34.47 | 5.37 | 320 | 20 | 18.53 | 34.44 | 5.39 | 24.74 | 322 | 0.06 | |
| 48 | 18.51 | 34.38 | 5.35 | 326 | 30 | 18.54 | 34.47 | 5.36 | 24.76 | 320 | 0.10 | |
| 72 | 16.71 | 34.15 | 4.39 | 301 | 50 | 18.48 | 34.37 | 5.34 | 24.69 | 326 | 0.16 | |
| 95 | 14.26 | 33.93 | 3.41 | 266 | 75 | 16.42 | 34.12 | 4.27 | 25.00 | 297 | 0.24 | |
| 118 | 13.16 | 34.40 | 1.05 | 209 | 100 | 13.54 | 33.95 | 2.93 | 25.49 | 250 | 0.31 | |
| 146 | 12.34 | 34.51 | 0.57 | 186 | 150 | (12.22) | (34.52) | (0.51) | (26.19) | (183) | (0.42) | |

STRANGER; April 5, 1958; 1032 GCT; 25°34'N, 113°50'W; sounding, 1100 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 07°. 133.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.86 | 34.48 | 5.34 | 327 | 0 | 18.86 | 34.48 | 5.34 | 24.68 | 327 | 0.00 | |
| 10 | 18.85 | 34.50 | 5.23 | 326 | 10 | 18.85 | 34.50 | 5.23 | 24.69 | 326 | 0.03 | |
| 35 | 18.86 | 34.45 | 5.29 | 329 | 20 | 18.85 | 34.48 | 5.24 | 24.68 | 327 | 0.06 | |
| 65 | 17.84 | 34.16 | 5.25 | 326 | 30 | 18.85 | 34.46 | 5.25 | 24.67 | 328 | 0.10 | |
| 74 | 17.07 | 34.13 | 5.20 | 311 | 50 | 18.79 | 34.43 | 5.27 | 24.65 | 330 | 0.16 | |
| 88 | 15.26 | 33.96 | 3.96 | 284 | 75 | 16.95 | 34.12 | 5.17 | 24.87 | 309 | 0.24 | |
| 98 | 13.68 | 33.82 | 3.69 | 262 | 100 | 13.56 | 33.82 | 3.63 | 25.39 | 260 | 0.32 | |
| 117 | 12.54 | 34.00 | 2.58 | 227 | 150 | 11.91 | 34.38 | 0.93 | 26.15 | 188 | 0.43 | |
| 130a) | 12.04 | 34.11 | 2.08 | 211 | 200 | 11.08 | 34.48 | 0.62 | 26.38 | 166 | 0.52 | |
| 148 | 11.94 | 34.36 | 0.94 | 190 | 250 | 10.47 | 34.54 | 0.47 | 26.53 | 152 | 0.60 | |
| 171 | 11.64 | 34.45 | 0.76 | 178 | 300 | 9.84 | 34.54 | 0.31 | 26.64 | 141 | 0.68 | |
| 199 | 11.11 | 34.48 | 0.62 | 167 | 400 | 8.21 | 34.44 | 0.27 | 26.83 | 123 | 0.81 | |
| 226 | 10.72 | 34.52 | 0.55 | 157 | 500 | 6.99 | 34.44 | 0.25 | 27.00 | 107 | 0.93 | |
| 280 | 10.16 | 34.56 | 0.36 | 144 | 600 | 6.19 | 34.43 | 0.41 | 27.10 | 97 | 1.04 | |
| 363 | 8.74 | 34.45 | 0.29 | 130 | | | | | | | | |
| 470 | 7.28 | 34.44b) | 0.23 | 110 | | | | | | | | |
| 611 | 6.10 | 34.43 | 0.43 | 96 | | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

b) Possible evaporation; value falls on property curve.

SIO

CCOFI
5804

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

133.50 STRANGER; April 5, 1958; 1623 GCT; 25°12'N, 114°35'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.96 | 34.40 | 5.04 | 335 | 0 | 18.96 | 34.40 | 5.04 | 24.60 | 335 | 0.00 |
| 10 | 18.95 | 34.40 | 5.18 | 335 | 10 | 18.95 | 34.40 | 5.18 | 24.60 | 335 | 0.03 |
| 30 | 18.94 | 34.41 | 5.13 | 334 | 20 | 18.95 | 34.40 | 5.16 | 24.60 | 335 | 0.07 |
| 60 | 18.94 | 34.41 | 5.12 | 334 | 30 | 18.94 | 34.41 | 5.13 | 24.61 | 334 | 0.10 |
| 69 | 18.91 | 34.36 | 5.12 | 337 | 50 | 18.94 | 34.41 | 5.13 | 24.61 | 334 | 0.17 |
| 78 | 18.72 | 34.34 | 5.22 | 334 | 75 | 18.82 | 34.35 | 5.17 | 24.60 | 335 | 0.25 |
| 93 | 17.57 | 34.13 | 5.03 | 322 | 100 | 17.30 | 34.09 | 4.98 | 24.77 | 319 | 0.34 |
| 107 | 15.98 | 33.95 | 4.54 | 299 | 150 | 11.94 | 34.18 | 1.87 | 25.98 | 203 | 0.46 |
| 121 | 13.26 | 33.87 | 3.15 | 250 | 200 | 10.48 | 34.32 | 1.47 | 26.36 | 168 | 0.56 |
| 140 | 12.28 | 34.09 | 2.22 | 216 | 250 | 9.40 | 34.34 | 1.32 | 26.56 | 149 | 0.64 |
| 157 | 11.70 | 34.22 | 1.65 | 196 | 300 | 8.99 | 34.38 | 0.91 | 26.66 | 139 | 0.71 |
| 186 | 11.24 | 34.34 | 1.33 | 179 | 400 | 8.20 | 34.46 | 0.34 | 26.84 | 122 | 0.85 |
| 209 | 10.01 | 34.31 | 1.51 | 161 | 500 | 7.25 | 34.45 | 0.25 | 26.96 | 110 | 0.97 |
| 259 | 9.27 | 34.34 | 1.26 | 146 | | | | | | | |
| 337 | 8.72 | 34.42 | 0.58 | 132 | | | | | | | |
| 439 | 7.86 | 34.46 | 0.25 | 117 | | | | | | | |
| 572 | 6.41 | 34.42 | 0.26 | 101 | | | | | | | |

133.65 STRANGER; April 6, 1958; 0037, 0102 GCT; 24°49'N, 115°20'W; sounding, 2000+ fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 32°, 45°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.53 | - | 5.28 | | 0 | 19.53 | (34.44) | 5.28 | (24.47) | (347) | (0.00) |
| 8 | 19.48 | 34.44 | 5.26 | 346 | 10 | (19.47) | (34.44) | (5.24) | (24.49) | (345) | (0.03) |
| 34 | 19.42 | 34.45 | 5.19 | 343 | 20 | (19.45) | (34.44) | (5.21) | (24.50) | (344) | (0.07) |
| 55 | 18.89 | 34.34 | 5.28 | 338 | 30 | (19.44) | (34.45) | (5.20) | (24.51) | (344) | (0.10) |
| 63 | 18.75 | 34.31 | 5.39 | 337 | 50 | 19.37 | 34.44 | 5.19 | 24.53 | 342 | (0.17) |
| 75 | 17.80 | 34.12 | 5.22 | 328 | 75 | 17.80 | 34.12 | 5.22 | 24.67 | 328 | (0.26) |
| 82 | 17.51 | 34.05 | 5.30 | 326 | 100 | 17.20 | 34.11 | 5.10 | 24.81 | 315 | (0.34) |
| 88 | 17.12 | 33.96 | 5.48 | 324 | 150 | 12.19 | 34.18 | 1.87 | 25.94 | 207 | (0.46) |
| 95 | 17.54 | 34.18 | 5.18 | 318 | 200 | 11.60 | 34.54 | 0.60 | 26.33 | 170 | (0.56) |
| 102 | 16.82 | 34.04 | 5.08 | 312 | 250 | 11.01 | 34.62 | 0.41 | 26.50 | 154 | (0.64) |
| 107a) | 15.02 | 33.85 | 4.10 | 287 | 300 | 10.09 | 34.55 | 0.41 | 26.60 | 145 | (0.72) |
| 109 | 14.66 | 33.86 | 4.06 | 279 | | | | | | | |
| 117 | 13.26 | 33.84 | 4.12 | 252 | | | | | | | |
| 155 | 12.04 | 34.24 | 1.51 | 201 | | | | | | | |
| 228 | 11.37 | 34.64 | 0.41 | 159 | | | | | | | |
| 379 | 8.58 | 34.42 | 0.41 | 130 | | | | | | | |

133.70 STRANGER; April 6, 1958; 0350 GCT; 24°38.5'N, 115°41'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.42 | 34.64 | 5.14 | 354 | 0 | 20.42 | 34.64 | 5.14 | 24.40 | 354 | 0.00 |
| 10 | 20.40 | 34.64 | 5.11 | 354 | 10 | 20.40 | 34.64 | 5.11 | 24.40 | 354 | 0.04 |
| 34 | 20.39 | 34.63 | 5.10 | 354 | 20 | 20.40 | 34.64 | 5.10 | 24.40 | 354 | 0.07 |
| 63 | 20.26 | 34.60 | 5.09 | 353 | 30 | 20.39 | 34.64 | 5.10 | 24.40 | 354 | 0.11 |
| 72 | 18.93 | 34.31 | 4.85 | 342 | 50 | 20.36 | 34.62 | 5.10 | 24.40 | 354 | 0.18 |
| 87 | 16.44 | 34.00 | 4.28 | 306 | 75 | 18.30 | 34.22 | 4.71 | 24.62 | 333 | 0.26 |
| 96 | 14.30 | 33.78 | 4.44 | 278 | 100 | 14.02 | 33.80 | 4.29 | 25.28 | 270 | 0.34 |
| 115a) | 13.31 | 33.92 | 3.24 | 248 | 150 | 11.23 | 34.05 | 2.49 | 26.01 | 201 | 0.46 |
| 129 | 12.48 | 34.05 | 2.81 | 223 | 200 | 11.19 | 34.51 | 0.85 | 26.38 | 166 | 0.55 |
| 149a) | 11.26 | 34.05 | 2.51 | 201 | 250 | 10.59 | 34.54 | 0.70 | 26.52 | 153 | 0.63 |
| 172 | 10.93 | 34.24 | 1.89 | 181 | 300 | 10.38 | 34.66 | 0.24 | 26.64 | 141 | 0.71 |
| 199 | 11.22 | 34.51 | 0.82 | 166 | 400 | 8.70 | 34.58 | 0.33 | 26.86 | 120 | 0.84 |
| 226 | 10.56 | 34.43 | 1.06 | 160 | 500 | 7.40 | 34.57 | 0.23 | 27.05 | 102 | 0.96 |
| 280 | 10.66 | 34.67 | 0.22 | 145 | 600 | 6.40 | 34.53 | 0.19 | 27.15 | 92 | 1.06 |
| 360 | 9.24 | 34.58 | 0.37 | 129 | | | | | | | |
| 466 | 7.80 | 34.58 | 0.25 | 107 | | | | | | | |
| 606 | 6.36 | 34.53 | 0.19 | 92 | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; April 6, 1958; 0859 GCT; 24°15'N, 116°25'W; sounding, 2000+ fm; wind, 340°, force 3; weather, clear; sea, rough; wire angle, 07°. | | | | | | | | | | | 133.80 |
| 0 | 20.32 | 34.67 | 5.02 | 349 | 0 | 20.32 | 34.67 | 5.02 | 24.45 | 349 | 0.00 |
| 10 | 20.30 | 34.61 | 5.02 | 353 | 10 | 20.30 | 34.61 | 5.02 | 24.41 | 353 | 0.04 |
| 30 | 20.30 | 34.67 | 5.00 | 349 | 20 | 20.30 | 34.64 | 5.01 | 24.43 | 351 | 0.07 |
| 60 | 20.30 | 34.66 | 5.10 | 350 | 30 | 20.30 | 34.67 | 5.00 | 24.45 | 349 | 0.10 |
| 70 | 20.25 | 34.67 | 5.14 | 348 | 50 | 20.30 | 34.66 | 5.05 | 24.45 | 349 | 0.18 |
| 80 | 19.92 | 34.54 | 5.02 | 349 | 75 | 20.13 | 34.64 | 5.13 | 24.46 | 348 | 0.26 |
| 94 | 16.73 | 34.29 | 3.94 | 292 | 100 | 16.20 | 34.24 | 3.47 | 25.14 | 284 | 0.34 |
| 108 | 15.57 | 34.18 | 2.71 | 274 | 150 | 13.13 | 34.38 | 1.52 | 25.90 | 211 | 0.47 |
| 123a) | 14.86 | 34.26 | 1.99 | 254 | 200 | 10.62 | 34.34 | 1.37 | 26.35 | 168 | 0.56 |
| 142 | 13.81 | 34.45 | 1.40 | 219 | 250 | 10.02 | 34.52 | 0.65 | 26.59 | 145 | 0.65 |
| 160 | 12.18 | 34.27 | 1.67 | 201 | 300 | 9.62 | 34.58 | 0.33 | 26.71 | 134 | 0.72 |
| 187 | 11.04 | 34.33 | 1.40 | 176 | 400 | 8.60 | 34.56 | 0.23 | 26.86 | 120 | 0.85 |
| 209 | 10.38 | 34.35 | 1.37 | 164 | 500 | 7.45 | 34.54 | 0.26 | 27.01 | 106 | 0.97 |
| 259 | 9.99 | 34.54 | 0.55 | 143 | | | | | | | |
| 337 | 9.28 | 34.60 | 0.24 | 128 | | | | | | | |
| 439 | 8.18 | 34.54 | 0.23 | 115 | | | | | | | |
| 572 | 6.64 | 34.54 | 0.30 | 96 | | | | | | | |
| STRANGER; April 4, 1958; 1851 GCT; 25°34'N, 112°18.5'W; sounding, 42 fm; wind, 320°, force 6; weather, partly cloudy; sea, high; wire angle, 08°. | | | | | | | | | | | 137.23 |
| 0 | 18.69 | 34.56 | 5.20 | 317 | 0 | 18.69 | 34.56 | 5.20 | 24.79 | 317 | 0.00 |
| 10 | 18.68 | 34.59 | 5.25 | 315 | 10 | 18.68 | 34.59 | 5.25 | 24.81 | 315 | 0.03 |
| 30 | 18.66 | 34.57 | 5.11 | 315 | 20 | 18.67 | 34.58 | 5.20 | 24.81 | 315 | 0.06 |
| 40 | 18.41 | 34.51 | 4.69 | 314 | 30 | 18.66 | 34.57 | 5.11 | 24.81 | 315 | 0.09 |
| 50 | 15.88 | 34.36 | 2.18 | 268 | 50 | 15.88 | 34.36 | 2.18 | 25.30 | 268 | 0.15 |
| 60 | 15.62 | 34.37 | 2.07 | 261 | | | | | | | |
| STRANGER; April 4, 1958; 1501 GCT; 25°14'N, 112°44.5'W; sounding, 130 fm; wind, 320°, force 5; weather, cloudy; sea, high; wire angle, 10°. | | | | | | | | | | | 137.30 |
| 0 | 19.15 | 34.60 | 5.21 | 325 | 0 | 19.15 | 34.60 | 5.21 | 24.70 | 325 | 0.00 |
| 10 | 19.15 | 34.63 | 5.25 | 323 | 10 | 19.15 | 34.63 | 5.25 | 24.72 | 323 | 0.03 |
| 30 | 19.14 | 34.60 | 5.17 | 325 | 20 | 19.14 | 34.62 | 5.20 | 24.71 | 324 | 0.06 |
| 40 | 19.10 | 34.62 | 5.16 | 322 | 30 | 19.14 | 34.60 | 5.17 | 24.70 | 325 | 0.10 |
| 50 | 18.98 | 34.63 | 5.15 | 319 | 50 | 18.98 | 34.63 | 5.15 | 24.77 | 319 | 0.16 |
| STRANGER; April 4, 1958; 1135 GCT; 25°04.5'N, 113°05'W; sounding, 600 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 25°. | | | | | | | | | | | 137.35 |
| 0 | 19.18 | 34.54 | 5.22 | 330 | 0 | 19.18 | 34.54 | 5.22 | 24.65 | 330 | 0.00 |
| 9 | 19.17 | 34.59 | 5.26 | 327 | 10 | 19.17 | 34.59 | 5.26 | 24.68 | 327 | 0.03 |
| 27 | 19.18 | 34.54 | 5.29 | 330 | 20 | 19.18 | 34.57 | 5.27 | 24.67 | 328 | 0.06 |
| 55 | 19.16 | 34.52 | 5.26 | 331 | 30 | 19.18 | 34.54 | 5.28 | 24.64 | 331 | 0.10 |
| 64 | 19.10 | 34.55 | 5.10 | 328 | 50 | 19.17 | 34.53 | 5.27 | 24.64 | 331 | 0.16 |
| 72 | 17.96 | 34.31 | 4.90 | 318 | 75 | 17.10 | 34.21 | 4.60 | 24.90 | 306 | 0.24 |
| 85 | 15.05 | 34.04 | 3.45 | 274 | 100 | 13.96 | 34.04 | 2.88 | 25.47 | 252 | 0.32 |
| 97 | 14.25 | 34.04 | 2.97 | 258 | 150 | 11.63 | 34.34 | 1.10 | 26.16 | 186 | 0.42 |
| 109 | 12.84 | 34.02 | 2.56 | 232 | 200 | 11.02 | 34.57 | 0.53 | 26.46 | 158 | 0.51 |
| 124 | 11.95 | 34.05 | 2.14 | 213 | 250 | 10.33 | 34.58 | 0.44 | 26.58 | 146 | 0.59 |
| 139 | 11.60 | 34.22 | 1.70 | 194 | 300 | 9.61 | 34.55 | 0.52 | 26.68 | 137 | 0.66 |
| 161 | 11.68 | 34.45 | 0.82 | 178 | 400 | 8.27 | 34.54 | 0.31 | 26.89 | 117 | 0.79 |
| 179 | 11.35 | 34.54 | 0.75 | 166 | 500 | (6.61) | (34.43) | (0.24) | (27.05) | (102) | (0.91) |
| 221 | 10.75 | 34.59 | 0.38 | 152 | | | | | | | |
| 284 | 9.81 | 34.55 | 0.54 | 140 | | | | | | | |
| 372 | 8.70 | 34.56 | 0.36 | 122 | | | | | | | |
| 487 | 6.84 | 34.43 | 0.24 | 106 | | | | | | | |

a) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **137.40** | STRANGER; April 4, 1958; 0833 GCT; 24°55'N, 113°24'W; sounding, 1200 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 11°. | | | | | | | | | | |
| 0 | 19.07 | 34.44 | | 335 | 0 | 19.07 | 34.44 | | 24.60 | 335 | 0.00 |
| 10 | 19.06 | 34.51 | | 330 | 10 | 19.06 | 34.51 | | 24.65 | 330 | 0.03 |
| 29 | 18.54 | 34.34 | | 330 | 20 | 18.83 | 34.45 | | 24.65 | 330 | 0.07 |
| 58 | 17.08 | 34.04 | | 318 | 30 | 18.54 | 34.34 | | 24.66 | 330 | 0.10 |
| 68 | 16.62 | 34.02 | | 309 | 50 | 17.15 | 34.05 | | 24.77 | 319 | 0.16 |
| 77 | 15.90 | 33.95 | | 298 | 75 | 16.08 | 33.97 | | 24.96 | 301 | 0.24 |
| 92 | 13.65 | 33.86 | | 258 | 100 | (13.22) | (33.94) | | (25.56) | (244) | (0.31) |
| 100a) | 13.21 | 33.94 | | 244 | | | | | | | |
| 123a) | 12.44 | 34.14 | | | | | | | | | |
| 141a) | 11.76 | 34.20 | | | | | | | | | |
| 184a) | 10.88 | 34.36 | | | | | | | | | |
| 250a) | 10.46 | 34.56 | | | | | | | | | |
| 337a) | 9.25 | 34.52 | | | | | | | | | |
| 448a) | 7.58 | 34.45 | | | | | | | | | |
| **137.50** | STRANGER; April 4, 1958; 0252 GCT; 24°38'N, 114°00'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 18.18 | 34.09 | 5.54 | 339 | 0 | 18.18 | 34.09 | 5.54 | 24.56 | 339 | 0.00 |
| 10 | 18.18 | 34.16 | 5.80 | 334 | 10 | 18.18 | 34.16 | 5.80 | 24.61 | 334 | 0.03 |
| 29 | 17.82 | 34.11 | 5.57 | 330 | 20 | 17.98 | 34.13 | 5.71 | 24.64 | 331 | 0.07 |
| 58 | 16.96 | 34.07 | 5.59 | 312 | 30 | 17.83 | 34.11 | 5.57 | 24.66 | 329 | 0.10 |
| 68 | 16.82 | 34.09 | 5.26 | 308 | 50 | 17.17 | 34.08 | 5.58 | 24.79 | 317 | 0.16 |
| 77 | 16.00 | 33.98 | 4.60 | 298 | 75 | 16.37 | 34.03 | 4.84 | 24.94 | 302 | 0.24 |
| 91 | 13.37 | 33.69 | 4.20 | 266 | 100 | 12.48 | 33.71 | 4.03 | 25.51 | 248 | 0.31 |
| 104 | 12.32 | 33.71 | 3.99 | 245 | 150 | 11.95 | 34.31 | 1.65 | 26.08 | 194 | 0.42 |
| 119 | 11.92 | 33.78 | 3.56 | 232 | 200 | 10.99 | 34.46 | 1.03 | 26.38 | 166 | 0.52 |
| 136 | 11.85 | 34.07 | 2.13 | 210 | 250 | 10.39 | 34.53 | 0.72 | 26.54 | 150 | 0.60 |
| 153 | 11.96 | 34.35 | 1.32 | 191 | 300 | 9.60 | 34.51 | 0.46 | 26.66 | 139 | 0.67 |
| 180 | 11.43 | 34.44 | 0.90 | 175 | 400 | 8.23 | 34.46 | 0.29 | 26.84 | 122 | 0.81 |
| 202 | 10.95 | 34.46 | 1.03 | 165 | 500 | 7.06 | 34.43 | 0.25 | 26.98 | 108 | 0.93 |
| 251 | 10.38 | 34.53 | 0.72 | 150 | | | | | | | |
| 327 | 9.17 | 34.50 | 0.34 | 133 | | | | | | | |
| 427 | 7.93 | 34.45 | 0.29 | 119 | | | | | | | |
| 556 | 6.41 | 34.42 | 0.25 | 100 | | | | | | | |
| **137.60** | STRANGER; April 3, 1958; 2120 GCT; 24°19.5'N, 114°37.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, cloudy; sea, high; wire angle, 20°. | | | | | | | | | | |
| 0 | 20.30 | 34.58 | 5.22 | 356 | 0 | 20.30 | 34.58 | 5.22 | 24.38 | 356 | 0.00 |
| 28 | 19.96 | 34.55 | 5.20 | 349 | 10 | 20.18 | 34.57 | 5.21 | 24.40 | 353 | 0.04 |
| 47 | 19.92 | 34.52 | 5.13 | 350 | 20 | 20.03 | 34.56 | 5.20 | 24.44 | 350 | 0.07 |
| 69 | 19.34 | 34.47 | 5.37 | 340 | 30 | 19.96 | 34.54 | 5.20 | 24.45 | 349 | 0.10 |
| 82 | 18.31 | 34.16 | 5.47 | 338 | 50 | 19.90 | 34.52 | 5.13 | 24.44 | 350 | 0.18 |
| 91 | 17.92 | 34.09 | 5.27 | 333 | 75 | 19.07 | 34.41 | 5.42 | 24.57 | 338 | 0.26 |
| 99 | 16.86 | 34.05 | 4.87 | 312 | 100 | 16.65 | 34.04 | 4.73 | 24.88 | 308 | 0.34 |
| 107 | 15.44 | 33.97 | 3.67 | 287 | 150 | 12.63 | 34.44 | 0.94 | 26.05 | 197 | 0.47 |
| 116b) | 13.98 | 33.93 | 3.32 | 260 | | | | | | | |
| 124 | 13.89 | 34.23 | 2.09 | 236 | | | | | | | |
| 132 | 13.70 | 34.42 | 1.42 | 218 | | | | | | | |
| 150 | 12.63 | 34.44 | 0.94 | 197 | | | | | | | |
| 213p | 10.81 | 34.47 | 0.88 | | | | | | | | |
| 314p | 9.45 | 34.56 | 0.48 | | | | | | | | |

a) Pretrip; depth too uncertain for interpolation.

b) The bathythermograph trace seems to indicate considerable mixing at two separate levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; April 3, 1958; 1518, 1559 GCT; 23°59.5'N, 115°17.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, cloudy; sea, high; wire angle, 10°, 22°. | | | | | | | | | | | 137.70 |
| 0 | 20.66 | 34.62 | 5.17 | 362 | 0 | 20.66 | 34.62 | 5.17 | 24.32 | 362 | 0.00 |
| 10 | 20.66 | 34.61 | 5.21 | 362 | 10 | 20.66 | 34.61 | 5.21 | 24.32 | 362 | 0.04 |
| 30 | 20.65 | 34.60 | 5.21 | 363 | 20 | 20.66 | 34.60 | 5.21 | 24.32 | 363 | 0.07 |
| 59 | 20.22 | 34.52 | 5.43 | 358 | 30 | 20.65 | 34.60 | 5.21 | 24.31 | 363 | 0.11 |
| 68 | 19.66 | 34.40 | 5.22 | 352 | 50 | 20.57 | 34.58 | 5.28 | 24.32 | 362 | 0.18 |
| 78 | 19.42 | 34.37 | 5.17 | 349 | 75 | 19.50 | 34.38 | 5.19 | 24.44 | 350 | 0.27 |
| 92 | 17.45 | 34.14 | 4.52 | 319 | 100 | 16.58 | 34.05 | 4.46 | 24.90 | 306 | 0.35 |
| 106 | 15.94 | 34.00 | 4.45 | 295 | 150 | 11.49 | 33.85 | 3.04 | 25.81 | 220 | 0.48 |
| 120 | 14.44 | 34.01 | 3.24 | 264 | 200 | 11.25 | 34.51 | 0.85 | 26.37 | 167 | 0.58 |
| 139 | 11.98 | 33.80 | 3.22 | 232 | 250 | 10.79 | 34.60 | 0.52 | 26.52 | 152 | 0.66 |
| 157 | 11.25 | 33.89 | 2.93 | 212 | 300 | 9.99 | 34.60 | 0.51 | 26.67 | 138 | 0.74 |
| | | | | | 400 | 8.40 | 34.48 | 0.27 | 26.83 | 123 | 0.88 |
| 171 | 10.61 | 34.04 | 2.29 | 191 | 500 | 7.41 | 34.47 | 0.22 | 26.96 | 110 | 1.00 |
| 193 | 11.17 | 34.45 | 1.14 | 169 | | | | | | | |
| 242 | 10.92 | 34.60 | 0.53 | 154 | | | | | | | |
| 319 | 9.66 | 34.60 | 0.51 | 134 | | | | | | | |
| 419 | 8.15 | 34.46 | 0.21 | 121 | | | | | | | |
| 553 | 7.04 | 34.48 | 0.25 | 105 | | | | | | | |
| STRANGER; April 3, 1958; 1017 GCT; 23°39.5'N, 115°55'W; sounding, 2100 fm; wind, 220°, force 2; weather, cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | 137.80 |
| 0 | 21.06 | 34.67 | 4.86 | 368 | 0 | 21.06 | 34.67 | 4.86 | 24.25 | 368 | 0.00 |
| 10 | 21.04 | 34.67 | 4.87 | 368 | 10 | 21.04 | 34.67 | 4.87 | 24.25 | 368 | 0.04 |
| 29 | 21.02 | 34.70 | 5.12 | 365 | 20 | 21.03 | 34.69 | 5.07 | 24.26 | 367 | 0.07 |
| 53 | 20.10 | 34.49 | 5.15 | 357 | 30 | 21.02 | 34.70 | 5.12 | 24.28 | 365 | 0.11 |
| 63 | 19.63 | 34.42 | 5.27 | 351 | 50 | 20.83 | 34.62 | 5.13 | 24.32 | 361 | 0.18 |
| 72 | 19.13 | 34.34 | 5.33 | 344 | 75 | 19.00 | 34.33 | 5.35 | 24.52 | 342 | 0.27 |
| 82 | 18.84 | 34.25u | 5.38 | | 100 | 18.57 | 34.30 | 5.43 | 24.62 | 333 | 0.36 |
| 96 | 18.60 | 34.30 | 5.43 | 334 | 150 | 11.90 | 33.79 | 3.56 | 25.68 | 232 | 0.50 |
| 109 | 17.97 | 34.24 | 5.19 | 324 | 200 | 10.20 | 34.13 | 1.90 | 26.26 | 177 | 0.60 |
| 127 | 14.23 | 33.69 | 4.59 | 282 | 250 | 9.87 | 34.30 | 1.29 | 26.45 | 159 | 0.69 |
| 144 | 12.40 | 33.78a) | 3.80 | 241 | 300 | 10.00 | 34.51 | 0.42 | 26.59 | 146 | 0.77 |
| 164 | 10.92 | 33.79 | 3.17 | 214 | 400 | 8.76 | 34.50 | 0.23 | 26.80 | 126 | 0.91 |
| 184 | 10.34 | 34.03 | 2.43 | 186 | 500 | (7.48) | (34.48) | (0.14) | (26.96) | (110) | (1.04) |
| 225 | 10.06 | 34.22 | 1.67 | 168 | | | | | | | |
| 289 | 10.10 | 34.50 | 0.51 | 148 | | | | | | | |
| 371 | 9.10 | 34.51 | 0.27 | 132 | | | | | | | |
| 481 | 7.77 | 34.49 | 0.17 | 115 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 43.50-F | IV-1 | 1030 | 40°48.0' | 124°57.0' | - | - | - | missing | missing | 11.57 | 32.77 | 11.73 | 33.03 |
| 43.60-F | 1 | 0130 | 40°28.0' | 125°43.0' | 1260 | 210° | 9 | rain | very high | 11.89 | 32.92 | 11.98 | 32.90 |
| 47.60-F | III-31 | 2130 | 39°54.0' | 125°18.0' | - | 170° | 8 | rain | very high | 11.80 | - | 9.93 | 33.48 |
| 60.52-B | IV-17 | 0450 | 37°53.5' | 123°02.0' | 45 | 340° | 5 | cloudy | high | 12.87 | 32.74 | 10.32 | 33.57 |
| 60.65-B | 17 | 1345 | 37°27.0' | 123°59.5' | 2000 | 280° | 4 | drizzle | very rough | 13.61 | 32.03 | 12.86 | 32.84 |
| 67.50-B | 16 | 1500 | 36°49.0' | 122°04.5' | 55 | 090° | 3 | clear | moderate | 14.03 | 32.50 | 10.02 | 33.57 |
| 67.65-B | 16 | 0245 | 36°19.0' | 123°09.0' | 1790 | 330° | 6 | cloudy | high | 13.14 | 32.97 | 12.78 | 33.00 |
| 70.55-B | 14 | 0130 | 36°03.0' | 122°02.0' | 750 | 300° | 3 | cloudy | moderate | 13.75 | 32.86 | 12.11 | 33.40 |
| 70.65-B | 14 | 0750 | 35°43.0' | 122°45.0' | 730 | 310° | 4 | overcast | moderate | 14.11 | 33.02 | 13.36 | 33.07 |
| 70.75-B | 14 | 1508 | 35°21.0' | 123°31.5' | 2000 | 310° | 4 | overcast | very rough | 13.63 | 33.16 | 13.78 | 33.20a) |
| 70.85-B | 14 | 2201 | 34°59.0' | 124°18.0' | 2300 | 340° | 5 | overcast | high | 14.12 | 33.22 | 13.90 | 33.26 |
| 73.51-F | 9 | 1345 | 35°34.0' | 121°20.5' | 260 | 330° | 4 | partly cloudy | very rough | 13.45 | 33.22 | 12.78 | 33.37 |
| 73.65-B | 12 | 1310 | 35°10.0' | 122°19.0' | 2150 | 320° | 2 | clear | rough | 13.94 | 33.19 | 13.66 | 33.21 |
| 73.75-B | 12 | 0630 | 34°48.0' | 123°01.5' | 2100 | 320° | 3 | clear | rough | 13.82 | 33.08 | 13.74 | 33.12 |
| 73.85-B | 11 | 2350 | 34°28.5' | 123°42.5' | 2250 | 340° | 4 | clear | rough | 14.20 | 33.22 | 14.01 | 33.25 |
| 77.50-F | 9 | 2030 | 35°01.5' | 120°52.5' | 85 | 320° | 5 | clear | very rough | 13.88 | 33.20 | 12.75 | 33.47 |
| 77.65-F | 10 | 0505 | 34°32.0' | 121°55.0' | 2100 | 320° | 6 | partly cloudy | high | 13.74 | 32.90 | 13.69 | 32.95 |

a) Loose bottle cap.

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77.75-F | IV-11 | 1030 | 34°14.0' | 122°34.5' | 2350 | 340° | 6 | cloudy | high | 14.12 | 33.29 | 14.13 | 33.26 |
| 77.85-F | 11 | 0535 | 33°53.5' | 123°17.5' | 2500 | 340° | 6 | clear | very high | 14.42 | 33.21 | 14.38 | 33.19 |
| 80.65-B | 10 | 1005 | 33°59.0' | 121°30.0' | 1850 | 300° | 7 | clear | very rough | 13.79 | 33.40 | 13.74 | 33.37 |
| 80.75-B | 10 | 1640 | 33°40.0' | 122°15.0' | 2200 | 350° | 6 | overcast | very rough | 13.89 | 33.34 | 13.86 | 33.30 |
| 80.85-B | 10 | 2315 | 33°18.0' | 122°52.0' | 2160 | 330° | 6 | overcast | high | 15.16 | 33.40 | 15.10 | 33.40 |
| 83.40-P | 1 | 2000 | 34°14.0' | 119°22.0' | 12 | 300° | 6 | rain | rough | 14.89 | 33.28 | - | - |
| 83.65-P | 4 | 1625 | 33°28.0' | 121°07.5' | 1900 | 270° | 6 | partly cloudy | very high | 14.92 | 33.34 | 14.94 | 33.36 |
| 83.70-P | 4 | 1930 | 33°16.5' | 121°27.0' | 2000 | 270° | 6 | partly cloudy | very high | 14.92 | 33.38 | 14.92 | 33.39 |
| 83.75-P | 4 | 2307 | 33°08.0' | 121°43.0' | 2150 | 300° | 6 | partly cloudy | very high | 14.91 | 33.36 | 14.79 | 33.34 |
| 83.80-P | 5 | 0229 | 32°59.0' | 121°58.0' | 2060 | 320° | 6 | partly cloudy | very high | 14.97 | 33.38 | 14.94 | 33.35 |
| 87.50-P | 6 | 0400 | 33°20.0' | 119°39.5' | 40 | 180° | 4 | partly cloudy | high | 14.08 | 33.40 | 12.74 | 33.50 |
| 87.65-P | 5 | 1825 | 32°50.0' | 120°42.0' | 2070 | 320° | 4 | partly cloudy | high | 14.86 | 33.48 | 14.83 | 33.48 |
| 87.75-P | 5 | 1130 | 32°30.0' | 121°23.0' | 2300 | 300° | 4 | partly cloudy | very high | 15.32 | 33.53 | 15.33 | 33.54 |
| 87.80-P | 5 | 0800 | 32°20.0' | 121°44.0' | 2160 | 290° | 4 | partly cloudy | very high | 15.30 | 33.53 | 15.26 | 33.49 |
| 90.50-P | 9 | 0400 | 32°45.0' | 119°16.5' | 200 | 300° | 7 | clear | very high | 15.13 | 33.49 | 14.93 | 33.48 |
| 90.55-P | 9 | 1440 | 32°32.0' | 119°36.5' | 450 | 320° | 6 | cloudy | very high | 14.64 | 33.46 | 14.55 | 33.46 |
| 90.60-P | 9 | 1915 | 32°26.0' | 119°57.0' | 600 | 310° | 7 | partly cloudy | very high | 14.51 | 33.46 | 13.47 | 33.49 |
| 90.65-P | 9 | 2315 | 32°15.5' | 120°18.0' | 2050 | 320° | 6 | cloudy | very high | 14.79 | 33.50 | 14.72 | 33.46 |
| 90.70-P | 10 | 0443 | 32°02.0' | 120°45.0' | 2000 | 320° | 6 | partly cloudy | very high | 14.84 | 33.53 | 14.86 | 33.51 |



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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.75-P | IV-10 | 0737 | 31°55.0' | 120°58.0' | 2240 | 320° | 7 | partly cloudy | very high | 15.28 | 33.53 | 15.26 | 33.51 |
| 90.80-P | 10 | 1130 | 31°45.0' | 121°16.0' | 1950 | 320° | 6 | partly cloudy | very high | 15.51 | 33.57 | 15.48 | 33.57 |
| 90.85-P | 10 | 1520 | 31°35.0' | 121°39.5' | 2150 | 340° | 6 | cloudy | very high | 15.01 | 33.47 | 15.04 | 33.47 |
| 90.90-P | 10 | 1905 | 31°27.0' | 121°57.5' | 2100 | 330° | 6 | cloudy | very high | 14.92 | 33.37 | 14.88 | 33.44 |
| 90.100-P | 11 | 0325 | 31°06.0' | 122°33.0' | 2200 | 330° | 6 | overcast | very high | 16.74 | 33.75 | 16.72 | 33.72 |
| 90.110-P | 11 | 1000 | 30°45.0' | 123°08.5' | 2200 | 330° | 6 | partly cloudy | high | 16.98 | 33.86 | 17.00 | 33.83 |
| 90.120-P | 11 | 1855 | 30°26.5' | 123°58.0' | 2300 | 330° | 6 | partly cloudy | high | 16.80 | 33.76 | 16.75 | 33.81 |
| 93.35-P | 19 | 0630 | 32°40.0' | 117°52.0' | 270 | 320° | 3 | missing | rough | 16.56 | 33.48 | 12.98 | 33.52 |
| 93.45-P | 19 | 1330 | 32°20.0' | 118°33.0' | 920 | 330° | 4 | overcast | very rough | 16.34 | 33.58 | 12.68 | 33.49 |
| 93.55-P | 19 | 2020 | 32°00.0' | 119°13.0' | 850 | 320° | 4 | cloudy | high | 16.16 | 33.50 | 15.66 | 33.53 |
| 93.65-P | 20 | 0548 | 31°41.5' | 119°55.0' | 2035 | 330° | 5 | clear | very high | 16.37 | 33.55 | 16.26 | 33.56 |
| 93.75-P | 20 | 1745 | 31°26.0' | 120°38.0' | 2000 | 320° | 5 | clear | high | 16.06 | 33.49 | 15.83 | 33.53 |
| 97.35-P | 22 | 0945 | 32°04.0' | 117°28.5' | 650 | 270° | 3 | clear | very rough | 18.09 | 33.56 | 12.38 | 33.48 |
| 97.45-P | 22 | 0247 | 31°43.0' | 118°09.5' | 750 | 330° | 5 | partly cloudy | very rough | 17.58 | 33.56 | 14.16 | 33.49 |
| 97.55-P | 21 | 2025 | 31°26.0' | 118°50.0' | 670 | 320° | 5 | clear | high | 16.70 | 33.55 | - | - |
| 97.65-P | 21 | 1430 | 31°06.0' | 119°31.0' | 1950 | 330° | 5 | clear | very rough | 16.30 | 33.41 | 15.48 | 33.42 |
| 97.75-P | 21 | 0720 | 30°46.0' | 120°11.0' | 2000 | 330° | 4 | clear | high | 16.48 | 33.49 | 15.70 | 33.58 |
| 100.29-P | 16 | 0813 | 31°42.0' | 116°43.5' | 95 | calm | | clear | moderate | 16.78 | 33.48 | 12.54 | 33.55 |
| 100.45-P | 15 | 2010 | 31°12.0' | 117°48.0' | 790 | 320° | 4 | clear | rough | 16.40 | 33.55 | 15.93 | 33.51 |

## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.55-P | IV-15 | 1405 | 30°57.0' | 118°26.5' | 1150 | 360° | 4 | clear | rough | 16.79 | 33.61 | 16.36 | 33.61 |
| 100.65-P | 15 | 0724 | 30°33.5' | 119°04.5' | 1750 | 360° | 5 | clear | rough | 16.42 | 33.44 | 15.50 | 33.33 |
| 100.75-P | 15 | 0127 | 30°10.5' | 119°47.0' | 1600 | 360° | 5 | clear | rough | 16.26 | - | 15.28 | 33.34 |
| 100.85-P | 14 | 1840 | 29°51.0' | 120°26.5' | 2080 | 360° | 5 | partly cloudy | rough | 16.76 | 33.69 | 16.50 | 33.69 |
| 103.45-B | 23 | 2308 | 30°35.0' | 117°26.0' | 900 | 320° | 4 | cloudy | high | 17.32 | 33.60 | 15.58 | 33.49 |
| 103.55-B | 24 | 0605 | 30°16.5' | 118°04.0' | 1500 | 310° | 5 | clear | high | 16.90 | 33.55 | 16.86 | 33.65 |
| 103.65-B | 24 | 1305 | 29°57.0' | 118°43.5' | 1900 | 340° | 5 | partly cloudy | high | 17.46 | 33.73 | 17.47 | 33.78 |
| 103.75-B | 24 | 2000 | 29°36.0' | 119°25.0' | 1850 | 320° | 6 | cloudy | high | 16.89 | 33.62 | 16.82 | 33.64 |
| 103.85-B | 25 | 0200 | 29°17.0' | 120°05.0' | 2000 | 310° | 5 | cloudy | very rough | 17.19 | 33.67 | 17.06 | 33.68 |
| 107.45-B | 26 | 1856 | 29°58.0' | 117°03.5' | 850 | 310° | 5 | partly cloudy | very rough | 17.09 | 33.57 | 11.04 | 33.42 |
| 107.55-B | 26 | 1103 | 29°40.5' | 117°42.0' | 1800 | 300° | 5 | partly cloudy | very rough | 16.91 | 33.58 | 15.55 | 33.48 |
| 107.65-B | 26 | 0415 | 29°21.5' | 118°21.0' | 1500 | 320° | 4 | partly cloudy | very rough | 17.43 | 33.73 | 17.16 | 33.75 |
| 107.75-B | 25 | 2100 | 29°02.0' | 119°00.0' | 1900 | 330° | 5 | partly cloudy | very rough | 17.30 | 33.71 | 17.02 | 33.65 |
| 107.85-B | 25 | 1416 | 28°42.0' | 119°40.5' | 2000 | 340° | 5 | cloudy | very rough | 17.83 | 33.89 | 17.86 | 33.95 |
| 110.45-S | 27 | 1215 | 29°25.5' | 116°39.0' | 500 | 360° | 5 | partly cloudy | very rough | 17.06 | 33.66 | 16.82 | 33.65 |
| 110.55-S | 27 | 0625 | 29°06.5' | 117°19.0' | 1900 | 360° | 5 | cloudy | very rough | 16.88 | 33.58 | 14.76 | 33.50 |
| 110.65-S | 27 | 0030 | 28°46.5' | 117°57.0' | 2000 | 360° | 5 | partly cloudy | very rough | 17.34 | 33.68 | 17.24 | 33.70 |
| 110.75-S | 26 | 1300 | 28°29.5' | 118°42.5' | 2200 | 340° | 4 | cloudy | very rough | 17.82 | 33.89 | 17.81 | 33.87 |
| 110.85-S | 26 | 0705 | 28°04.0' | 119°16.0' | 2200 | 340° | 5 | partly cloudy | very rough | 18.16 | 34.01 | 18.07 | 33.98 |



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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.45-S | IV-24 | 2000 | 28°48.0' | 116°18.5' | 1200 | 320° | 4 | partly cloudy | very rough | 17.50 | 33.66 | 15.90 | 33.57 |
| 113.55-S | 25 | 0130 | 28°32.0' | 116°57.0' | 2400 | 320° | 4 | partly cloudy | very rough | 17.64 | 33.70 | 16.12 | 33.66 |
| 113.65-S | 25 | 0920 | 28°08.5' | 117°34.0' | 2130 | 320° | 4 | partly cloudy | very rough | 17.12 | 33.68 | 16.48 | 33.62 |
| 113.75-S | 25 | 1445 | 28°47.0' | 118°18.0' | 2100 | 320° | 5 | cloudy | very rough | 18.00 | 33.96 | 18.07 | 33.96 |
| 113.85-S | 25 | 1950 | 27°31.0' | 118°52.0' | 2200 | 340° | 5 | partly cloudy | very rough | 18.34 | 33.98 | 18.05 | 33.96 |
| 117.45-S | 23 | 1655 | 28°13.0' | 116°02.5' | 2350 | 290° | 3 | cloudy | very rough | 17.67 | 33.77 | 16.84 | 33.74 |
| 117.55-S | 23 | 1045 | 27°51.0' | 116°40.5' | 1850 | 320° | 4 | cloudy | rough | 17.42 | 33.68 | 16.92 | 33.82 |
| 117.65-S | 23 | 0500 | 27°31.0' | 117°19.0' | 2000 | 340° | 4 | partly cloudy | very rough | 18.16 | 33.89 | 17.56 | 33.96 |
| 117.75-S | 22 | 2250 | 27°11.5' | 117°58.5' | 2300 | 320° | 3 | cloudy | very rough | 18.44 | 34.02 | 17.60 | 33.97 |
| 117.85-S | 22 | 1610 | 26°50.0' | 118°35.0' | 2300 | 320° | 4 | cloudy | rough | 18.31 | 33.92 | 17.99 | 33.98 |
| 120.40-S | 22 | 0755 | 27°56.5' | 115°14.0' | 20 | 320° | 4 | clear | rough | 17.12 | 33.93 | - | - |
| 120.55-S | 21 | 0630 | 27°21.0' | 116°10.0' | 2000 | 310° | 2 | fog | moderate | 17.26 | 33.66 | 16.17 | 33.60 |
| 120.65-S | 21 | 1530 | 26°58.0' | 116°47.5' | 2200 | 310° | 3 | fog | rough | 17.36 | 33.68 | 15.96 | 33.67 |
| 120.75-S | 21 | 2130 | 26°35.0' | 117°30.5' | 2100 | 270° | 3 | cloudy | rough | 17.94 | 33.73 | - | - |
| 120.85-S | 22 | 0310 | 26°21.0' | 118°07.0' | 2250 | 280° | 3 | cloudy | rough | 18.62 | 33.90 | 17.78 | 33.97 |
| 123.45-S | 10 | 2220 | 27°12.0' | 115°08.0' | 1800 | 320° | 4 | clear | rough | 17.66 | 34.03a) | 18.10 | 33.87 |
| 123.55-S | 10 | 1735 | 26°54.0' | 115°36.5' | 2000 | 340° | 4 | clear | rough | 17.22 | 33.88 | 14.76 | 33.86 |

a) Possible evaporation.

## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 127.45-S | IV-9 | 0220 | 26°34.5' | 114°46.0' | 2000 | 300° | 5 | cloudy | high | 17.39 | 33.92 | 17.10 | 33.89 |
| 127.55-S | 9 | 0810 | 26°14.0' | 115°23.0' | 2000+ | 320° | 5 | clear | high | 17.96 | 34.14 | 17.97 | - |
| 130.45-S | 7 | 0955 | 26°07.0' | 114°31.5' | 2000 | 320° | 3 | cloudy | very rough | 17.10 | 33.91 | 17.12 | 33.88 |
| 130.55-S | 7 | 0415 | 27°48.0' | 115°08.5' | 2000+ | 320° | 3 | partly cloudy | very rough | 18.32 | 34.23 | 18.27 | 34.23 |
| 133.45-S | 5 | 1340 | 25°21.0' | 114°14.0' | 2000 | 320° | 5 | partly cloudy | high | 18.68 | 34.39 | 18.66 | 34.39 |
| 133.55-S | 5 | 1915 | 25°03.0' | 114°53.5' | 2000 | 320° | 6 | clear | high | 20.02 | 34.63 | 19.48 | 34.54 |
| 137.45-S | 4 | 0530 | 24°46.0' | 113°44.0' | 1890 | 320° | 4 | clear | very rough | 18.86 | 34.31 | 18.28 | 34.40 |
| 137.55-S | 4 | 0020 | 24°28.0' | 114°18.5' | 2000 | 310° | 6 | partly cloudy | high | 19.54 | 34.61 | 17.40 | 33.95 |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **60.55** | STRANGER; May 16, 1958; 2223 GCT; 37°46.5'N, 123°15'W; sounding, 65 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 13.81 | 32.86 | 6.75 | 335 | 0 | 13.81 | 32.86 | 6.75 | 24.60 | 335 | 0.00 |
| 10 | 11.20 | 33.19 | 5.74 | 263 | 10 | 11.20 | 33.19 | 5.74 | 25.36 | 263 | 0.03 |
| 29 | 10.08 | 33.42 | 4.52 | 228 | 20 | 10.34 | 33.33 | 4.90 | 25.62 | 238 | 0.05 |
| 49 | 9.42 | 33.62 | 3.74 | 202 | 30 | 10.06 | 33.42 | 4.48 | 25.73 | 227 | 0.08 |
| 78 | 8.78 | 33.86 | 2.58 | 175 | 50 | 9.38 | 33.63 | 3.72 | 26.00 | 202 | 0.12 |
| 96 | 8.71 | 33.89 | 2.18 | 172 | 75 | 8.80 | 33.84 | 2.70 | 26.26 | 177 | 0.17 |
| | | | | | 100 | (8.68) | (33.89) | (2.06) | (26.32) | (171) | (0.21) |
| **60.90** | STRANGER; May 17, 1958; 1353, 1410 GCT; 36°38.5'N, 125°32'W; sounding, 2500 fm; wind, 170°, force 3; weather, cloudy; sea, moderate; wire angle, 04°, 04°. | | | | | | | | | | |
| 0 | 15.04 | 33.23 | 5.80 | 333 | 0 | 15.04 | 33.23 | 5.80 | 24.62 | 333 | 0.00 |
| 10 | 14.68 | 33.22 | - | 326 | 10 | 14.68 | 33.22 | | 24.69 | 326 | 0.03 |
| 29 | 14.45 | 33.24 | 5.97 | 320 | 20 | 14.53 | 33.23 | 5.96 | 24.74 | 322 | 0.06 |
| 63a) | 12.91 | 33.06 | 6.15 | 303 | | | | | | | |
| 73a) | 12.59 | 33.03 | 6.12 | 299 | | | | | | | |
| 82a) | 12.78 | 33.08 | 6.03 | 299 | | | | | | | |
| 96a) | 12.48 | 33.15 | 5.84 | 289 | | | | | | | |
| 110a) | 10.33 | 33.19 | 5.41 | 248 | | | | | | | |
| 129a) | 9.06 | 33.32 | 5.00 | 219 | | | | | | | |
| 194a) | 8.31 | 33.87 | 3.74 | 167 | | | | | | | |
| 241a) | 8.11 | 34.04 | 2.35 | 150 | | | | | | | |
| 316a) | 6.63 | 34.04 | 1.98 | 132 | | | | | | | |
| 410a) | 6.30 | 34.16 | 0.91 | 119 | | | | | | | |
| 535a) | 5.74 | 34.27 | 0.43 | 104 | | | | | | | |
| 54a) | 13.73 | 33.17 | 5.98 | 310 | | | | | | | |
| **70.55** | STRANGER; May 13, 1958; 1436 GCT; 36°00'N, 122°00'W; sounding, 800 fm; wind, 360°, force 6; weather, partly cloudy; sea, high; wire angle, 06°. | | | | | | | | | | |
| 0 | 12.82 | 33.25 | 6.36 | 288 | 0 | 12.82 | 33.25 | 6.36 | 25.09 | 288 | 0.00 |
| 10 | 12.80 | 33.22 | - | 289 | 10 | 12.80 | 33.22 | | 25.08 | 289 | 0.03 |
| 29 | 12.41 | 33.29 | 6.26 | 277 | 20 | 12.63 | 33.26 | 6.32 | 25.14 | 284 | 0.06 |
| 44 | 9.70 | 33.67 | 4.27 | 203 | 30 | 12.38 | 33.29 | 6.23 | 25.21 | 277 | 0.08 |
| 53 | 9.44 | 33.72 | 3.75 | 196 | 50 | 9.57 | 33.71 | 4.00 | 26.04 | 198 | 0.13 |
| 63 | 9.08 | 33.80 | 3.25 | 184 | 75 | 9.00 | 33.83 | 3.12 | 26.23 | 180 | 0.18 |
| 72 | 9.06 | 33.81 | 3.14 | 183 | 100 | 8.53 | 33.93 | 2.76 | 26.38 | 166 | 0.22 |
| 91 | 8.56 | 33.88 | 3.02 | 170 | 150 | 8.00 | 33.97 | 2.52 | 26.48 | 156 | 0.30 |
| 105 | 8.48 | 33.95 | 2.65 | 164 | 200 | 7.39 | 33.98 | 2.22 | 26.58 | 146 | 0.38 |
| 119 | 8.14 | 33.94 | 2.83 | 160 | 250 | 6.77 | 34.07 | 1.45 | 26.74 | 131 | 0.45 |
| 143 | 8.01 | 33.96 | 2.54 | 156 | 300 | 6.45 | 34.12 | 0.98 | 26.83 | 123 | 0.51 |
| 171 | 7.75 | 33.99 | 2.20 | 150 | 400 | 5.98 | 34.20 | 0.52 | 26.95 | 112 | 0.64 |
| 208 | 7.29 | 33.98 | 2.22 | 145 | 500 | 5.50 | 34.25 | 0.40 | 27.05 | 102 | 0.75 |
| 260 | 6.70 | 34.08 | 1.39 | 129 | | | | | | | |
| 339 | 6.28 | 34.16 | 0.77 | 119 | | | | | | | |
| 439 | 5.78 | 34.22 | 0.45 | 108 | | | | | | | |
| 578 | 5.14 | 34.30 | 0.36 | 95 | | | | | | | |

a) Pretrip; depth too uncertain for interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; May 12, 1958; 2115 GCT; 34°53'N, 124°27.5'W; sounding, 2400 fm; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 16°. | | | | | | | | | | | 70.90 |
| 0 | 14.42 | 32.95 | 5.99 | 340 | 0 | 14.42 | 32.95 | 5.99 | 24.55 | 340 | 0.00 |
| 10 | 14.38 | 32.99 | - | 337 | 10 | 14.38 | 32.99 | | 24.58 | 337 | 0.03 |
| 28 | 13.94 | 33.03 | 6.06 | 325 | 20 | 14.18 | 33.02 | 6.02 | 24.65 | 330 | 0.07 |
| 42 | 13.58 | 33.01 | 6.06 | 320 | 30 | 13.88 | 33.03 | 6.06 | 24.71 | 324 | 0.10 |
| 51 | 13.48 | 33.15 | 5.92 | 308 | 50 | 13.52 | 33.14 | 5.99 | 24.87 | 309 | 0.16 |
| 60 | 12.18 | 33.20 | 5.70 | 280 | 75 | 11.40 | 33.33 | 5.32 | 25.42 | 256 | 0.23 |
| 69 | 11.78 | 33.27 | 5.52 | 267 | 100 | 10.36 | 33.51 | 4.16 | 25.76 | 225 | 0.30 |
| 87 | 10.64 | 33.42 | 4.88 | 237 | 150 | 9.17 | 33.76 | 3.40 | 26.15 | 188 | 0.40 |
| 100 | 10.36 | 33.51 | 4.16 | 225 | 200 | 8.53 | 34.00 | 2.27 | 26.43 | 161 | 0.49 |
| 114 | 9.82 | 33.56 | 4.04 | 213 | 250 | 7.68 | 34.06 | 2.02 | 26.60 | 145 | 0.56 |
| 133 | 9.20 | 33.69 | 3.60 | 194 | 300 | 7.21 | 34.09 | 1.73 | 26.69 | 136 | 0.64 |
| 162 | 9.09 | 33.89 | 2.85 | 177 | 400 | 6.28 | 34.17 | 1.03 | 26.88 | 118 | 0.77 |
| 198 | 8.58 | 33.99 | 2.28 | 162 | 500 | 5.70 | 34.22 | 0.66 | 27.00 | 107 | 0.89 |
| 247 | 7.74 | 34.14a) | 2.04 | | | | | | | | |
| 324 | 6.99 | 34.11 | 1.56 | 131 | | | | | | | |
| 419 | 6.08 | 34.18 | 0.86 | 115 | | | | | | | |
| 556 | 5.38 | 34.26 | 0.47 | 100 | | | | | | | |
| STRANGER; May 11, 1958; 1020 GCT; 34°54'N, 121°11'W; sounding, 320 fm; wind, 090°, force 1; weather, cloudy; sea, smooth; wire angle, 00°. | | | | | | | | | | | 77.55 |
| 0 | 12.98 | 33.29 | 7.04 | 288 | 0 | 12.98 | 33.29 | 7.04 | 25.10 | 288 | 0.00 |
| 10 | 12.94 | 33.31 | - | 285 | 10 | 12.94 | 33.31 | | 25.12 | 285 | 0.03 |
| 29 | 11.84 | 33.54 | 7.13 | 249 | 20 | 12.27 | 33.47 | 7.12 | 25.37 | 262 | 0.06 |
| 39 | 11.66 | 33.56 | 6.72 | 244 | 30 | 11.83 | 33.54 | 7.12 | 25.51 | 248 | 0.08 |
| 49 | 11.32 | 33.57 | 6.09 | 237 | 50 | 11.28 | 33.57 | 6.03 | 25.63 | 237 | 0.13 |
| 58 | 10.34 | 33.57 | 4.66 | 220 | 75 | 10.23 | 33.61 | 4.44 | 25.85 | 216 | 0.19 |
| 68 | 10.28 | 33.58 | 4.59 | 219 | 100 | 9.46 | 33.75 | 3.32 | 26.09 | 193 | 0.24 |
| 82 | 10.19 | 33.68 | 4.31 | 210 | 150 | 8.62 | 34.00 | 2.41 | 26.42 | 162 | 0.33 |
| 96 | 9.48 | 33.73 | 3.50 | 195 | 200 | 8.17 | 34.12 | 1.67 | 26.58 | 146 | 0.41 |
| 109 | 9.41 | 33.85 | 2.73 | 185 | 250 | 7.61 | 34.16 | 1.28 | 26.69 | 136 | 0.48 |
| 133 | 9.14 | 33.96 | 2.47 | 173 | 300 | 7.23 | 34.21 | 1.04 | 26.79 | 127 | 0.55 |
| 160 | 8.36 | 34.02 | 2.32 | 156 | 400 | 6.51 | 34.24 | 0.62 | 26.91 | 115 | 0.67 |
| 193 | 8.24 | 34.11 | 1.78 | 148 | 500 | (5.95) | (34.28) | (0.51) | (27.01) | (106) | (0.79) |
| 240 | 7.70 | 34.14 | 1.37 | 138 | | | | | | | |
| 287 | 7.36 | 34.20 | 1.10 | 130 | | | | | | | |
| 385 | 6.61 | 34.23 | 0.67 | 117 | | | | | | | |
| 480 | 6.03 | 34.27 | 0.51 | 107 | | | | | | | |
| STRANGER; May 11, 1958; 0739 GCT; 34°43'N, 122°33'W; sounding, 420 fm; wind, 090°, force 2; weather, cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | | 77.60 |
| 0 | 13.91 | 33.33 | 6.67 | 302 | 0 | 13.91 | 33.33 | 6.67 | 24.94 | 302 | 0.00 |
| 10 | 13.72 | 33.31 | - | 300 | 10 | 13.72 | 33.31 | | 24.96 | 300 | 0.03 |
| 29 | 13.06 | 33.29 | 6.37 | 289 | 20 | 13.45 | 33.29 | 6.53 | 25.01 | 296 | 0.06 |
| 39 | 12.29 | 33.35 | 5.79 | 271 | 30 | 13.00 | 33.29 | 6.33 | 25.09 | 288 | 0.09 |
| 49 | 11.83 | 33.40 | 5.53 | 259 | 50 | 11.80 | 33.40 | 5.52 | 25.41 | 258 | 0.14 |
| 58 | 11.26 | 33.48 | 4.93 | 243 | 75 | 10.98 | 33.53 | 4.64 | 25.66 | 234 | 0.20 |
| 68 | 11.16 | 33.50 | 4.84 | 240 | 100 | 10.19 | 33.81 | 3.33 | 26.02 | 200 | 0.26 |
| 82 | 10.80 | 33.58 | 4.39 | 228 | 150 | 9.18 | 34.01 | 2.37 | 26.34 | 170 | 0.35 |
| 96 | 10.30 | 33.80 | 3.44 | 203 | 200 | 8.66 | 34.15 | 1.60 | 26.53 | 152 | 0.44 |
| 110 | 9.90 | 33.84 | 3.18 | 193 | 250 | 8.20 | 34.20 | 1.42 | 26.64 | 141 | 0.51 |
| 132 | 9.37 | 33.95 | 2.47 | 177 | 300 | 7.80 | 34.21 | 1.30 | 26.71 | 134 | 0.58 |
| 161 | 9.06 | 34.06 | 2.29 | 164 | 400 | 6.59 | 34.31 | 0.87 | 26.96 | 111 | 0.71 |
| 193 | 8.77 | 34.13 | 1.68 | 154 | 500 | 5.95 | 34.30 | 0.59 | 27.03 | 104 | 0.82 |
| 239 | 8.32 | 34.20 | 1.45 | 143 | | | | | | | |
| 313 | 7.65 | 34.21 | 1.27 | 133 | | | | | | | |
| 407 | 6.55 | 34.31 | 0.82 | 110 | | | | | | | |
| 532 | 5.78 | 34.29 | 0.52 | 102 | | | | | | | |

a) Broken bottle cap; value does not fall on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **80.51** | STRANGER; May 9, 1958; 1150 GCT; 34°26.5'N, 120°31.5'W; sounding, 45 fm; wind, 190°, force 3; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 13.16 | 33.63 | 5.56 | 266 | 0 | 13.16 | 33.63 | 5.56 | 25.33 | 266 | 0.00 |
| 20 | 12.09 | 33.67 | 4.42 | 244 | 10 | 12.66 | 33.65 | 4.92 | 25.44 | 255 | 0.03 |
| 39 | 10.94 | 33.68 | 4.00 | 222 | 20 | 12.09 | 33.67 | 4.42 | 25.56 | 244 | 0.05 |
| 64 | 10.26 | 33.73 | 3.41 | 208 | 30 | 11.36 | 33.68 | 4.14 | 25.70 | 230 | 0.07 |
| | | | | | 50 | 10.58 | 33.70 | 3.72 | 25.86 | 215 | 0.12 |
| **80.55** | STRANGER; May 9, 1958; 1440 GCT; 34°19'N, 120°48.5'W; sounding, 450 fm; wind, direction missing, force 1; weather, overcast; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 13.67 | 33.54 | 6.54 | 283 | 0 | 13.67 | 33.54 | 6.54 | 25.15 | 283 | 0.00 |
| 10 | 13.65 | 33.53 | - | 283 | 10 | 13.65 | 33.53 | | 25.15 | 283 | 0.03 |
| 29 | 12.98 | 33.56 | 6.00 | 268 | 20 | 13.46 | 33.53 | 6.33 | 25.18 | 279 | 0.06 |
| 39 | 11.90 | 33.53 | 5.57 | 250 | 30 | 12.88 | 33.56 | 5.96 | 25.32 | 266 | 0.08 |
| 48 | 10.90 | 33.48 | 4.94 | 237 | 50 | 10.74 | 33.47 | 4.84 | 25.66 | 234 | 0.13 |
| 58 | 10.18 | 33.47 | 4.50 | 225 | 75 | 9.83 | 33.66 | 3.70 | 25.95 | 206 | 0.19 |
| 67 | 10.02 | 33.60 | 3.91 | 214 | 100 | 9.37 | 33.81 | 2.87 | 26.16 | 187 | 0.24 |
| 81 | 9.66 | 33.71 | 3.51 | 199 | 150 | 8.63 | 33.99 | 2.37 | 26.41 | 163 | 0.33 |
| 94 | 9.40 | 33.80 | 2.89 | 188 | 200 | 7.77 | 34.07 | 1.86 | 26.60 | 145 | 0.40 |
| 108 | 9.27 | 33.82 | 2.85 | 185 | 250 | 7.58 | 34.15 | 1.54 | 26.69 | 136 | 0.48 |
| 131 | 8.91 | 33.95 | 2.45 | 170 | 300 | 7.37 | 34.20 | 1.23 | 26.77 | 129 | 0.54 |
| 159 | 8.52 | 34.00 | 2.36 | 160 | 400 | 6.46 | 34.23 | 0.62 | 26.91 | 116 | 0.67 |
| 191 | 7.82 | 34.05 | 1.98 | 147 | 500 | 5.78 | 34.26 | 0.53 | 27.02 | 104 | 0.78 |
| 238 | 7.60 | 34.13 | 1.57 | 138 | | | | | | | |
| 313 | 7.26 | 34.21 | 1.11 | 127 | | | | | | | |
| 407 | 6.40 | 34.23 | 0.60 | 115 | | | | | | | |
| 531 | 5.60 | 34.28 | 0.52 | 102 | | | | | | | |
| **80.60** | STRANGER; May 9, 1958; 1741, 1815 GCT; 34°10'N, 121°09.5'W; sounding, 1600 fm; wind, 200°, force 4; weather, overcast; sea, moderate; wire angle, 15°, 18°. | | | | | | | | | | |
| 0 | 13.90 | 33.30 | 6.56 | 305 | 0 | 13.90 | 33.30 | 6.56 | 24.92 | 305 | 0.00 |
| 9 | 13.89 | 33.32 | - | 304 | 10 | 13.88 | 33.32 | | 24.94 | 303 | 0.03 |
| 28 | 12.84 | 33.47 | 6.25 | 272 | 20 | 13.54 | 33.38 | 6.46 | 25.06 | 291 | 0.06 |
| 37 | 11.91 | 33.56 | 5.32 | 248 | 30 | 12.44 | 33.51 | 5.90 | 25.37 | 262 | 0.09 |
| 49p | 11.60 | 33.58 | 5.32 | 241 | 50 | 11.59 | 33.59 | 5.32 | 25.59 | 241 | 0.14 |
| 59p | 11.56 | 33.64 | 4.94 | 236 | 75 | 9.69 | 33.66 | 3.77 | 25.98 | 203 | 0.19 |
| | | | | | 100 | 9.15 | 33.74 | 3.20 | 26.13 | 190 | 0.24 |
| 71 | 10.15 | 33.67 | 3.80 | 210 | 150 | 9.00 | 34.00 | 2.13 | 26.35 | 168 | 0.33 |
| 85 | 9.26 | 33.65 | 3.73 | 198 | 200 | 8.25 | 34.12 | 1.65 | 26.56 | 148 | 0.41 |
| 98 | 9.14 | 33.69 | 3.35 | 193 | 250 | 7.98 | 34.15 | 1.40 | 26.63 | 142 | 0.49 |
| 120 | 9.22 | 33.86 | 2.60 | 182 | 300 | 7.57 | 34.17 | 1.16 | 26.71 | 134 | 0.56 |
| 147 | 9.06 | 33.98 | 2.22 | 170 | 400 | 6.60 | 34.23 | 0.77 | 26.89 | 117 | 0.69 |
| 176 | 8.50 | 34.07 | 1.86 | 155 | 500 | 5.75 | 34.27 | 0.49 | 27.04 | 103 | 0.80 |
| 222 | 8.16 | 34.14 | 1.55 | 145 | | | | | | | |
| 296 | 7.61 | 34.17 | 1.17 | 135 | | | | | | | |
| 386 | 6.71 | 34.22 | 0.82 | 119 | | | | | | | |
| 507 | 5.66 | 34.28 | 0.48 | 102 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |
| STRANGER; May 9-10, 1958; 2341, 0006, 0032 GCT; 33°48'N, 121°50'W; sounding, 2000 fm; wind, 160°, force 4; weather, cloudy; sea, moderate; wire angle, 04°, 03°, 05°. | | | | | | | | | | | 80.70 |
| 0 | 14.22 | 33.00 | 6.04 | 333 | 0 | 14.22 | 33.00 | 6.04 | 24.62 | 333 | 0.00 |
| 10 | 14.14 | 33.13 | - | 322 | 10 | 14.14 | 33.13 | | 24.74 | 322 | 0.03 |
| 29 | 13.90 | 33.14 | 6.15 | 316 | 20 | 14.03 | 33.14 | 6.13 | 24.77 | 319 | 0.06 |
| 43 | 13.80 | 33.13 | 6.03 | 314 | 30 | 13.86 | 33.14 | 6.15 | 24.80 | 316 | 0.10 |
| 53 | 13.70 | 33.16 | 6.02 | 311 | 50 | 13.71 | 33.15 | 6.02 | 24.84 | 312 | 0.16 |
| 63 | 13.54 | 33.24 | 6.06 | 302 | 75 | 13.34 | 33.29 | 6.02 | 25.03 | 294 | 0.24 |
| 77 | 13.27 | 33.30 | 5.98 | 292 | 100 | 12.50 | 33.37 | 5.37 | 25.25 | 273 | 0.31 |
| | | | | | 150 | 8.87 | 33.69 | 4.01 | 26.13 | 189 | 0.42 |
| 90 | 12.96 | 33.35 | 5.52 | 283 | 200 | 8.46 | 33.97 | 2.26 | 26.42 | 162 | 0.51 |
| 104 | 12.20 | 33.37 | 6.03u | 268 | 250 | 8.22 | 34.13 | 1.57 | 26.58 | 146 | 0.59 |
| | | | | | 300 | 7.70 | 34.19 | 1.29 | 26.70 | 135 | 0.66 |
| 114 | 10.39 | 33.39 | 4.83 | 234 | 400 | 6.60 | 34.22 | 0.77 | 26.89 | 118 | 0.79 |
| 137 | 9.06 | 33.57 | 4.27 | 201 | 500 | 6.01 | 34.24 | 0.51 | 26.98 | 109 | 0.91 |
| 165 | 8.68 | 33.81 | 3.28 | 177 | | | | | | | |
| 202 | 8.45 | 33.98 | 2.24 | 161 | | | | | | | |
| 253 | 8.20 | 34.14 | 1.50 | 146 | | | | | | | |
| 332 | 7.26 | 34.20 | 1.15 | 128 | | | | | | | |
| 431 | 6.39 | 34.23 | 0.64 | 114 | | | | | | | |
| 570 | 5.50 | 34.27 | 0.40 | 101 | | | | | | | |
| STRANGER; May 10, 1958; 0618 GCT; 33°28'N, 122°35.5'W; sounding, 2250 fm; wind, 140°, force 4; weather, partly cloudy; sea, rough; wire angle, 14°. | | | | | | | | | | | 80.80 |
| 0 | 14.50 | 33.16 | 5.97 | 327 | 0 | 14.50 | 33.16 | 5.97 | 24.68 | 327 | 0.00 |
| 10 | 14.48 | 33.22 | - | 323 | 10 | 14.48 | 33.22 | | 24.73 | 323 | 0.03 |
| 28 | 14.44 | 33.17 | 5.93 | 325 | 20 | 14.45 | 33.21 | 5.94 | 24.73 | 323 | 0.06 |
| 43 | 14.40 | 33.17 | 6.00 | 324 | 30 | 14.44 | 33.17 | 5.93 | 24.71 | 325 | 0.10 |
| 52 | 14.24 | 33.22 | 6.05 | 317 | 50 | 14.27 | 33.20 | 6.05 | 24.77 | 319 | 0.16 |
| 62 | 14.12 | 33.35 | 5.84 | 305 | 75 | 13.88 | 33.35 | 5.80 | 24.96 | 301 | 0.24 |
| 76 | 13.86 | 33.35 | 5.80 | 301 | 100 | 10.82 | 33.36 | 4.73 | 25.56 | 244 | 0.31 |
| 89 | 11.34 | 33.35 | 4.99 | 254 | 150 | 9.02 | 33.76 | 3.40 | 26.18 | 185 | 0.42 |
| 103 | 10.66 | 33.37 | 4.65 | 241 | 200 | 8.71 | 33.99 | 2.22 | 26.40 | 164 | 0.50 |
| 116 | 9.76 | 33.49 | 4.30 | 217 | 250 | 8.38 | 34.09 | 1.73 | 26.52 | 152 | 0.58 |
| 139 | 9.18 | 33.65 | 3.71 | 196 | 300 | 7.98 | 34.18 | 1.44 | 26.66 | 139 | 0.66 |
| 165 | 8.86 | 33.83 | 2.91 | 178 | 400 | 6.62 | 34.20 | 0.78 | 26.86 | 120 | 0.79 |
| 201 | 8.71 | 33.99 | 2.21 | 164 | 500 | 5.90 | 34.23 | 0.58 | 26.98 | 109 | 0.92 |
| 251 | 8.38 | 34.09 | 1.73 | 152 | | | | | | | |
| 328 | 7.65 | 34.20 | 1.27 | 134 | | | | | | | |
| 425 | 6.38 | 34.20 | 0.68 | 116 | | | | | | | |
| 561 | 5.48 | 34.27 | 0.55 | 101 | | | | | | | |
| STRANGER; May 10, 1958; 1150 GCT; 33°09.5'N, 123°19.5'W; sounding, 2350 fm; wind, 150°, force 4; weather, drizzle; sea, rough; wire angle, 18°. | | | | | | | | | | | 80.90 |
| 0 | 14.65 | 33.19 | 5.97 | 328 | 0 | 14.65 | 33.19 | 5.97 | 24.67 | 328 | 0.00 |
| 10 | 14.64 | 33.22 | - | 326 | 10 | 14.64 | 33.22 | | 24.69 | 326 | 0.03 |
| 28 | 14.59 | 33.21 | 5.94 | 325 | 20 | 14.62 | 33.22 | 5.94 | 24.70 | 325 | 0.06 |
| 56 | 14.49 | 33.22 | 5.97 | 322 | 30 | 14.58 | 33.21 | 5.95 | 24.70 | 325 | 0.10 |
| 64 | 14.46 | 33.26 | 5.96 | 318 | 50 | 14.54 | 33.22 | 5.96 | 24.72 | 323 | 0.16 |
| 74 | 14.32 | 33.25 | 6.00 | 316 | 75 | 14.30 | 33.25 | 5.99 | 24.80 | 316 | 0.24 |
| 87 | 14.25 | 33.35 | 5.94 | 308 | 100 | 13.34 | 33.34 | 5.56 | 25.07 | 290 | 0.32 |
| 100 | 13.34 | 33.34 | 5.56 | 290 | 150 | 9.50 | 33.58 | 3.87 | 25.94 | 207 | 0.44 |
| 113 | 11.26 | 33.44 | 4.57 | 246 | 200 | 8.84 | 34.00 | 2.28 | 26.38 | 165 | 0.53 |
| 131 | 10.03 | 33.54 | 4.08 | 218 | 250 | 8.03 | 34.04 | 2.05 | 26.55 | 150 | 0.62 |
| 149 | 9.52 | 33.58 | 3.90 | 207 | 300 | 7.35 | 34.08 | 1.59 | 26.67 | 138 | 0.69 |
| 176 | 9.35 | 33.87 | 2.75 | 183 | 400 | 6.42 | 34.14 | 0.99 | 26.84 | 122 | 0.82 |
| 198 | 8.86 | 34.00 | 2.30 | 166 | 500 | 5.85 | 34.20 | 0.62 | 26.96 | 110 | 0.95 |
| 248 | 8.02 | 34.04 | 2.10 | 150 | | | | | | | |
| 325 | 7.02 | 34.10 | 1.40 | 133 | | | | | | | |
| 426 | 6.24 | 34.16 | 0.88 | 118 | | | | | | | |
| 556 | 5.48 | 34.26 | 0.38 | 101 | | | | | | | |

S10

CCOFI 5805

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

90.45 PAOLINA-T; May 4, 1958; 1500, 1544 GCT; 32°55.'N, 118°56'W; sounding, 940 fm; wind, 270°, force 3; weather, cloudy; sea, moderate; wire angle, 09°, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.62 | 33.57 | 6.05 | 299 | 0 | 14.62 | 33.57 | 6.05 | 24.97 | 299 | 0.00 |
| 10 | 14.60 | 33.55 | 6.18 | 300 | 10 | 14.60 | 33.55 | 6.18 | 24.96 | 300 | 0.03 |
| 29 | 13.34 | 33.77r | 5.94 | | 20 | 13.75 | 33.54 | 6.03 | 25.13 | 284 | 0.06 |
| 44 | 12.68 | 33.53 | 5.71 | 264 | 30 | 13.33 | 33.54 | 5.93 | 25.22 | 276 | 0.09 |
| 53 | 11.72 | 33.55 | 4.97 | 245 | 50 | 11.85 | 33.55 | 5.10 | 25.51 | 248 | 0.14 |
| 63 | 11.26 | 33.53 | 4.55 | 239 | 75 | 10.45 | 33.60 | 4.31 | 25.80 | 221 | 0.20 |
| 73 | 10.92 | 33.56 | 4.44 | 231 | 100 | 9.78 | 33.67 | 3.70 | 25.98 | 204 | 0.25 |
| 91 | 9.90 | 33.66 | 3.90 | 207 | 150 | 9.08 | 34.02 | 2.18 | 26.36 | 168 | 0.34 |
| 105 | 9.71 | 33.68 | 3.62 | 202 | 200 | 8.54 | 34.17 | 1.66 | 26.56 | 148 | 0.42 |
| 119 | 9.38 | 33.79 | 3.32 | 189 | 250 | 8.06 | 34.23 | 1.31 | 26.68 | 137 | 0.50 |
| 142 | 9.15 | 33.98 | 2.41 | 172 | 300 | 7.73 | 34.26 | 1.03 | 26.76 | 130 | 0.57 |
| 170 | 8.93 | 34.08 | 1.98 | 161 | 400 | 6.82 | 34.29 | 0.48 | 26.91 | 115 | 0.69 |
| 206 | 8.45 | 34.18 | 1.61 | 146 | 500 | 6.19 | 34.34 | 0.36 | 27.03 | 104 | 0.81 |
| 259 | 7.99 | 34.24 | 1.24 | 135 | | | | | | | |
| 337 | 7.38 | 34.27 | 0.79 | 124 | | | | | | | |
| 438 | 6.55 | 34.31 | 0.33 | 110 | | | | | | | |
| 578 | 5.68 | 34.38 | 0.53 | 95 | | | | | | | |

100.70 PAOLINA-T; May 10, 1958; 1007 GCT; 30°23'N, 119°29'W; sounding, 2100 fm; wind, 140°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.60 | 33.48 | 5.95 | 348 | 0 | 16.60 | 33.48 | 5.95 | 24.46 | 348 | 0.00 |
| 10 | 16.30 | 33.49 | 5.94 | 341 | 10 | 16.30 | 33.49 | 5.94 | 24.54 | 341 | 0.03 |
| 30 | 16.23 | 33.46 | 5.74 | 342 | 20 | 16.25 | 33.47 | 5.76 | 24.54 | 341 | 0.07 |
| 55 | 15.68 | 33.39a) | 5.74 | 335 | 30 | 16.23 | 33.46 | 5.74 | 24.53 | 342 | 0.10 |
| 66 | 15.22 | 33.32 | 5.79 | 330 | 50 | 16.20 | 33.45 | 5.74 | 24.54 | 341 | 0.17 |
| 74 | 14.82 | 33.32 | 5.93 | 322 | 75 | 14.78 | 33.32 | 5.93 | 24.75 | 321 | 0.25 |
| 84 | 14.02 | 33.36 | 5.57 | 303 | 100 | 11.90 | 33.37 | 6.00 | 25.36 | 262 | 0.33 |
| 100 | 11.90 | 33.37 | 6.00 | 262 | 150 | 9.34 | 33.40 | 3.91 | 25.82 | 218 | 0.45 |
| 114 | 11.00 | 33.38 | 5.88 | 246 | 200 | 8.50 | 33.85 | 2.79 | 26.32 | 171 | 0.55 |
| 133 | 9.86 | 33.39 | 4.86 | 226 | 250 | 7.65 | 33.94 | 2.17 | 26.51 | 153 | 0.63 |
| 151 | 9.33 | 33.40 | 3.90 | 217 | 300 | 7.08 | 33.99 | 1.65 | 26.64 | 141 | 0.71 |
| 173 | 8.86 | 33.78 | 3.21 | 182 | 400 | 6.22 | 34.11 | 0.82 | 26.85 | 121 | 0.84 |
| 197 | 8.53 | 33.84 | 2.83 | 172 | 500 | 5.82 | 34.23 | 0.53 | 26.99 | 108 | 0.96 |
| 242 | 7.78 | 33.92 | 2.27 | 156 | | | | | | | |
| 317 | 6.92 | 34.01b) | 1.46 | 138 | | | | | | | |
| 412 | 6.16 | 34.15b) | 0.79 | 117 | | | | | | | |
| 540 | 5.70 | 34.27 | 0.41 | 103 | | | | | | | |

107.60 PAOLINA-T; May 14, 1958; 0659 GCT; 29°32'N, 118°01'W; sounding, 1820 fm; wind, 270°, force 7; weather, cloudy; sea, high; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.80 | 33.49 | 5.84 | 352 | 0 | 16.80 | 33.49 | 5.84 | 24.42 | 352 | 0.00 |
| 9 | 16.83 | 33.49c) | 5.91 | 352 | 10 | 16.83 | 33.49 | 5.91 | 24.42 | 352 | 0.04 |
| 27 | 16.80 | 33.48 | 5.88 | 352 | 20 | 16.83 | 33.49 | 5.90 | 24.42 | 352 | 0.07 |
| 55 | 16.44 | 33.58 | 5.98 | 337 | 30 | 16.78 | 33.48 | 5.88 | 24.42 | 352 | 0.10 |
| 62 | 15.87 | 33.49 | 5.88 | 331 | 50 | 16.42 | 33.58 | 5.98 | 24.57 | 338 | 0.17 |
| 71 | 15.23 | 33.51d) | 5.95 | | 75 | 15.03 | 33.44 | 5.94 | 24.79 | 317 | 0.26 |
| 83 | 14.76 | 33.43 | 5.90 | 312 | 100 | 12.75 | 33.43 | 5.53 | 25.25 | 273 | 0.33 |
| 96 | 13.33 | 33.45 | 5.65 | 282 | 150 | 9.92 | 33.50 | 4.75 | 25.82 | 218 | 0.45 |
| 109 | 11.79 | 33.37 | - | 260 | | | | | | | |
| 126 | 10.86 | 33.46 | 4.98 | 237 | | | | | | | |
| 144 | 10.15 | 33.48 | 4.83 | 224 | | | | | | | |
| 169 | 9.24 | 33.73 | 3.70 | 192 | | | | | | | |

a) Broken bottle cap; value falls on property curve.
b) Salinity samples at 317 and 412 meters appear to have been reversed; they are assumed to be listed in correct order.
c) Possible evaporation; value falls on property curve.
d) Loose bottle cap; value does not fall on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; May 15, 1958; 1141 GCT; 27°33'N, 115°52.5'W; sounding, 2100 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 14°. | | | | | | | | | | | 120.50 |
| 0 | 17.85 | 33.78 | 5.30 | 354 | 0 | 17.85 | 33.78 | 5.30 | 24.40 | 354 | 0.00 |
| 10 | 17.86 | 33.77 | 5.00 | 355 | 10 | 17.86 | 33.77 | 5.00 | 24.38 | 355 | 0.04 |
| 29 | 16.78 | 33.68 | 4.94 | 338 | 20 | 17.83 | 33.77 | 4.98 | 24.39 | 354 | 0.07 |
| 43 | 15.62 | 33.68 | 5.05 | 312 | 30 | 16.68 | 33.68 | 4.95 | 24.60 | 335 | 0.10 |
| 52 | 14.22 | 33.86 | 3.56 | 270 | 50 | 14.97 | 33.82 | 3.80 | 25.08 | 289 | 0.17 |
| 62 | 12.74 | 33.78 | 3.11 | 247 | 75 | 11.72 | 33.84 | 3.02 | 25.76 | 224 | 0.23 |
| 72 | 11.86 | 33.82 | 3.05 | 228 | 100 | 10.90 | 34.04 | 2.27 | 26.05 | 197 | 0.28 |
| 88 | 11.16 | 33.96 | 2.31 | 205 | 150 | 10.45 | 34.30 | 1.32 | 26.35 | 168 | 0.38 |
| 101 | 10.86 | 34.03 | 2.27 | 196 | 200 | 10.26 | 34.40 | 1.06 | 26.45 | 159 | 0.46 |
| 114 | 10.42 | 34.06 | 2.22 | 186 | 250 | 8.95 | 34.32 | 1.20 | 26.61 | 144 | 0.54 |
| 135 | 10.48 | 34.29 | 1.56 | 170 | 300 | 7.92 | 34.21 | 1.32 | 26.69 | 136 | 0.61 |
| 161 | 10.38 | 34.31 | 1.28 | 166 | 400 | 7.01 | 34.33 | 1.08 | 26.91 | 115 | 0.74 |
| 195 | 10.33 | 34.40 | 1.07 | 159 | 500 | 6.52 | 34.39 | 0.27 | 27.02 | 105 | 0.85 |
| 242 | 9.16 | 34.34 | 1.17 | 145 | | | | | | | |
| 317 | 7.58 | 34.18 | 1.33 | 134 | | | | | | | |
| 416 | 6.97 | 34.35 | 0.40 | 113 | | | | | | | |
| 546 | 6.10 | 34.42 | 0.25 | 97 | | | | | | | |
| BLACK DOUGLAS; May 16, 1958; 0515 GCT; 26°32.5'N, 117°48.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 06°. | | | | | | | | | | | 120.80 |
| 0 | 18.60 | 33.86 | 5.82 | 366 | 0 | 18.60 | 33.86 | 5.82 | 24.27 | 366 | 0.00 |
| 10 | 18.63 | 33.87 | 5.79 | 366 | 10 | 18.63 | 33.87 | 5.79 | 24.27 | 366 | 0.04 |
| 29 | 18.46 | 33.85 | 5.81 | 364 | 20 | 18.56 | 33.86 | 5.80 | 24.28 | 365 | 0.07 |
| 43 | 18.10 | 33.82 | 5.78 | 358 | 30 | 18.45 | 33.85 | 5.81 | 24.30 | 363 | 0.11 |
| 53 | 17.50 | 33.89a) | 5.96 | | 50 | 17.70 | 33.82 | 5.87 | 24.46 | 348 | 0.18 |
| 62 | 17.26 | 33.83 | 5.93 | 337 | 75 | 17.10 | 33.83 | 5.98 | 24.62 | 333 | 0.26 |
| 72 | 17.16 | 33.83 | 5.98 | 335 | 100 | 16.10 | 33.78 | 5.80 | 24.82 | 314 | 0.35 |
| 89 | 16.88 | 33.84 | 5.90 | 328 | 150 | 11.20 | 33.61 | 3.72 | 25.68 | 232 | 0.48 |
| 102 | 15.98 | 33.78 | 5.80 | 312 | 200 | 10.21 | 34.06 | (2.52) | 26.20 | 182 | 0.59 |
| 115 | 15.18 | 33.76 | 5.71 | 297 | 250 | 9.54 | 34.29 | (2.10) | 26.49 | 155 | 0.68 |
| 136 | 11.79 | 33.53 | 4.96 | 248 | 300 | 8.95 | 34.32 | (1.50) | 26.61 | 144 | 0.76 |
| 162 | 11.78 | 33.92 | 3.05 | 219 | 400 | 7.64 | 34.35 | 0.62 | 26.84 | 122 | 0.89 |
| 198 | 10.22 | 34.05 | 2.52 | 184 | 500 | 6.64 | 34.36 | 0.40 | 26.98 | 108 | 1.02 |
| 255 | 9.54 | 34.30 | - | 154 | | | | | | | |
| 332 | 8.54 | 34.32 | 1.03 | 137 | | | | | | | |
| 428 | 7.30 | 34.36 | 0.51 | 117 | | | | | | | |
| 565 | 5.96 | 34.34 | 0.33 | 101 | | | | | | | |
| BLACK DOUGLAS; May 9, 1958; 1632 GCT; 25°00'N, 113°23.5'W; sounding, 1500 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 16°. | | | | | | | | | | | 137.40 |
| 0 | 18.16 | 33.87 | 5.96 | 355 | 0 | 18.16 | 33.87 | 5.96 | 24.39 | 355 | 0.00 |
| 10 | 18.09 | 33.87 | 5.64 | 353 | 10 | 18.09 | 33.87 | 5.64 | 24.41 | 353 | 0.04 |
| 28 | 18.09 | 33.87 | 5.72 | 353 | 20 | 18.09 | 33.87 | 5.68 | 24.41 | 353 | 0.07 |
| 42 | 17.16 | 33.85 | 5.82 | 333 | 30 | 18.08 | 33.87 | 5.73 | 24.41 | 353 | 0.10 |
| 51 | 16.58 | 33.84 | 5.85 | 321 | 50 | 16.63 | 33.84 | 5.84 | 24.74 | 322 | 0.17 |
| 60 | 15.96 | 33.78 | 5.75 | 311 | 75 | 15.40 | 33.92 | 4.94 | 25.07 | 290 | 0.25 |
| 70 | 15.82 | 33.93 | 5.33 | 298 | 100 | 13.13 | 34.09 | 3.90 | 25.68 | 232 | 0.32 |
| 85 | 13.88 | 33.90 | 3.89 | 261 | 150 | 11.80 | 34.48 | 0.83 | 26.25 | 178 | 0.42 |
| 97 | 13.11 | 33.96 | 3.00 | 241 | 200 | 11.10 | 34.60 | 0.38 | 26.46 | 158 | 0.50 |
| 109 | 11.92 | 33.96 | 2.90 | 219 | 250 | 10.28 | 34.59 | 0.30 | 26.61 | 144 | 0.58 |
| 128 | 12.35 | 34.34 | 1.17 | 199 | 300 | 9.48 | 34.55 | 0.29 | 26.71 | 134 | 0.66 |
| 152 | 11.72 | 34.48 | 0.82 | 177 | 400 | 8.10 | 34.46 | 0.24 | 26.86 | 120 | 0.79 |
| 186 | 11.29 | 34.58 | 0.46 | 162 | 500 | 6.97 | 34.44 | 0.22 | 27.00 | 107 | 0.90 |
| 285p | 9.69 | 34.56 | 0.29 | 137 | | | | | | | |
| 382p | 8.31 | 34.47 | 0.25 | 123 | | | | | | | |
| 519p | 6.98 | 34.43 | 0.22 | 104 | | | | | | | |

a) Broken bottle cap; value does not fall on property curve.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 60.52-S | V-16 | 2055 | 37°53.0' | 123°01.0' | 42 | calm | | haze | slight | 10.94 | 33.48 | 8.90 | 33.85 |
| 60.60-S | 17 | 0045 | 37°36.5' | 123°35.0' | 1700 | 300° | 4 | partly cloudy | moderate | 13.14 | 32.77 | 9.52 | 33.54 |
| 60.70-S | 17 | 0500 | 37°17.5' | 124°16.0' | 2200 | 240° | 1 | partly cloudy | moderate | 13.73 | 32.78 | 12.01 | 32.97 |
| 60.80-S | 17 | 0915 | 36°57.5' | 124°56.0' | 2360 | 180° | 2 | partly cloudy | slight | 14.13 | 33.03 | 13.75 | 33.02 |
| 63.52-S | 15 | 1130 | 37°20.0' | 122°39.5' | 50 | 320° | 3 | clear | slight | 11.52 | 33.01 | 9.33 | 33.64 |
| 63.55-S | 15 | 0930 | 37°12.5' | 122°50.0' | 200 | 320° | 3 | clear | slight | 12.44 | 32.83 | 9.23 | 33.60 |
| 63.60-S | 15 | 0645 | 37°01.0' | 123°10.5' | 1470 | 320° | 3 | clear | slight | 12.07 | 33.04 | 10.94 | 33.21 |
| 63.70-S | 15 | 0040 | 36°40.0' | 123°55.0' | 2125 | 340° | 4 | clear | rough | 13.57 | 32.86 | 12.96 | 32.86 |
| 63.80-S | 14 | 1835 | 36°19.5' | 124°38.5' | 2300 | 340° | 3 | partly cloudy | rough | 13.84 | 33.03 | 13.52 | 33.06 |
| 63.90-S | 17 | 1840 | 36°06.5' | 125°13.0' | 2500 | 180° | 3 | cloudy | moderate | 14.37 | 32.91 | 13.05 | 32.94 |
| 67.50-S | 13 | 2153 | 36°47.5' | 122°04.0' | 177 | 360° | 5 | partly cloudy | very rough | 12.32 | 33.51 | 9.18 | 33.69 |
| 67.55-S | 14 | 0030 | 36°35.5' | 122°26.5' | 1600 | 330° | 5 | clear | high | 13.75 | 32.92 | 11.16 | 33.22 |
| 67.60-S | 14 | 0250 | 36°23.0' | 122°48.5' | 1600 | 340° | 5 | partly cloudy | high | 13.94 | 32.83 | 12.15 | 33.03 |
| 67.70-S | 14 | 0730 | 36°04.0' | 123°30.0' | 2000 | 320° | 5 | partly cloudy | high | 14.02 | 32.95 | 10.90 | 33.26 |
| 67.80-S | 14 | 1301 | 35°43.0' | 124°15.0' | 2200 | 330° | 4 | cloudy | rough | 14.28 | 32.86 | 13.92 | 33.03 |
| 67.90-S | 17 | 2310 | 35°34.0' | 124°50.0' | 2450 | 180° | 3 | cloudy | moderate | 14.11 | 32.87 | 13.54 | 33.02 |
| 70.52-S | 13 | 1700 | 36°09.0' | 121°50.0' | 420 | 320° | 3 | clear | rough | 12.32 | 33.31 | 9.83 | 33.62 |
| 70.60-S | 13 | 1120 | 35°50.5' | 122°22.0' | 1900 | 340° | 6 | partly cloudy | high | 12.70 | 33.35 | 10.79 | 33.49 |
| 70.70-S | 13 | 0700 | 35°31.0' | 123°05.0' | 2100 | 350° | 5 | clear | high | 13.81 | 33.02 | 12.63 | 33.04 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70.80-S | V-13 | 0200 | 35°12.5' | 123°47.0' | 2250 | 360° | 4 | partly cloudy | high | 14.14 | 32.90 | 12.52 | 32.97 |
| 73.51-S | 11 | 2130 | 35°36.0' | 121°20.0' | 155 | 270° | 3 | partly cloudy | moderate | 11.30 | 33.51 | 10.00 | 33.69 |
| 73.55-S | 11 | 2340 | 35°27.5' | 121°37.5' | 600 | 270° | 3 | partly cloudy | slight | 13.97 | 32.86 | 11.48 | 33.30 |
| 73.60-S | 12 | 0210 | 35°17.0' | 121°58.5' | 1550 | 320° | 4 | partly cloudy | moderate | 14.04 | 33.12 | 11.88 | 32.92 |
| 73.70-S | 12 | 0700 | 34°56.5' | 122°40.0' | 2250 | 320° | 4 | rain | rough | 14.38 | 33.09 | 11.90 | 33.25 |
| 73.80-S | 12 | 1120 | 34°35.0' | 123°24.5' | 2300 | 320° | 5 | overcast | very rough | 14.76 | 33.20 | 14.50 | 33.19 |
| 73.90-S | 12 | 1550 | 34°14.0' | 124°09.5' | 2450 | 360° | 5 | overcast | high | 14.96 | 33.24 | 14.54 | 33.22 |
| 77.50-S | 11 | 1310 | 34°05.0' | 120°52.0' | 80 | 120° | 2 | cloudy | slight | 12.67 | 33.36 | 10.62 | 33.60 |
| 77.70-S | 11 | 0225 | 34°23.0' | 122°16.0' | 2200 | 120° | 3 | cloudy | moderate | 14.16 | 33.00 | 11.98 | 33.24 |
| 77.80-S | 10 | 2145 | 34°04.5' | 122°56.0' | 2350 | 130° | 3 | cloudy | rough | 14.96 | 33.22 | 14.77 | 33.24 |
| 77.90-S | 10 | 1700 | 33°44.5' | 123°38.5' | 2300 | 140° | 4 | cloudy | very rough | 15.04 | 33.26 | 14.98 | 33.26 |
| 82.47-S | 9 | 0830 | 34°15.0' | 119°58.0' | 310 | calm | | cloudy | moderate | 11.98 | 33.66 | 9.72 | 33.89 |
| 83.40-S | 9 | 0020 | 34°14.0' | 119°21.5' | 10 | 270° | 4 | cloudy | slight | 15.08 | 33.58 | - | - |
| 83.43-S | 9 | 0540 | 34°08.0' | 119°34.0' | 131 | 270° | 1 | cloudy | slight | 15.01 | 33.51 | 11.52 | 33.62 |
| 83.51-S | 8 | 1855 | 33°51.5' | 120°08.0' | 174 | 310° | 4 | overcast | rough | 14.67 | 33.60 | 9.66 | 33.84 |
| 83.55-S | 8 | 1635 | 33°44.0' | 120°25.5' | 532 | 300° | 3 | overcast | rough | 14.11 | 33.58 | 11.05 | 33.63 |
| 83.60-S | 8 | 1350 | 33°31.0' | 120°46.0' | 1000 | 320° | 4 | overcast | rough | 13.61 | 33.40 | 12.52 | 33.46 |
| 83.65-S | 8 | 1050 | 33°22.5' | 121°05.0' | 1900 | 320° | 4 | overcast | rough | 13.96 | 33.23 | 13.94 | 33.33 |
| 83.70-S | 8 | 0810 | 33°13.0' | 121°25.0' | 2000 | 320° | 3 | overcast | rough | 14.10 | 33.21 | 14.04 | 33.22 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 83.75-S | V-8 | 0530 | 33°03.5' | 122°45.5' | 2400 | 320° | 5 | overcast | high | 14.82 | 33.30 | 14.91 | 33.30 |
| 83.80-S | 8 | 0245 | 32°53.5' | 122°06.0' | 2240 | 320° | 5 | cloudy | high | 14.81 | 33.20 | 15.22 | - |
| 83.85-S | 8 | 0000 | 32°44.0' | 122°27.5' | 2000 | 320° | 5 | overcast | high | 14.88 | 33.21 | 14.87 | 33.24 |
| 83.90-S | 7 | 2145 | 32°35.0' | 122°45.0' | 2000 | 320° | 5 | overcast | high | 14.86 | 33.12 | 14.52 | 33.19 |
| 87.35-S | 6 | 0830 | 33°50.0' | 118°37.5' | 420 | 180° | 2 | cloudy | slight | 15.98 | 33.46 | 11.16 | 33.62 |
| 87.40-S | 6 | 1130 | 33°39.0' | 118°58.0' | 640 | - | 1 | cloudy | slight | 15.92 | 33.49 | - | - |
| 87.45-S | 6 | 1420 | 33°30.0' | 119°19.0' | 900 | 320° | 2 | overcast | very rough | 14.59 | 33.55 | 9.70 | 33.73 |
| 87.50-S | 6 | 1810 | 33°20.0' | 119°40.0' | 40 | 280° | 4 | overcast | very rough | 14.30 | 33.55 | 9.81 | 33.69 |
| 87.55-S | 6 | 2035 | 33°10.0' | 120°00.5' | 500 | 270° | 4 | overcast | rough | 13.34 | 33.55 | 12.30 | 33.57 |
| 87.60-S | 7 | 0015 | 33°00.0' | 120°21.5' | 330 | 320° | 5 | overcast | very high | 14.12 | 33.58 | 12.28 | 33.57 |
| 87.65-S | 7 | 0237 | 32°50.0' | 120°41.0' | 2000 | 320° | 6 | cloudy | high | 14.46 | 33.28 | 14.10 | 33.37 |
| 87.70-S | 7 | 0530 | 32°39.0' | 121°02.0' | 2100 | 300° | 5 | cloudy | high | 14.70 | 33.20 | 14.80 | 33.23 |
| 87.75-S | 7 | 0750 | 32°29.0' | 121°22.0' | 2400 | 320° | 5 | cloudy | high | 15.23 | 33.48 | 15.24 | 33.49 |
| 87.80-S | 7 | 1015 | 32°18.5' | 121°42.5' | 2000 | 320° | 5 | cloudy | high | 15.20 | 33.51 | 15.20 | 33.48 |
| 87.85-S | 7 | 1250 | 32°10.0' | 122°01.0' | 2000 | 320° | 4 | overcast | high | 15.41 | 33.53 | 15.43 | 33.52 |
| 87.90-S | 7 | 1540 | 32°00.0' | 122°20.0' | 2300 | 320° | 5 | overcast | high | 15.32 | 33.40 | 15.42 | 33.46 |
| 90.28-S | 4 | 0345 | 33°28.5' | 117°47.0' | 200 | 280° | 3 | clear | rough | 16.04 | 33.49 | 10.62 | 33.68 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.30-P | V-4 | 0545 | 33°24.5' | 117°55.0' | 330 | 330° | 3 | clear | rough | 17.82 | - | 11.33 | 33.60 |
| 90.50-P | 4 | 1858 | 32°45.0' | 119°16.5' | 170 | 330° | 2 | cloudy | moderate | 14.58 | 33.49 | 12.96 | 33.50 |
| 90.55-P | 4 | 2237 | 32°35.0' | 119°37.0' | 600 | 270° | 3 | cloudy | moderate | 14.14 | 33.39 | 13.32 | 33.48 |
| 90.60-P | 5 | 0149 | 32°23.0' | 120°00.5' | 650 | 290° | 5 | cloudy | moderate | 14.67 | 33.39 | 13.80 | 33.51 |
| 90.65-P | 5 | 0452 | 32°15.0' | 120°17.0' | 2050 | 320° | 6 | overcast | rough | 14.93 | 33.42 | 13.84 | 33.50 |
| 90.70-P | 5 | 0820 | 32°04.0' | 120°38.5' | 2095 | 270° | 5 | overcast | very high | 14.72 | 33.40 | 14.50 | 33.45 |
| 90.80-P | 5 | 1505 | 31°42.0' | 121°19.0' | 2000 | 320° | 6 | overcast | very rough | 15.54 | 33.48 | - | 33.54 |
| 90.85-P | 5 | 1825 | 31°32.0' | 121°39.0' | 2200 | 320° | 5 | cloudy | high | 15.78 | 33.55 | 15.71 | 33.58 |
| 90.90-P | 5 | 2126 | 31°22.0' | 121°58.0' | 2100 | 320° | 5 | cloudy | very rough | 15.72 | 33.57 | 15.32 | 33.51 |
| 93.27-P | 7 | 1935 | 32°56.0' | 117°19.0' | 98 | 180° | 3 | cloudy | slight | 15.06 | 33.52 | 10.65 | 33.68 |
| 93.30-P | 7 | 1742 | 32°50.0' | 117°31.5' | 510 | 200° | 3 | overcast | slight | 17.68 | 33.51 | 11.20 | 33.54 |
| 93.35-P | 7 | 1419 | 32°40.0' | 117°52.0' | 340 | 090° | 3 | overcast | moderate | 16.10 | 33.56 | 12.10 | 33.51 |
| 93.40-P | 7 | 1157 | 32°30.0' | 118°12.5' | 1000 | 320° | 1 | overcast | slight | 16.78 | 33.51 | 12.40 | 33.49 |
| 93.45-P | 7 | 0841 | 32°20.0' | 118°33.0' | 450 | 320° | 3 | overcast | moderate | 16.16 | 33.56 | 12.59 | 33.48 |
| 93.50-P | 7 | 0527 | 32°10.0' | 118°53.0' | 750 | 320° | 4 | overcast | rough | 15.84 | 33.51 | 14.22 | 33.48 |
| 93.55-P | 7 | 0217 | 32°00.0' | 119°15.0' | 850 | 320° | 5 | overcast | very rough | 15.20 | 33.49 | 14.14 | 33.45 |
| 93.60-P | 6 | 2305 | 31°50.0' | 119°34.0' | 1800 | 270° | 5 | overcast | very rough | 16.08 | 33.53 | 15.74 | 33.51 |
| 93.65-P | 6 | 1953 | 31°41.0' | 119°53.0' | 2035 | 270° | 5 | overcast | high | 15.62 | 33.49 | 15.46 | 33.48 |
| 93.70-P | 6 | 1655 | 31°30.0' | 120°15.0' | 2000 | 330° | 6 | overcast | high | 16.01 | 33.49 | 15.04 | 33.51 |



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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.75-P | V-6 | 1310 | 31°18.5' | 120°38.0' | 2100 | 270° | 6 | overcast | very rough | 16.08 | 33.54 | 16.04 | 33.48 |
| 93.80-P | 6 | 0928 | 31°10.5' | 120°55.0' | 2000 | 340° | 6 | cloudy | high | 16.18 | 33.49 | 16.16 | 33.54 |
| 93.85-P | 6 | 0546 | 31°01.0' | 121°15.0' | 2200 | 320° | 6 | cloudy | high | 15.85 | 33.46 | 15.77 | 33.56 |
| 93.90-P | 6 | 0220 | 30°50.0' | 121°35.0' | 2200 | 320° | 5 | overcast | very rough | 15.50 | 33.35 | 15.24 | 33.42 |
| 97.30-P | 8 | 0308 | 32°15.5' | 117°08.5' | 35 | 360° | 4 | cloudy | moderate | 14.98 | 33.51 | 9.86 | 33.71 |
| 97.32-P | 8 | 0436 | 32°11.5' | 117°16.5' | 820 | 220° | 3 | overcast | moderate | 17.20 | 33.45 | 11.20 | 33.48 |
| 97.35-P | 8 | 0648 | 32°05.0' | 117°28.5' | 680 | 130° | 3 | overcast | slight | 17.04 | 33.66 | 13.52 | - |
| 97.40-P | 8 | 1001 | 31°55.0' | 117°50.0' | 850 | 220° | 4 | overcast | rough | 16.61 | 33.57 | 12.10 | 33.48 |
| 97.45-P | 8 | 1308 | 31°45.5' | 118°10.0' | 1000 | 220° | 1 | overcast | rough | 15.72 | 33.53 | 14.95 | 33.44 |
| 97.50-P | 8 | 1610 | 31°35.0' | 118°30.0' | 1300 | 290° | 3 | overcast | moderate | 15.88 | 33.55 | 14.22 | 33.51 |
| 97.55-P | 8 | 1910 | 31°25.0' | 118°50.0' | 550 | 300° | 3 | overcast | rough | 16.00 | 33.55 | 15.55 | 33.56 |
| 97.60-P | 8 | 2212 | 31°16.0' | 119°10.0' | 2100 | 270° | 4 | overcast | very rough | 15.77 | 33.54 | 15.82 | 33.53 |
| 97.65-P | 9 | 0109 | 31°05.5' | 119°31.0' | 2230 | 270° | 3 | overcast | high | 16.29 | 33.50 | 16.08 | - |
| 97.70-P | 9 | 0404 | 30°55.5' | 119°50.5' | 2130 | 320° | 3 | overcast | rough | 16.19 | 33.51 | 16.06 | 33.48 |
| 97.75-P | 9 | 0709 | 30°45.0' | 120°11.0' | 2000 | 250° | 3 | overcast | slight | 16.28 | 33.55 | 16.19 | 33.55 |
| 97.80-P | 9 | 1007 | 30°35.0' | 120°31.0' | 2000 | 240° | 3 | overcast | moderate | 15.82 | 33.45 | 15.34 | 33.39 |
| 97.85-P | 9 | 1309 | 30°25.0' | 120°51.0' | 2250 | 320° | 3 | cloudy | moderate | 15.48 | 33.39 | 15.42 | 33.36 |
| 97.90-P | 9 | 1704 | 30°11.0' | 121°12.0' | 2020 | 180° | 3 | cloudy | moderate | 15.48 | 33.38 | 15.41 | 33.39 |
| 100.29-P | 11 | 1136 | 31°42.0' | 116°43.0' | 100 | 140° | 2 | cloudy | smooth | 14.54 | 33.52 | 10.66 | 33.53 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.30-P | V-11 | 1000 | 31°41.0' | 116°46.5' | 310 | calm | | partly cloudy | slight | 16.02 | 33.49 | 11.18 | 33.51 |
| 100.35-P | 11 | 0715 | 31°31.0' | 117°06.5' | 660 | calm | | partly cloudy | slight | 17.24 | 33.61 | 12.88 | 33.48 |
| 100.40-P | 11 | 0400 | 31°21.0' | 117°27.0' | 1100 | calm | | partly cloudy | moderate | 17.04 | 33.63 | - | 33.48 |
| 100.45-P | 11 | 0120 | 31°11.0' | 117°46.0' | 950 | 180° | 1 | partly cloudy | slight | 16.26 | 33.54 | 14.44 | 33.46 |
| 100.50-P | 10 | 2235 | 31°02.0' | 118°08.0' | 950 | 110° | 4 | partly cloudy | moderate | 16.69 | 33.60 | - | 33.46 |
| 100.55-P | 10 | 1938 | 30°53.0' | 118°28.0' | 1340 | 120° | 5 | partly cloudy | slight | 16.61 | 33.48 | 16.38 | 33.48 |
| 100.60-P | 10 | 1630 | 30°45.0' | 118°49.0' | 1850 | 140° | 3 | cloudy | moderate | 16.57 | 33.52 | 16.13 | 33.46 |
| 100.65-P | 10 | 1356 | 30°33.0' | 119°09.0' | 2050 | 140° | 3 | partly cloudy | moderate | 16.40 | 33.53 | 15.92 | 33.46 |
| 100.75-P | 10 | 0641 | 30°12.0' | 119°48.0' | 2140 | 180° | 3 | partly cloudy | slight | 15.96 | 33.42 | 16.23 | 33.49 |
| 100.80-P | 10 | 0338 | 30°02.0' | 120°07.0' | 2530 | 180° | 5 | partly cloudy | high | 16.32 | 33.58 | 16.26 | 33.57 |
| 100.85-P | 10 | 0102 | 29°51.0' | 120°27.0' | 2550 | 140° | 4 | partly cloudy | moderate | 16.54 | 33.63 | 16.66 | 33.71 |
| 100.90-P | 9 | 2203 | 29°41.0' | 120°46.0' | 2000 | 140° | 3 | partly cloudy | moderate | 16.96 | 33.82 | 16.92 | 33.78 |
| 103.30-P | 11 | 1708 | 31°05.0' | 116°25.0' | 45 | 130° | 5 | partly cloudy | slight | 14.36 | 33.51 | 10.49 | 33.55 |
| 103.35-P | 11 | 1955 | 30°56.0' | 116°43.0' | 1020 | 130° | 5 | cloudy | moderate | 17.27 | 33.58 | 14.01 | 33.47 |
| 103.40-P | 11 | 2310 | 30°45.0' | 117°05.0' | 1040 | 130° | 4 | partly cloudy | moderate | 16.71 | - | - | 33.41 |
| 103.45-P | 12 | 0212 | 30°30.0' | 117°18.0' | 1200 | 220° | 4 | partly cloudy | moderate | 17.22 | 33.56 | 16.64 | 33.54 |
| 103.55-P | 12 | 0841 | 30°14.0' | 118°04.0' | 1650 | 300° | 4 | clear | very rough | 17.18 | 33.57 | 16.67 | 33.58 |
| 103.60-P | 12 | 1153 | 30°05.0' | 118°23.0' | 2035 | 300° | 4 | cloudy | moderate | 17.44 | 33.64 | 17.08 | 33.73 |
| 103.65-P | 12 | 1504 | 29°55.0' | 118°43.0' | 2150 | 320° | 4 | cloudy | rough | 16.80 | 33.49 | 16.41 | 33.53 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.70-P | V-12 | 1806 | 29°47.5' | 119°04.0' | 1900 | 300° | 3 | cloudy | rough | 16.94 | 33.58 | 16.90 | 33.71 |
| 103.75-P | 12 | 2115 | 29°37.0' | 119°24.0' | 1940 | 340° | 3 | partly cloudy | moderate | 17.10a) | 33.66 | 16.78 | 33.71 |
| 103.80-P | 13 | 0022 | 29°26.0' | 119°43.0' | 2000 | 340° | 3 | partly cloudy | moderate | 17.26 | 33.62 | 16.93 | 33.68 |
| 103.85-P | 13 | 0320 | 29°15.0' | 120°04.0' | 2250 | 340° | 5 | partly cloudy | rough | 17.63 | 33.68 | 17.24 | 33.71 |
| 103.90-P | 13 | 0550 | 29°10.0' | 120°19.5' | 2040 | 300° | 5 | partly cloudy | slight | 17.48 | 33.68 | 17.46 | 33.79 |
| 107.32-P | 15 | 0230 | 30°26.5' | 116°12.0' | 250 | 340° | 5 | partly cloudy | very rough | 17.37 | 33.57 | 11.87 | 33.55 |
| 107.40-P | 14 | 2206 | 30°12.5' | 116°45.0' | 1510 | 340° | 4 | cloudy | rough | 17.40 | 33.57 | 14.28 | 33.48 |
| 107.45-P | 14 | 1921 | 30°05.5' | 117°03.5' | 1200 | 320° | 4 | cloudy | very rough | 17.60 | 33.68 | 14.40 | 33.49 |
| 107.50-P | 14 | 1537 | 29°53.5' | 117°23.0' | 1600 | 320° | 4 | cloudy | rough | 17.39 | 33.62 | 12.98 | 33.49 |
| 107.55-P | 14 | 1150 | 29°42.5' | 117°43.0' | 1800 | 270° | 6 | cloudy | rough | 16.88 | 33.51 | 16.34 | 33.48 |
| 107.65-P | 14 | 0322 | 29°20.5' | 118°20.0' | 2000 | 320° | 6 | cloudy | very rough | 17.16 | 33.53 | 15.89 | 33.44 |
| 107.70-P | 14 | 0014 | 29°12.0' | 118°40.0' | 1900 | 270° | 5 | cloudy | very rough | 17.40 | 33.60 | 16.82 | - |
| 107.75-P | 13 | 2105 | 29°06.0' | 119°01.0' | 2000 | 340° | 4 | cloudy | very rough | 17.58 | 33.68 | 16.96 | 33.64 |
| 107.80-P | 13 | 1619 | 28°56.5' | 119°24.5' | 2000 | 320° | 6 | cloudy | very rough | 17.16 | 33.64 | 16.92 | 33.67 |
| 107.85-P | 13 | 1309 | 28°46.0' | 119°42.5' | 2000 | 040° | 6 | cloudy | very rough | 17.37 | 33.57 | 16.98 | 33.62 |
| 107.90-P | 13 | 0955 | 28°38.0' | 119°58.0' | 2000 | 320° | 5 | partly cloudy | very rough | 18.31 | - | 17.70 | 33.86 |
| 110.33-B | 21 | 2315 | 29°50.5' | 115°52.0' | 47 | 330° | 3 | overcast | slight | 13.90 | 33.49 | 11.16 | 33.59 |

a) Alternate value, 17.28°C.

## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.35-B | V-21 | 2145 | 29°46.5' | 116°00.0' | 700 | 320° | 2 | overcast | slight | 17.40 | 33.59 | 15.00 | 33.53 |
| 110.40-B | 21 | 1740 | 29°39.0' | 116°23.0' | 1150 | 330° | 3 | overcast | slight | 17.76 | 33.66 | 17.90a) | 33.68 |
| 110.45-B | 21 | 1540 | 29°26.0' | 116°39.5' | 450 | 330° | 4 | overcast | moderate | 17.75 | 33.67 | 16.30 | 33.48 |
| 110.50-B | 21 | 1310 | 29°16.5' | 116°59.0' | 2000 | 330° | 4 | overcast | moderate | 17.56 | 33.60 | 16.26 | 33.50 |
| 110.55-B | 21 | 1000 | 29°06.0' | 117°18.0' | 2000 | 320° | 5 | partly cloudy | moderate | 17.88 | 33.64 | 12.81 | 33.46 |
| 110.60-B | 21 | 0710 | 28°56.5' | 117°39.0' | 2000 | 330° | 4 | partly cloudy | moderate | 17.92 | 33.62 | 17.36 | 33.64 |
| 110.65-B | 21 | 0350 | 28°46.5' | 117°58.0' | 2000 | 320° | 4 | partly cloudy | moderate | 17.58 | 33.58 | 16.90 | 33.54 |
| 110.70-B | 21 | 0110 | 28°36.5' | 118°18.0' | 1850 | 330° | 4 | partly cloudy | moderate | 17.35 | 33.54 | 17.03 | 33.53 |
| 110.75-B | 20 | 2200 | 28°27.5' | 118°39.0' | 2000 | 320° | 4 | partly cloudy | moderate | 18.00 | 33.68 | 18.24 | 33.88 |
| 110.80-B | 20 | 1920 | 28°21.0' | 118°57.0' | 2000 | 330° | 4 | partly cloudy | moderate | 18.86 | 34.05 | 18.81 | 34.07 |
| 110.85-B | 20 | 1625 | 28°06.0' | 119°16.5' | 2000 | 320° | 4 | cloudy | moderate | 18.86 | 34.07 | 18.14 | 34.00 |
| 110.90-B | 20 | 1330 | 27°56.5' | 119°36.0' | 2000 | 320° | 4 | cloudy | moderate | 18.66 | 34.01 | 18.18 | 33.96 |
| 113.30-B | 18 | 1930 | 29°22.5' | 115°17.5' | 29 | 280° | 5 | clear | moderate | 16.12 | 33.67 | 11.58 | 33.77 |
| 113.35-B | 18 | 2240 | 29°12.0' | 115°39.0' | 620 | 300° | 5 | clear | moderate | 15.50 | 33.61 | 12.48 | 33.60 |
| 113.40-B | 19 | 0200 | 29°01.0' | 115°57.0' | 950 | 320° | 5 | clear | rough | 17.76 | 33.68 | 17.32 | 33.68 |
| 113.45-B | 19 | 0525 | 28°52.0' | 116°18.0' | 1600 | 320° | 5 | clear | rough | 18.11 | 33.69 | 17.14 | 33.67 |
| 113.50-B | 19 | 0830 | 28°41.0' | 116°39.5' | 2000 | 320° | 5 | clear | rough | 18.08 | 33.75 | 17.26 | 33.64 |

a) Mean value of 17.83 and 17.96°C.



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## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113.55-B | V-19 | 1145 | 28°30.0' | 117°02.0' | 2000 | 320° | 5 | cloudy | rough | 18.41 | 33.87 | 17.78 | 33.87 |
| 113.60-B | 19 | 1510 | 28°19.0' | 117°22.0' | 2000 | 330° | 5 | cloudy | rough | 18.24 | 33.78 | 17.26 | 33.73 |
| 113.65-B | 19 | 1710 | 28°13.5' | 117°35.5' | 2000 | 320° | 4 | clear | moderate | 17.82 | 33.68 | 17.14 | 33.73 |
| 113.70-B | 19 | 2000 | 28°02.0' | 117°55.5' | 2000 | 310° | 4 | clear | moderate | 17.50 | 33.58 | 17.50 | 33.73 |
| 113.75-B | 19 | 2245 | 27°52.0' | 118°15.0' | 1900 | 320° | 4 | clear | moderate | 18.52 | 33.90 | 18.03 | 33.83 |
| 113.80-B | 20 | 0120 | 27°43.5' | 118°35.0' | 2000 | 320° | 4 | clear | moderate | 18.96 | 34.02 | 18.61 | 34.02 |
| 113.85-B | 20 | 0430 | 27°32.0' | 118°53.0' | 2000 | 320° | 4 | clear | slight | 18.88 | 34.04 | 18.93 | 34.22 |
| 113.90-B | 20 | 0745 | 27°22.0' | 119°12.0' | 2000 | 330° | 4 | partly cloudy | moderate | 19.24 | 34.18 | 18.81 | 34.11 |
| 117.26-B | 18 | 1345 | 28°56.0' | 114°41.0' | 41 | 280° | 2 | overcast | moderate | 16.88 | 33.71 | 11.13 | 33.59 |
| 117.30-B | 18 | 1120 | 28°48.0' | 114°56.5' | 54 | 320° | 5 | cloudy | moderate | 16.34 | 33.59 | 13.12 | 33.55 |
| 117.35-B | 18 | 0825 | 28°38.0' | 115°16.0' | 120 | 300° | 4 | clear | moderate | 16.32 | 33.57 | 13.20 | 33.48 |
| 117.45-B | 17 | 2250 | 28°18.0' | 115°55.0' | 1800 | 320° | 4 | cloudy | moderate | 17.80 | 33.68 | 17.04 | 33.64 |
| 117.50-B | 17 | 1820 | 28°07.5' | 116°16.0' | 2000 | 300° | 4 | partly cloudy | moderate | 17.45 | 33.67 | 15.28 | 33.57 |
| 117.55-B | 17 | 1515 | 27°57.5' | 116°34.5' | 2000 | 300° | 3 | partly cloudy | moderate | 17.74 | 33.69 | 16.54 | 33.58 |
| 117.60-B | 17 | 1220 | 27°55.5' | 116°48.0' | 2000 | 320° | 3 | partly cloudy | moderate | 17.96 | - | 17.31 | - |
| 117.65-B | 17 | 0910 | 27°43.0' | 117°10.0' | 2000 | 320° | 4 | cloudy | moderate | 17.98 | 33.73 | 17.34 | 33.67 |
| 117.70-B | 17 | 0525 | 27°31.0' | 117°31.5' | 2000 | 320° | 5 | clear | moderate | 18.09 | 33.73 | 17.58 | 33.69 |
| 117.75-B | 17 | 0225 | 27°19.0' | 117°51.5' | 2000 | 340° | 4 | cloudy | slight | 18.46 | 33.75 | 18.34 | 33.95 |
| 117.80-B | 16 | 2315 | 27°08.0' | 118°11.5' | 2000 | 320° | 3 | overcast | slight | 18.92 | 34.00 | 17.82 | 34.00 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.85-B | V-16 | 2020 | 26°58.0' | 118°30.5' | 2000 | 320° | 2 | overcast | slight | 18.82 | 33.96 | 17.91 | 33.85 |
| 117.90-B | 16 | 1720 | 26°47.5' | 118°50.0' | 2000 | 340° | 4 | overcast | slight | 18.53 | 33.89 | 17.86 | 33.78 |
| 118.39-B | 18 | 0445 | 28°18.5' | 115°24.0' | 130 | 300° | 3 | clear | moderate | 16.42 | 33.56 | 14.50 | 33.55 |
| 119.33-B | 15 | 0040 | 28°19.0' | 114°53.0' | 60 | 320° | 4 | clear | moderate | 17.88 | 33.82 | 15.94 | 33.65 |
| 120.25-B | 14 | 1900 | 28°23.0' | 114°14.5' | 30 | 300° | 4 | cloudy | smooth | 17.88 | 33.74 | 12.05 | 33.69 |
| 120.30-B | 14 | 2145 | 28°13.0' | 114°34.0' | 50 | 300° | 4 | partly cloudy | slight | 17.38 | 33.75 | 13.28 | 33.77 |
| 120.35-B | 15 | 0320 | 28°03.0' | 114°54.0' | 45 | 350° | 4 | clear | moderate | 17.56 | 33.78 | 17.18 | 33.78 |
| 120.40-B | 15 | 0540 | 27°56.5' | 115°14.0' | 20 | 280° | 5 | clear | moderate | 18.18 | 33.84 | - | - |
| 120.45-B | 15 | 0805 | 27°43.0' | 115°33.0' | 1200 | 320° | 3 | clear | slight | 17.72 | 33.78 | 14.40 | 33.78 |
| 120.55-B | 15 | 1500 | 27°23.0' | 116°12.0' | 2000 | 320° | 3 | cloudy | slight | 17.29 | 33.70 | 14.62 | 33.57 |
| 120.60-B | 15 | 1725 | 27°13.0' | 116°31.5' | 2000 | 320° | 4 | cloudy | moderate | 17.69 | 33.66 | 16.10 | 33.54 |
| 120.65-B | 15 | 2020 | 27°02.5' | 116°51.0' | 2000 | 330° | 3 | cloudy | moderate | 17.88 | - | 16.39 | - |
| 120.70-B | 15 | 2320 | 26°52.0' | 117°10.0' | 2000 | 330° | 3 | cloudy | moderate | 18.17 | 33.72 | - | 33.86 |
| 120.75-B | 16 | 0220 | 26°42.5' | 117°30.0' | 2000 | 330° | 3 | cloudy | slight | 18.39 | 33.78 | 17.39 | 33.82 |
| 120.85-B | 16 | 0805 | 26°22.5' | 118°09.0' | 2000 | 320° | 4 | overcast | slight | 18.42 | 33.73 | 16.90 | 33.65 |
| 120.90-B | 16 | 1125 | 26°13.0' | 118°27.5' | 2100 | 330° | 4 | overcast | slight | 18.66 | - | 17.03 | 33.77 |
| 123.37-B | 14 | 0620 | 27°24.0' | 114°39.5' | 39 | 320° | 3 | clear | slight | 16.46 | 33.86 | 12.60 | 33.58 |
| 123.42-B | 13 | 2220 | 27°15.5' | 115°00.0' | 1000 | 320° | 5 | clear | rough | - | - | 16.48 | 33.61 |
| 123.50-B | 13 | 1810 | 26°58.0' | 115°30.5' | 1900 | 340° | 4 | cloudy | moderate | 17.94 | 33.64 | 15.82 | 33.57 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 123.55-B | V-13 | 1420 | 26°46.5' | 115°52.0' | 2000 | 340° | 4 | cloudy | moderate | 18.00 | 33.66 | 16.13 | 33.56 |
| 123.60-B | 13 | 1125 | 26°38.0' | 116°10.0' | 2000 | 320° | 4 | partly cloudy | moderate | 17.98 | 33.64 | 16.87 | 33.75 |
| 127.34-B | 12 | 1350 | 26°55.5' | 114°06.0' | 44 | 290° | 2 | partly cloudy | smooth | 15.07 | 33.90 | 12.56 | 34.09 |
| 127.40-B | 12 | 1720 | 26°43.5' | 114°29.5' | 1600 | 320° | 4 | partly cloudy | slight | 17.58 | 33.68 | 17.22 | 33.77 |
| 127.45-B | 12 | 2010 | 26°33.5' | 114°48.5' | 1800 | 320° | 4 | partly cloudy | slight | 19.36 | 34.31 | 19.07 | 34.26 |
| 127.50-B | 12 | 2245 | 26°23.5' | 115°08.0' | 1800 | 320° | 4 | cloudy | moderate | 19.23 | 34.13 | 19.02 | 34.23 |
| 127.55-B | 13 | 0210 | 26°13.5' | 115°27.0' | 1900 | 320° | 4 | partly cloudy | moderate | 18.78 | 33.86 | 17.40 | 33.84 |
| 127.60-B | 13 | 0520 | 26°03.5' | 115°46.5' | 2000 | 320° | 4 | partly cloudy | moderate | 18.81 | 33.85 | 17.06 | 33.69 |
| 130.30-B | 12 | 0825 | 26°29.0' | 113°29.0' | 41 | 320° | 2 | clear | slight | 17.36 | 33.93 | 16.86 | 33.93 |
| 130.35-B | 12 | 0530 | 26°19.0' | 113°48.5' | 160 | 280° | 4 | clear | moderate | 17.55 | 33.94 | 14.26 | 33.94 |
| 130.40-B | 12 | 0230 | 26°10.5' | 114°06.5' | 1100 | 320° | 3 | clear | slight | 17.44 | 33.80 | 15.01 | 33.77 |
| 130.45-B | 11 | 2320 | 25°59.0' | 114°25.5' | 1900 | 320° | 3 | partly cloudy | slight | 18.81 | 33.96 | 18.52 | 33.94 |
| 130.50-B | 11 | 2020 | 25°49.0' | 114°46.0' | 1900 | 330° | 4 | partly cloudy | slight | 18.90 | 34.00 | 19.29 | 34.39 |
| 130.55-B | 11 | 1725 | 25°38.5' | 115°04.0' | 2000 | 320° | 4 | clear | moderate | 18.90 | 34.02 | 17.12 | 33.73 |
| 130.60-B | 11 | 1410 | 25°30.5' | 115°28.5' | 1900 | 320° | 3 | clear | slight | 18.30 | 33.82 | 17.88 | 33.96 |
| 133.25-B | 10 | 1100 | 26°04.5' | 112°48.0' | 44 | 320° | 4 | partly cloudy | moderate | 18.12 | 33.89 | 14.94 | 33.82 |
| 133.30-B | 10 | 1400 | 25°54.5' | 113°07.5' | 108 | 360° | 4 | cloudy | moderate | 18.05 | 33.89 | 15.06 | 33.84 |
| 133.35-B | 10 | 2020 | 25°44.5' | 113°26.5' | 350 | 320° | 4 | cloudy | moderate | 17.66 | 33.86 | 16.70 | 33.77 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 133.40-B | V-10 | 2330 | 25°33.0' | 113°43.5' | 1300 | 320° | 4 | cloudy | moderate | 18.27 | 33.84 | 17.76a) | 33.86 |
| 133.45-B | 11 | 0225 | 25°22.0' | 114°00.0' | 1900 | 340° | 4 | cloudy | moderate | 18.35 | 33.86 | 17.44 | 33.89 |
| 133.50-B | 11 | 0615 | 25°14.5' | 114°24.0' | 1900 | 320° | 4 | clear | moderate | 18.65 | 33.86 | 18.66 | 34.19 |
| 137.23-B | 10 | 0515 | 25°34.0' | 112°18.5' | 40 | 300° | 4 | partly cloudy | moderate | 19.06 | 34.22 | 14.92 | 34.27 |
| 137.30-B | 10 | 0130 | 25°20.0' | 112°45.5' | 180 | 300° | 3 | partly cloudy | moderate | 18.52 | 33.91 | 16.53 | 33.95 |
| 137.35-B | 9 | 2000 | 25°10.0' | 113°04.5' | 650 | 300° | 4 | partly cloudy | moderate | 18.08 | 33.86 | 16.45 | 33.80 |
| 137.45-B | 9 | 1215 | 24°50.0' | 113°42.5' | 1900 | 320° | 4 | cloudy | moderate | 18.57 | 33.91 | 19.10 | 34.31 |
| 137.50-B | 9 | 0910 | 24°40.0' | 114°01.5' | 1700 | 320° | 4 | overcast | moderate | 18.58 | 33.91 | 17.85 | 34.02 |

a) Mean value of 17.69 and 17.82°C.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

50.50 BLACK DOUGLAS; June 15, 1958; 0412 GCT; 39°40'N, 124°08'W; sounding, 520 fm; wind, 300°, force 5; weather, clear; sea, rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.72 | 32.92 | 5.98 | 329 | 0 | 13.72 | 32.92 | 5.98 | 24.66 | 329 | 0.00 |
| 10 | 13.71 | 32.92 | 6.05 | 329 | 10 | 13.71 | 32.92 | 6.05 | 24.66 | 329 | 0.03 |
| 28 | 13.45 | 32.92 | 5.91 | 324 | 20 | 13.63 | 32.92 | 6.02 | 24.68 | 327 | 0.07 |
| 42 | 10.98 | 32.92 | 5.43 | 279 | 30 | 13.42 | 32.92 | 5.90 | 24.72 | 323 | 0.10 |
| 51 | 10.02 | 33.01 | 5.15 | 257 | 50 | 10.07 | 33.01 | 5.17 | 25.41 | 258 | 0.16 |
| 60 | 9.14 | 33.04 | 4.99 | 241 | 75 | 8.70 | 33.17 | 5.24 | 25.76 | 224 | 0.22 |
| 69 | 8.84 | 33.13 | 5.29 | 230 | 100 | 8.26 | 33.46 | 4.62 | 26.04 | 198 | 0.27 |
| 87 | 8.42 | 33.27 | 5.07 | 214 | 150 | 8.39 | 33.90 | 2.88 | 26.38 | 166 | 0.36 |
| 100 | 8.26 | 33.46 | 4.62 | 198 | 200 | 7.80 | 33.99 | 2.40 | 26.54 | 151 | 0.44 |
| 113 | 8.34 | 33.62 | 4.23 | 186 | 250 | 7.37 | 34.04 | 1.66 | 26.63 | 142 | 0.52 |
| 135 | 8.26 | 33.78 | 3.30 | 174 | 300 | 6.66 | 34.06 | 1.52 | 26.74 | 131 | 0.59 |
| 160 | 8.18 | 33.92 | 2.85 | 162 | 400 | 6.21 | 34.15 | 0.69 | 26.88 | 118 | 0.72 |
| 194 | 7.82 | 33.97 | 2.70 | 153 | 500 | 5.64 | 34.21 | 0.54 | 27.00 | 107 | 0.83 |
| 241 | 7.46 | 34.04 | 1.73 | 143 | | | | | | | |
| 313 | 6.52 | 34.07 | 1.49 | 128 | | | | | | | |
| 405 | 6.20 | 34.16 | 0.68 | 118 | | | | | | | |
| 538 | 5.40 | 34.22 | 0.51 | 104 | | | | | | | |

60.55 BLACK DOUGLAS; June 12, 1958; 0300 GCT; 37°47.5'N, 123°15'W; sounding, 65 fm; wind, 320°, force 6; weather, partly cloudy; sea, very rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.92 | 32.99 | 6.50 | 368 | 0 | 15.92 | 32.99 | 6.50 | 24.25 | 368 | 0.00 |
| 10 | 14.38 | 33.15 | 6.76 | 325 | 10 | 14.38 | 33.15 | 6.76 | 24.70 | 325 | 0.03 |
| 29 | 10.21 | 33.08 | 5.52 | 256 | 20 | 11.17 | 33.09 | 5.80 | 25.28 | 270 | 0.06 |
| 48 | 10.42 | 33.40 | 4.82 | 234 | 30 | 10.24 | 33.09 | 5.51 | 25.44 | 255 | 0.09 |
| 72 | 9.32 | 33.68 | 2.88 | 196 | 50 | 10.38 | 33.42 | 4.70 | 25.68 | 232 | 0.14 |
| 96 | 9.10 | 33.75 | 2.39 | 188 | 75 | 9.27 | 33.69 | 2.80 | 26.07 | 195 | 0.19 |
| | | | | | 100 | (9.08) | (33.76) | (2.32) | (26.16) | (187) | (0.24) |

60.90 BLACK DOUGLAS; June 11, 1958; 0335 GCT; 36°37'N, 125°47'W; sounding, 2400 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.34 | 32.97 | 5.46 | 401 | 0 | 17.34 | 32.97 | 5.46 | 23.90 | 401 | 0.00 |
| 10 | 17.32 | 32.95 | 5.55 | 402 | 10 | 17.32 | 32.95 | 5.55 | 23.89 | 402 | 0.04 |
| 29 | 14.90 | 33.22 | 5.80 | 331 | 20 | 16.10 | 33.09 | 5.69 | 24.28 | 365 | 0.08 |
| 43 | 14.69 | 33.30 | 5.74 | 320 | 30 | 14.90 | 33.22 | 5.80 | 24.65 | 330 | 0.11 |
| 53 | 13.72 | 33.18 | 5.71 | 310 | 50 | 13.87 | 33.20 | 5.72 | 24.84 | 312 | 0.18 |
| 63 | 13.50 | 33.19 | 5.53 | 305 | 75 | 13.25 | 33.16 | 5.84 | 24.94 | 302 | 0.25 |
| 72 | 13.28 | 33.16 | 5.93 | 303 | 100 | 11.70 | 33.29 | 5.16 | 25.34 | 264 | 0.33 |
| 90 | 13.04 | 33.24 | 4.73 | 293 | 150 | 9.05 | 33.46 | 4.84 | 25.92 | 209 | 0.44 |
| 104 | 11.12 | 33.31 | 5.32 | 253 | 200 | 8.23 | 33.78 | 3.98 | 26.30 | 173 | 0.54 |
| 116 | 10.37 | 33.34 | 5.18 | 238 | 250 | 7.60 | 33.96 | 2.98 | 26.53 | 151 | 0.62 |
| 139 | 9.31 | 33.39 | 4.93 | 218 | 300 | 6.78 | 33.98 | 2.44 | 26.67 | 138 | 0.70 |
| 165 | 8.76 | 33.55 | 4.70 | 198 | 400 | 5.92 | 34.02 | 1.55 | 26.81 | 125 | 0.84 |
| 199 | 8.24 | 33.78 | 3.99 | 173 | 500 | 5.41 | 34.08 | 0.93 | 26.93 | 114 | 0.96 |
| 248 | 7.62 | 33.95 | 3.01 | 152 | | | | | | | |
| 322 | 6.48 | 33.99 | 2.29 | 134 | | | | | | | |
| 415 | 5.83 | 34.02 | 1.48 | 124 | | | | | | | |
| 549 | 5.16 | 34.15 | 0.62 | 106 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_{T_3}^{-5}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_{T_3}^{-5}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

BLACK DOUGLAS; June 7, 1958; 1535 GCT; 36°03'N, 122°02'W; sounding, 750 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 04°. 70.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.49 | 33.06 | 5.53 | 376 | 0 | 16.49 | 33.06 | 5.53 | 24.16 | 376 | 0.00 |
| 10 | 16.06 | 33.01 | 5.49 | 369 | 10 | 16.06 | 33.01 | 5.49 | 24.24 | 369 | 0.04 |
| 29 | 13.47 | 33.27 | 6.02 | 298 | 20 | 15.05 | 33.12 | 5.71 | 24.53 | 341 | 0.07 |
| 39 | 11.61 | 33.42 | - | 254 | 30 | 13.38 | 33.28 | 6.02 | 25.01 | 296 | 0.10 |
| 48 | 11.38 | 33.49 | 4.62 | 244 | 50 | 11.38 | 33.50 | 4.55 | 25.56 | 243 | 0.16 |
| 58 | 11.34 | 33.60 | 4.38 | 235 | 75 | 10.26 | 33.65 | 3.80 | 25.88 | 213 | 0.22 |
| 67 | 11.05 | 33.66 | 4.49 | 226 | 100 | 8.94 | 33.70 | 3.40 | 26.14 | 189 | 0.27 |
| 80 | 9.88 | 33.64 | 3.52 | 208 | 150 | 8.53 | 33.94 | 2.30 | 26.39 | 165 | 0.36 |
| 94 | 9.12 | 33.64 | 3.46 | 196 | 200 | 7.92 | 34.06 | 1.56 | 26.57 | 147 | 0.44 |
| 107 | 8.80 | 33.78 | 3.21 | 181 | 250 | 7.68 | 34.15 | 1.20 | 26.67 | 138 | 0.51 |
| 129 | 8.82 | 33.86 | 2.68 | 175 | 300 | 7.36 | 34.16 | 1.14 | 26.72 | 133 | 0.58 |
| 186 | 8.06 | 34.04 | 1.98 | 152 | 400 | 6.64 | 34.25 | 0.66 | 26.90 | 116 | 0.70 |
| 231 | 7.81 | 34.14 | 1.21 | 140 | 500 | 5.80 | 34.27 | 0.44 | 27.02 | 104 | 0.82 |
| 302 | - | 34.16 | 1.14 | | | | | | | | |
| 393 | 6.68 | 34.25 | 0.68 | 117 | | | | | | | |
| 513 | 5.70 | 34.27 | 0.41 | 103 | | | | | | | |

BLACK DOUGLAS; June 8, 1958; 1054 GCT; 34°53'N, 124°30'W; sounding, 2250 fm; wind, 300°, force 4; weather, overcast; sea, moderate; wire angle, 07°. 70.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.76 | 33.02 | 5.39 | 407 | 0 | 17.76 | 33.02 | 5.39 | 23.84 | 407 | 0.00 |
| 10 | 17.74 | 33.01 | 5.30 | 407 | 10 | 17.74 | 33.01 | 5.30 | 23.84 | 407 | 0.04 |
| 30 | 16.30 | 33.27 | 5.69 | 356 | 20 | 17.68 | 33.01 | 5.32 | 23.85 | 406 | 0.08 |
| 39 | 15.38 | 33.31 | 5.75 | 334 | 30 | 16.30 | 33.27 | 5.69 | 24.37 | 356 | 0.12 |
| 49 | 15.02 | 33.28 | 5.58 | 329 | 50 | 15.00 | 33.27 | 5.61 | 24.66 | 329 | 0.19 |
| 58 | 14.62 | 33.22 | 5.98 | 325 | 75 | 13.98 | 33.23 | 5.83 | 24.85 | 311 | 0.27 |
| 68 | 14.34 | 33.22 | 5.88 | 320 | 100 | 11.46 | 33.33 | 5.06 | 25.41 | 257 | 0.34 |
| 81 | 13.34 | 33.25 | 5.76 | 297 | 150 | 9.42 | 33.72 | 3.00 | 26.07 | 195 | 0.45 |
| 95 | 11.88 | 33.30 | 5.35 | 267 | 200 | 9.04 | 34.04 | 2.18 | 26.38 | 166 | 0.54 |
| 108 | 10.81 | 33.39 | 4.56 | 242 | 250 | 8.48 | 34.11 | 1.76 | 26.52 | 152 | 0.63 |
| 130 | 9.84 | 33.60 | 3.41 | 210 | 300 | 7.88 | 34.09 | 1.85 | 26.60 | 145 | 0.70 |
| 157 | 9.30 | 33.77 | 2.86 | 190 | 400 | 6.76 | 34.17 | 1.04 | 26.82 | 124 | 0.84 |
| 188 | 9.10 | 33.98 | 2.30 | 171 | 500 | 5.88 | 34.21 | 0.62 | 26.97 | 110 | 0.96 |
| 232 | 8.68 | 34.11 | 1.74 | 155 | | | | | | | |
| 304 | - | 34.09 | 1.86 | | | | | | | | |
| 395 | 6.80 | 34.17 | 1.06 | 124 | | | | | | | |
| 516 | 5.76 | 34.22 | 0.52 | 108 | | | | | | | |

ORCA; June 5, 1958; 0020 GCT; 34°26'N, 120°31.5'W; sounding, 52 fm; wind, 280°, force 3; weather, clear; sea, rough; wire angle, 06°. 80.51

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.69 | 33.69 | 5.07 | 235 | 0 | 11.69 | 33.69 | 5.07 | 25.65 | 235 | 0.00 |
| 10 | 11.65 | 33.64 | 5.10 | 238 | 10 | 11.65 | 33.64 | 5.10 | 25.62 | 238 | 0.02 |
| 30 | 11.32 | 33.72 | 4.80 | 226 | 20 | 11.50 | 33.69 | 5.00 | 25.69 | 231 | 0.05 |
| 50 | 11.04 | 33.69 | 4.37 | 224 | 30 | 11.32 | 33.72 | 4.80 | 25.74 | 226 | 0.07 |
| 76 | 10.21 | 33.72 | 3.34 | 208 | 50 | 11.04 | 33.69 | 4.37 | 25.77 | 224 | 0.12 |
| | | | | | 75 | 10.25 | 33.72 | 3.37 | 25.93 | 208 | 0.17 |

SIO

CCOFI
5806

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

80.55 ORCA; June 5, 1958; 0258 GCT; 34°17.5'N, 120°47.5'W; sounding, 400 fm; wind, 280°, force 3; weather, clear; sea, rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.66 | 33.59 | 8.36 | 298 | 0 | 14.66 | 33.59 | 8.36 | 24.98 | 298 | 0.00 |
| 10 | 14.00 | 33.58 | 8.32 | 286 | 10 | 14.00 | 33.58 | 8.32 | 25.12 | 286 | 0.03 |
| 28 | 13.45 | 33.58 | 6.38 | 275 | 20 | 13.60 | 33.58 | 6.75 | 25.20 | 278 | 0.06 |
| 38 | 12.29 | 33.55 | 4.94 | 256 | 30 | 13.43 | 33.58 | 6.35 | 25.23 | 275 | 0.08 |
| 47 | 11.87 | 33.62 | 4.56 | 243 | 50 | 11.60 | 33.66 | 4.27 | 25.65 | 235 | 0.14 |
| 57 | 11.18 | 33.71 | 3.75 | 224 | 75 | 9.93 | 33.78 | 2.78 | 26.03 | 199 | 0.19 |
| 66 | 10.10 | 33.75 | 2.84 | 204 | 100 | 9.35 | 33.87 | 2.29 | 26.20 | 183 | 0.24 |
| 81 | 9.80 | 33.79 | 2.74 | 196 | 150 | 8.92 | 34.03 | 1.90 | 26.40 | 164 | 0.33 |
| 94 | 9.42 | 33.86 | 2.32 | 185 | 200 | 8.56 | 34.16 | 1.42 | 26.55 | 150 | 0.41 |
| 108 | 9.22 | 33.90 | 2.27 | 179 | 250 | 8.20 | 34.22 | 1.17 | 26.65 | 140 | 0.48 |
| 131 | 9.02 | 33.97 | 2.18 | 170 | 300 | 8.00 | 34.24 | 1.16 | 26.70 | 136 | 0.55 |
| 158 | 8.86 | 34.06 | 1.79 | 161 | 400 | 7.28 | 34.24 | 0.79 | 26.80 | 126 | 0.68 |
| 191 | 8.61 | 34.15 | 1.52 | 151 | 500 | 6.40 | 34.23 | 0.46 | 26.92 | 115 | 0.81 |
| 237 | 8.30 | 34.21 | 1.20 | 142 | | | | | | | |
| 310 | 7.98 | 34.24 | 1.13 | 134 | | | | | | | |
| 404 | 7.22 | 34.24 | 0.76 | 125 | | | | | | | |
| 527 | 6.13 | 34.22 | 0.38 | 112 | | | | | | | |

80.60 ORCA; June 5, 1958; 0655, 0749 GCT; 34°08'N, 121°08'W; sounding, 1200 fm; wind, 280°, force 3; weather, partly cloudy; sea, rough; wire angle, 29°, 29°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.42 | 33.04 | 5.80 | 376 | 0 | 16.42 | 33.04 | 5.80 | 24.17 | 376 | 0.00 |
| 10 | 16.44 | 33.04 | 6.00 | 376 | 10 | 16.44 | 33.04 | 6.00 | 24.16 | 376 | 0.04 |
| 28 | 14.04 | 32.94 | 6.08 | 334 | 20 | 15.72 | 33.00 | 6.01 | 24.30 | 363 | 0.07 |
| 43 | 13.48 | 33.20 | 6.40 | 303 | 30 | 13.96 | 32.96 | 6.13 | 24.64 | 331 | 0.11 |
| 52 | 13.02 | 33.22 | 5.76 | 294 | 50 | 13.18 | 33.22 | 5.94 | 25.00 | 297 | 0.17 |
| 61 | 11.51 | 33.23 | 5.35 | 266 | 75 | 10.60 | 33.38 | 5.03 | 25.60 | 239 | 0.24 |
| 71 | 10.84 | 33.36 | 5.11 | 244 | 100 | 9.40 | 33.44 | 4.37 | 25.86 | 215 | 0.30 |
| 90 | 9.70 | 33.42 | 4.55 | 221 | 150 | 8.82 | 33.89 | 2.47 | 26.30 | 173 | 0.40 |
| 104 | 9.34 | 33.45 | 4.34 | 214 | 200 | 8.06 | 33.99 | 2.30 | 26.50 | 154 | 0.48 |
| 117 | 9.16 | 33.60 | 4.07 | 200 | | | | | | | |
| 140 | 9.13 | 33.82 | 2.50 | 183 | | | | | | | |
| 149 | 8.82 | 33.89 | 2.47a) | 173 | | | | | | | |
| 181 | 8.32 | 33.96 | 2.44 | 160 | | | | | | | |
| 226 | 7.78 | 34.03 | 1.96 | 147 | | | | | | | |

80.70 ORCA; June 5, 1958; 1344, 1409 GCT; 33°44.5'N, 121°51.5'W; sounding, 2000+ fm; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, 07°, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.74 | 32.98 | 5.78 | 387 | 0 | 16.74 | 32.98 | 5.78 | 24.05 | 387 | 0.00 |
| 10 | 16.75 | 33.04 | 5.85 | 383 | 10 | 16.75 | 33.04 | 5.85 | 24.10 | 383 | 0.04 |
| 29 | 15.62 | 32.96 | 5.98 | 365 | 20 | 16.74 | 33.04 | 5.86 | 24.10 | 383 | 0.08 |
| 45 | 13.42 | 32.94 | 6.22 | 322 | 30 | 15.40 | 32.96 | 6.00 | 24.33 | 360 | 0.11 |
| 55 | 12.90 | 33.00 | 6.29 | 308 | 50 | 13.16 | 32.96 | 6.26 | 24.81 | 315 | 0.18 |
| 65 | 12.32 | 32.99 | 6.02 | 297 | 75 | 12.00 | 33.11 | 5.48 | 25.15 | 283 | 0.26 |
| 74 | 12.02 | 33.10 | 5.52 | 284 | 100 | 10.22 | 33.39 | 4.40 | 25.68 | 232 | 0.32 |
| 94 | 10.59 | 33.32 | 4.70 | 243 | 150 | 8.92 | 33.73 | 3.28 | 26.16 | 186 | 0.43 |
| 108 | 9.98 | 33.50 | 4.11 | 220 | 200 | 8.29 | 33.98 | 2.59 | 26.45 | 159 | 0.52 |
| 122 | 9.92 | 33.60 | 3.80 | 212 | 250 | 7.80 | 34.08 | 2.02 | 26.61 | 144 | 0.59 |
| 147 | 9.04 | 33.71 | 3.28 | 190 | 300 | 7.25 | 34.13 | 1.56 | 26.72 | 133 | 0.66 |
| 175 | 8.55 | 33.88 | 3.27 | 170 | 400 | 6.58 | 34.19 | 0.93 | 26.86 | 120 | 0.80 |
| 213 | 8.18 | 34.03 | 2.27 | 153 | 500 | 5.96 | | 0.48 | | | |
| 265 | 7.60 | 34.10 | 1.92 | 140 | 600 | (5.32) | | (0.27) | | | |
| 347 | 6.86 | 34.17 | 1.18 | 125 | | | | | | | |
| 449 | 6.22 | 34.22 | 0.62 | 114 | | | | | | | |
| 593 | 5.38 | 34.16u | 0.30 | | | | | | | | |

a) Alternate value, 2.74 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

ORCA; June 5, 1958; 1954, 2023 GCT; 33°29'N, 122°26'W; sounding, 2000+ fm; wind, 290°, force 2; weather, partly cloudy; sea, moderate; wire angle, 13°, 14°. 80.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.72 | 33.04 | 5.62 | 405 | 0 | 17.72 | 33.04 | 5.62 | 23.86 | 405 | 0.00 |
| 10 | 17.40 | 33.12 | 5.68 | 392 | 10 | 17.40 | 33.12 | 5.68 | 24.00 | 392 | 0.04 |
| 29 | 15.67 | 33.30 | 5.88 | 340 | 20 | 17.37 | 33.12 | 5.69 | 24.00 | 392 | 0.08 |
| 38 | 15.46 | 33.31 | 5.90 | 336 | 30 | 15.63 | 33.30 | 5.89 | 24.54 | 340 | 0.12 |
| 48 | 14.65 | 33.27 | 6.03 | 322 | 50 | 14.55 | 33.26 | 6.02 | 24.75 | 321 | 0.18 |
| 57 | 14.36 | 33.23 | 6.00 | 319 | 75 | 14.18 | 33.39 | 6.03 | 24.92 | 304 | 0.26 |
| 66 | 14.22 | 33.30 | 6.04 | 311 | 100 | 11.65 | 33.42 | 5.48 | 25.45 | 254 | 0.33 |
| 80 | 14.18 | 33.40 | 6.03 | 303 | 150 | 9.25 | 33.63 | 4.57 | 26.02 | 200 | 0.45 |
| 94 | 12.42 | 33.43 | 5.94 | 267 | 200 | 8.59 | 33.85 | 3.12 | 26.30 | 173 | 0.54 |
| 108 | 10.80 | 33.42 | 5.09 | 240 | 250 | 8.09 | 34.07 | 2.18 | 26.55 | 150 | 0.62 |
| 132 | 9.78 | 33.51 | 5.08 | 216 | 300 | 7.38 | 34.07 | 1.63 | 26.66 | 140 | 0.70 |
| 159 | 9.14 | 33.66 | 4.39 | 195 | 400 | 6.57 | 34.08 | 0.99 | 26.78 | 128 | 0.84 |
| 191 | 8.66 | 33.81 | 3.36 | 177 | 500 | 5.86 | 34.11 | 0.53 | 26.89 | 117 | 0.96 |
| 238 | 8.24 | 34.06 | 2.38 | 152 | | | | | | | |
| 312 | 7.26 | 34.07 | 1.54 | 138 | | | | | | | |
| 407 | 6.52 | 34.09a) | 0.94 | 126 | | | | | | | |
| 534 | 5.66 | 34.12a) | 0.46 | 114 | | | | | | | |

ORCA; June 6, 1958; 0300 GCT; 33°10'N, 123°16'W; sounding, 2000+ fm; wind, 290°, force 1; weather, partly cloudy; sea, moderate; wire angle, 01°. 80.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.36 | 33.31 | 5.46 | 399 | 0 | 18.36 | 33.31 | 5.46 | 23.93 | 399 | 0.00 |
| 10 | 17.88 | 33.30 | 5.44 | 390 | 10 | 17.88 | 33.30 | 5.44 | 24.02 | 390 | 0.04 |
| 30 | 16.18 | 33.28 | 5.74 | 353 | 20 | 17.43 | 33.30 | 5.49 | 24.12 | 380 | 0.08 |
| 39 | 15.22 | 33.24 | 5.91 | 336 | 30 | 16.18 | 33.28 | 5.74 | 24.41 | 353 | 0.11 |
| 49 | 14.90 | 33.26 | 5.86 | 328 | 50 | 14.86 | 33.26 | 5.86 | 24.68 | 328 | 0.18 |
| 59 | 14.41 | 33.28 | 5.82 | 316 | 75 | 14.15 | 33.33 | 5.92 | 24.88 | 308 | 0.26 |
| 68 | 14.26 | 33.31 | 5.90 | 311 | 100 | 11.27 | 33.40 | 4.79 | 25.50 | 249 | 0.33 |
| 82 | 14.05 | 33.36 | 5.96 | 303 | 150 | 9.39 | 33.68 | 3.60 | 26.04 | 198 | 0.44 |
| 96 | 11.62 | 33.40 | 4.92 | 255 | 200 | 8.55 | 33.91 | 2.63 | 26.36 | 168 | 0.54 |
| 111 | 10.60 | 33.40 | 4.56 | 238 | 250 | 8.00 | 34.10 | 2.17 | 26.60 | 145 | 0.62 |
| 135 | 9.67 | 33.59 | 3.88 | 209 | 300 | 7.40 | 34.11 | 1.68 | 26.68 | 137 | 0.69 |
| 164 | 9.19 | 33.75 | 3.37 | 189 | 400 | 6.67 | 34.18 | 0.83 | 26.84 | 122 | 0.82 |
| 198 | 8.58 | 33.90 | 2.66 | 169 | 500 | 6.05 | 34.26 | 0.45 | 26.98 | 108 | 0.95 |
| 245 | 8.04 | 34.10 | 2.22 | 146 | | | | | | | |
| 323 | 7.20 | 34.11 | 1.44 | 134 | | | | | | | |
| 420 | 6.54 | 34.20 | 0.70 | 118 | | | | | | | |
| 551 | 5.76 | 34.30 | 0.32 | 102 | | | | | | | |

ORCA; June 12, 1958; 0445 GCT; 32°50'N, 119°01'W; sounding, 950 fm; wind, 300°, force 4; weather, clear; sea, rough; wire angle, 31°. 90.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.32 | 33.67 | 6.02 | 328 | 0 | 16.32 | 33.67 | 6.02 | 24.68 | 328 | 0.00 |
| 8 | 16.32 | 33.58 | 5.90 | 334 | 10 | 16.28 | 33.58 | 5.89 | 24.60 | 334 | 0.03 |
| 30 | 12.86 | 33.45 | 5.46 | 274 | 20 | 16.18 | 33.57 | 5.87 | 24.64 | 331 | 0.07 |
| 38 | 12.38 | 33.54 | 5.08 | 258 | 30 | 12.86 | 33.45 | 5.46 | 25.24 | 274 | 0.10 |
| 51 | 11.58 | 33.60 | 4.61 | 239 | 50 | 11.62 | 33.60 | 4.63 | 25.59 | 241 | 0.15 |
| 60 | 11.07 | 33.57 | 4.38 | 233 | 75 | 10.32 | 33.62 | 3.90 | 25.84 | 216 | 0.20 |
| 68 | 10.74 | 33.60 | 4.13 | 225 | 100 | 9.27 | 33.78 | 3.28 | 26.14 | 188 | 0.26 |
| 85 | 9.67 | 33.65 | 3.69 | 204 | 150 | 8.72 | 34.07 | 2.37 | 26.46 | 158 | 0.35 |
| 101 | 9.26 | 33.78 | 3.28 | 188 | 200 | 8.40 | 34.20 | 1.54 | 26.61 | 144 | 0.42 |
| 113 | 9.10 | 33.82 | 2.88 | 183 | 250 | 8.07 | 34.26 | 1.31 | 26.70 | 135 | 0.49 |
| 132 | 9.00 | 33.96 | 2.54 | 171 | 300 | 7.72 | 34.34 | 0.98 | 26.82 | 124 | 0.56 |
| 162 | 8.59 | 34.10 | 2.30 | 154 | 400 | 6.82 | 34.42 | 0.51 | 27.01 | 106 | 0.68 |
| 191 | 8.42 | 34.20 | 1.58 | 144 | 500 | (6.06) | (34.42) | (0.33) | (27.10) | (97) | (0.78) |
| 234 | 8.20 | 34.19u | 1.40 | | | | | | | | |
| 300 | 7.72 | 34.34 | 0.98 | 124 | | | | | | | |
| 384 | 6.96 | 34.42 | 0.55 | 108 | | | | | | | |
| 499 | 6.07 | 34.42 | 0.34 | 97 | | | | | | | |

a) Salinity samples at 407 and 534 meters appear to have been reversed; they are assumed to be listed in correct order.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| 90.90 | ORCA; June 10, 1958; 2335 GCT; 31°27'N, 121°55'W; sounding, 2000+ fm; wind, 300°, force 4; weather, cloudy; sea, rough; wire angle, 30°. | | | | | | | | | | |
| 0 | 18.58 | 33.48 | 5.12 | 393 | 0 | 18.58 | 33.48 | 5.12 | 23.99 | 393 | 0.00 |
| 8 | 18.56 | 33.47 | 5.06 | 393 | 10 | 18.56 | 33.47 | 5.06 | 23.99 | 393 | 0.04 |
| 26 | 15.86 | 33.25 | 5.36 | 348 | 20 | 18.50 | 33.46 | 5.06 | 24.00 | 392 | 0.08 |
| 39 | 15.62 | 33.35 | 5.36 | 336 | 30 | 15.77 | 33.28 | 5.36 | 24.50 | 345 | 0.12 |
| 47 | 15.53 | 33.40 | 5.36 | 330 | 50 | 15.45 | 33.41 | 5.36 | 24.66 | 329 | 0.18 |
| 57 | 15.34 | 33.44 | 5.36 | 324 | 75 | 14.47 | 33.48 | 5.43 | 24.94 | 303 | 0.26 |
| 66 | 15.16 | 33.40u | 5.36 | | 100 | 11.86 | 33.44 | 4.84 | 25.42 | 257 | 0.33 |
| 82 | 13.81 | 33.48 | 5.52 | 290 | 150 | 9.30 | 33.64 | 3.59 | 26.03 | 199 | 0.45 |
| 95 | 12.37 | 33.42 | 5.02 | 267 | 200 | 8.50 | 33.97 | 3.18 | 26.41 | 163 | 0.54 |
| 108 | 11.10 | 33.47 | 4.63 | 240 | 250 | 7.90 | 34.05 | 2.20 | 26.56 | 148 | 0.62 |
| 129 | 10.02 | 33.52 | 4.06 | 220 | 300 | 7.41 | 34.11 | 1.92 | 26.68 | 137 | 0.69 |
| 154 | 9.20 | 33.68 | 3.54 | 195 | 400 | 6.42 | 34.26 | 0.96 | 26.94 | 113 | 0.82 |
| 187 | 8.69 | 33.92 | 3.42 | 170 | 500 | 5.96 | 34.33 | 0.63 | 27.05 | 102 | 0.94 |
| 232 | 8.09 | 34.02 | 2.35 | 153 | | | | | | | |
| 307 | 7.36 | 34.12 | 1.86 | 135 | | | | | | | |
| 401 | 6.42 | 34.26 | 0.96 | 113 | | | | | | | |
| 538 | 5.78 | 34.34 | 0.51 | 99 | | | | | | | |
| 100.70 | ORCA; June 24, 1958; 1837 GCT; 30°21'N, 119°27.5'W; sounding, 2000+ fm; wind, 280°, force 5; weather, overcast; sea, high; wire angle, 28°. | | | | | | | | | | |
| 0 | 19.08 | 33.64 | | 393 | 0 | 19.08 | 33.64 | | 23.99 | 393 | 0.00 |
| 10 | 19.08 | - | | | 10 | 19.08 | 33.64 | | 23.99 | 393 | 0.04 |
| 33 | 18.78 | 33.73 | | 380 | 20 | 19.03 | 33.66 | | 24.02 | 390 | 0.08 |
| 43 | 17.43 | 33.59 | | 358 | 30 | 18.99 | 33.68 | | 24.04 | 388 | 0.12 |
| 57 | 16.96 | - | | | 50 | 17.00 | 33.59 | | 24.46 | 348 | 0.19 |
| 67 | 16.96 | 33.68 | | 342 | 75 | 16.43 | 33.68 | | 24.65 | 330 | 0.28 |
| 76 | 16.38 | 33.68 | | 329 | 100 | 15.00 | 33.66 | | 24.96 | 301 | 0.36 |
| 95 | 15.36 | 33.66 | | 308 | 150 | 10.73 | 33.55 | | 25.72 | 228 | 0.49 |
| 113 | 13.88 | 33.68 | | 276 | 200 | 9.03 | 33.76 | | 26.16 | 186 | 0.60 |
| 127 | 12.46 | 33.59 | | 256 | 250 | 8.08 | 33.95 | | 26.46 | 158 | 0.68 |
| 149 | 10.78 | 33.55 | | 229 | 300 | 7.37 | 34.07 | | 26.66 | 139 | 0.76 |
| 184 | 9.44 | 33.71 | | 196 | 400 | 6.50 | 34.19 | | 26.87 | 119 | 0.90 |
| 220 | 8.61 | 33.82 | | 175 | 500 | 5.85 | 34.29 | | 27.03 | 104 | 1.01 |
| 274 | 7.72 | 34.03 | | 147 | 600 | 5.30 | 34.36 | | 27.16 | 92 | 1.12 |
| 356 | 6.80 | 34.13 | | 127 | | | | | | | |
| 463 | 6.08 | 34.26 | | 108 | | | | | | | |
| 608 | 5.22 | 34.37 | | 90 | | | | | | | |
| 107.60 | ORCA; June 15, 1958; 1917 GCT; 29°34'N, 118°04'W; sounding, 1800 fm; wind, 310°, force 2; weather, overcast; sea, rough; wire angle, 09°. | | | | | | | | | | |
| 0 | 18.76 | 33.68 | 5.36 | 382 | 0 | 18.76 | 33.68 | 5.36 | 24.10 | 382 | 0.00 |
| 10 | 18.65 | 33.75 | 5.20 | 376 | 10 | 18.65 | 33.75 | 5.20 | 24.16 | 376 | 0.04 |
| 30 | 18.48 | 33.74 | - | 372 | 20 | 18.57 | 33.75 | | 24.19 | 374 | 0.08 |
| 60 | 18.03 | 33.69 | - | 365 | 30 | 18.48 | 33.74 | | 24.21 | 372 | 0.11 |
| 70 | 14.49 | 33.64 | - | 291 | 50 | 18.20 | 33.71 | | 24.26 | 367 | 0.19 |
| 79 | 12.72 | 33.49 | - | 268 | 75 | 13.40 | 33.55 | | 25.21 | 277 | 0.27 |
| 94 | 10.88 | 33.51 | - | 234 | 100 | 10.65 | 33.52 | | 25.70 | 230 | 0.33 |
| 109 | 10.44 | 33.57 | - | 222 | 150 | 10.05 | 33.93 | | 26.12 | 190 | 0.44 |
| 123 | 10.26 | 33.68 | - | 211 | 200 | 9.50 | 34.24 | | 26.46 | 158 | 0.53 |
| 143 | 10.14 | 33.89 | - | 194 | 250 | 9.02 | 34.31 | | 26.60 | 145 | 0.60 |
| 163 | 9.92 | 34.02 | - | 181 | 300 | 7.90 | 34.24 | | 26.72 | 133 | 0.68 |
| 191 | 9.64 | 34.22 | - | 161 | 400 | 6.81 | 34.23 | | 26.86 | 120 | 0.81 |
| 215 | 9.25 | 34.27 | - | 152 | 500 | 6.20 | 34.28 | | 26.98 | 109 | 0.93 |
| 268 | 8.44 | 34.27 | - | 139 | 600 | (5.55) | (34.37) | | (27.13) | (94) | (1.04) |
| 349 | 7.21 | 34.22 | - | 126 | | | | | | | |
| 455 | 6.47 | 34.25 | - | 114 | | | | | | | |
| 592 | 5.60 | 34.36 | - | 95 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ $cm^3/g$ | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ $cm^3/g$ | ΔD dyn. m |

STRANGER; June 19, 1958; 0442 GCT; 27°37'N, 115°53'W; sounding, 2400 fm; wind, 320°, force 6; weather, missing; sea, very rough; wire angle, 26°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.20 | 33.58 | 5.63 | 377 | 0 | 18.20 | 33.58 | 5.63 | 24.15 | 377 | 0.00 |
| 9 | 18.18 | 33.58 | 5.60 | 376 | 10 | 18.18 | 33.58 | 5.61 | 24.16 | 376 | 0.04 |
| 27 | 18.19 | 33.58 | 5.77 | 376 | 20 | 18.18 | 33.58 | 5.65 | 24.16 | 376 | 0.08 |
| 40 | 16.64 | 33.49 | 5.92 | 349 | 30 | 18.16 | 33.58 | 5.79 | 24.16 | 376 | 0.11 |
| 49 | 15.50 | 33.46 | 6.03 | 325 | 50 | 15.32 | 33.46 | 6.03 | 24.74 | 321 | 0.18 |
| 57 | 14.20 | 33.43 | 6.02 | 301 | 75 | 11.46 | 33.46 | 4.96 | 25.52 | 247 | 0.25 |
| 64 | 13.04 | 33.46 | 5.56 | 277 | 100 | 10.24 | 33.60 | 4.18 | 25.84 | 217 | 0.31 |
| 78 | 11.26 | 33.47 | 4.88 | 244 | 150 | 10.82 | 34.26 | 1.24 | 26.25 | 178 | 0.41 |
| 90 | 10.68 | 33.50 | 4.58 | 231 | 200 | 10.34 | 34.42 | 0.88 | 26.46 | 158 | 0.50 |
| 100 | 10.24 | 33.60 | 4.18 | 217 | 250 | 9.83 | 34.47 | 0.76 | 26.59 | 146 | 0.58 |
| 118 | 10.22 | 33.78 | 3.20 | 203 | 300 | 9.28 | 34.46 | 0.60 | 26.67 | 138 | 0.65 |
| 140 | 10.82 | 34.20 | 1.58 | 182 | 400 | 8.05 | 34.41 | 0.28 | 26.83 | 123 | 0.78 |
| 168 | 10.76 | 34.33 | 1.12 | 171 | 500 | (6.90) | (34.41) | | (26.99) | (108) | (0.90) |
| 206 | 10.20 | 34.42 | 0.87 | 155 | | | | | | | |
| 272 | 9.68 | 34.48 | 0.73 | 143 | | | | | | | |
| 354 | 8.52 | 34.42 | 0.36 | 129 | | | | | | | |
| 473 | 7.24 | 34.41 | 0.21 | 113 | | | | | | | |

STRANGER; June 18, 1958; 1118 GCT; 26°35'N, 117°48.5'W; sounding, 2100 fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 05°. 120.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.56 | 33.82 | 5.10 | 392 | 0 | 19.56 | 33.82 | 5.10 | 24.00 | 392 | 0.00 |
| 10 | 19.58 | 33.84 | 4.95 | 392 | 10 | 19.58 | 33.84 | 4.95 | 24.00 | 392 | 0.04 |
| 29 | 19.52 | 33.84 | 5.12 | 389 | 20 | 19.56 | 33.84 | 5.04 | 24.01 | 391 | 0.08 |
| 44 | 18.95 | 34.03 | 5.26 | 362 | 30 | 19.50 | 33.84 | 5.16 | 24.03 | 389 | 0.12 |
| 54 | 18.40 | 33.98 | 5.29 | 352 | 50 | 18.57 | 33.99 | 5.27 | 24.38 | 356 | 0.19 |
| 63 | 18.26 | 33.99 | 5.42 | 349 | 75 | 18.10 | 33.98 | 5.44 | 24.49 | 346 | 0.28 |
| 73 | 18.13 | 33.98 | 5.44 | 346 | 100 | 15.69 | 33.81 | 5.29 | 24.92 | 304 | 0.36 |
| 92 | 16.88 | 33.91 | 5.47 | 322 | 150 | 10.68 | 33.59 | 4.10 | 25.75 | 225 | 0.50 |
| 106 | 14.75 | 33.74 | 5.18 | 290 | 200 | 10.00 | 33.93 | 2.82 | 26.14 | 189 | 0.60 |
| 121 | 13.48 | 33.73 | 4.54 | 265 | 250 | 9.34 | 34.20 | 1.76 | 26.45 | 159 | 0.69 |
| 144 | 11.30 | 33.58 | 4.42 | 236 | 300 | 8.78 | 34.17 | 1.25 | 26.53 | 152 | 0.77 |
| 166 | 10.23 | 33.75 | 3.67 | 206 | 400 | 7.86 | 34.19 | 0.46 | 26.68 | 137 | 0.92 |
| 208 | 9.87 | 34.02 | 2.46 | 180 | 500 | 6.90 | 34.21 | 0.20 | 26.83 | 123 | 1.06 |
| 257 | 9.21 | 34.20 | 1.66 | 156 | | | | | | | |
| 335 | 8.44 | 34.15 | 0.96 | 148 | | | | | | | |
| 431 | 7.55 | 34.20 | 0.32 | 132 | | | | | | | |
| 563 | 6.25 | 34.21 | 0.19 | 114 | | | | | | | |

STRANGER; June 7, 1958; 1730 GCT; 24°58.5'N, 113°22'W; sounding, 1500 fm; wind, 320°, force 6; weather, clear; sea, very rough; wire angle, 18°. 137.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.75 | 33.94 | 5.01 | 389 | 0 | 19.75 | 33.94 | 5.01 | 24.03 | 389 | 0.00 |
| 9 | 19.74 | 33.95 | 4.83 | 387 | 10 | 19.74 | 33.95 | 4.83 | 24.06 | 386 | 0.04 |
| 32 | 18.99 | 33.86 | 5.06 | 375 | 20 | 19.74 | 33.95 | 4.83 | 24.06 | 386 | 0.08 |
| 42 | 16.84 | 33.77 | 5.58 | 333 | 30 | 19.74 | 33.95 | 4.83 | 24.06 | 386 | 0.12 |
| 55 | 15.12 | 33.72 | 5.22 | 298 | 50 | 15.70 | 33.73 | 5.42 | 24.86 | 310 | 0.18 |
| 64 | 14.54 | 33.76 | 4.61 | 284 | 75 | 13.22 | 33.77 | 3.95 | 25.42 | 257 | 0.26 |
| 72 | 13.42 | 33.75a) | 4.12 | 262 | 100 | 12.12 | 33.99 | 2.62 | 25.80 | 220 | 0.32 |
| 90 | 12.46 | 33.86a) | 3.20 | 237 | 150 | 11.17 | 34.25 | 1.80 | 26.19 | 184 | 0.42 |
| 107 | 11.99 | 34.04a) | 2.32 | 214 | 200 | 10.47 | 34.44 | 1.09 | 26.46 | 158 | 0.51 |
| 120 | 11.82 | 34.14a) | 2.13 | 204 | 250 | 9.90 | 34.54 | 0.70 | 26.64 | 141 | 0.58 |
| 142 | 11.32 | 34.21a) | 1.96 | 190 | 300 | 9.43 | 34.55 | 0.38 | 26.72 | 134 | 0.66 |
| 176 | 10.77 | 34.41a) | 1.19 | 166 | 400 | 8.16 | 34.51 | | 26.88 | 118 | 0.78 |
| 212 | 10.32 | 34.45 | 1.02 | 155 | 500 | 7.25 | 34.50 | | 27.02 | 105 | 0.90 |
| 266 | 9.88 | 34.58 | 0.42 | 138 | 600 | (6.26) | (34.49) | | (27.14) | (93) | (1.01) |
| 347 | 8.77 | 34.51 | 0.36 | 127 | | | | | | | |
| 453 | 7.67 | 34.51 | 1.23u | 111 | | | | | | | |
| 595 | 6.31 | 34.49 | 0.32 | 93 | | | | | | | |

a) Salinity bottle numbers from 72 to 176 meters, inclusive, appear to have been entered in reverse order on the original data sheet. Since standard handling and titrating procedures were used, present order is assumed to be correct.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50.47-B | VI-15 | 0135 | 39°46.0' | 123°54.0' | 55 | 300° | 2 | partly cloudy | rough | 10.92 | 33.35 | 8.50 | 33.77 |
| 50.55-B | 15 | 0825 | 39°30.0' | 124°30.0' | 1200 | 320° | 7 | clear | very high | 14.24 | 32.68 | 11.88 | 32.81 |
| 50.60-B | 15 | 1145 | 39°20.0' | 124°52.0' | 1600 | 330° | 7 | clear | high | 13.68 | 32.70 | 12.78 | 32.76 |
| 53.52-B | 14 | 1850 | 39°02.0' | 123°51.0' | 60 | 310° | 4 | clear | very rough | 11.79 | 33.42 | 8.91 | 33.58 |
| 53.55-B | 14 | 1640 | 38°56.0' | 124°04.5' | 650 | 330° | 5 | clear | very rough | 13.46 | 33.08 | 10.56 | 33.03 |
| 53.60-B | 14 | 1225 | 38°46.0' | 124°26.5' | 1800 | 330° | 7 | partly cloudy | high | 15.28 | 32.77 | 11.38 | 32.88 |
| 57.51-B | 13 | 2305 | 38°30.0' | 123°22.0' | 55 | 300° | 4 | partly cloudy | very rough | 10.56 | 33.54 | 8.92 | 33.75 |
| 57.55-B | 14 | 0145 | 38°22.0' | 123°39.5' | 400 | 320° | 7 | clear | high | 12.56 | 33.04 | 11.08 | 33.10 |
| 57.60-B | 14 | 0440 | 38°12.0' | 124°02.0' | 1900 | 320° | 7 | clear | high | 15.07 | 32.91 | 12.77 | 32.96 |
| 60.52-B | 12 | 0515 | 37°53.5' | 123°02.0' | 43 | 300° | 6 | partly cloudy | very rough | 11.45 | 33.24 | 9.32 | 33.73 |
| 60.60-B | 11 | 2315 | 37°37.0' | 123°37.0' | 1800 | 320° | 6 | cloudy | very rough | 15.58 | 32.81 | 10.72 | 33.23 |
| 60.70-B | 11 | 1705 | 37°20.0' | 124°21.0' | 2200 | 310° | 6 | cloudy | high | 16.08 | 32.89 | 10.02 | 33.44 |
| 60.80-B | 11 | 1045 | 36°59.0' | 125°06.0' | 2400 | 320° | 7 | cloudy | very rough | 17.14 | 32.86 | 12.69 | 32.90 |
| 63.52-B | 9 | 2115 | 37°19.0' | 122°36.0' | 49 | 300° | 4 | cloudy | moderate | 14.66 | 32.57 | 10.80 | 33.35 |
| 63.55-B | 9 | 2325 | 37°14.0' | 122°49.5' | 150 | 280° | 3 | cloudy | moderate | 15.41 | 32.81 | 10.68 | 33.40 |
| 63.60-B | 10 | 0215 | 37°02.5' | 123°10.5' | 1400 | 280° | 4 | partly cloudy | rough | 17.71 | 32.73 | 11.98 | 33.18 |
| 63.70-B | 10 | 0755 | 36°43.0' | 123°55.0' | 2100 | 300° | 4 | partly cloudy | rough | 17.26 | 32.88 | 14.12 | 33.18 |
| 63.80-B | 10 | 1425 | 36°23.0' | 124°37.5' | 2400 | 320° | 5 | overcast | rough | 17.16 | 32.95 | 13.64 | 33.04 |
| 63.90-B | 10 | 2020 | 36°01.0' | 125°23.0' | 2500 | 320° | 5 | cloudy | very rough | 18.01 | 33.16 | 14.75 | 33.19 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 67.50-B | VI-9 | 1535 | 36°49.0' | 122°04.5' | 57 | calm | | cloudy | moderate | 13.20 | 33.17 | 9.96 | 33.64 |
| 67.55-B | 9 | 1250 | 36°39.0' | 122°26.0' | 1150 | 280° | 3 | cloudy | moderate | 17.44 | 32.52 | 10.34 | 33.44 |
| 67.60-B | 9 | 0910 | 36°26.5' | 122°52.5' | 1650 | 300° | 4 | partly cloudy | moderate | 17.39 | 32.94 | 10.54 | 33.41 |
| 67.70-B | 9 | 0410 | 36°08.0' | 123°30.0' | 1400 | 300° | 4 | cloudy | rough | 17.24 | 32.90 | 13.32 | 32.95 |
| 67.80-B | 8 | 2300 | 35°48.0' | 124°12.0' | 2200 | 280° | 5 | cloudy | rough | 17.80 | 33.06 | 13.14 | 33.01 |
| 67.90-B | 8 | 1750 | 35°28.0' | 124°55.0' | 2400 | 280° | 4 | cloudy | rough | 18.20 | - | 14.60 | 33.21 |
| 70.52-B | 7 | 1310 | 36°08.5' | 121°50.0' | 350 | 320° | 1 | partly cloudy | slight | 12.45 | 33.57 | 10.08 | 33.72 |
| 70.60-B | 7 | 1846 | 35°53.0' | 122°23.0' | 1750 | 280° | 3 | partly cloudy | moderate | 17.16 | 33.07 | 12.32 | 33.13 |
| 70.70-B | 7 | 2350 | 35°33.0' | 123°06.0' | 2100 | 270° | 3 | partly cloudy | moderate | 18.20 | 32.41 | 11.83 | 32.94 |
| 70.80-B | 8 | 0500 | 35°13.0' | 123°48.0' | 2200 | 260° | 4 | clear | moderate | 17.87 | 32.90 | 13.68 | 33.02 |
| 73.51-B | 7 | 0745 | 35°35.5' | 121°20.0' | 125 | 320° | 3 | partly cloudy | moderate | 11.57 | 33.64 | 9.70 | 33.69 |
| 73.55-B | 7 | 0510 | 35°27.5' | 121°37.5' | 540 | 320° | 3 | partly cloudy | moderate | 13.00 | 33.46 | 10.66 | 33.37 |
| 73.60-B | 7 | 0205 | 35°18.0' | 121°58.5' | 1300 | 260° | 2 | partly cloudy | moderate | 16.80 | 33.08 | 12.56 | 33.31 |
| 73.70-B | 6 | 2045 | 34°58.0' | 122°35.0' | 2200 | - | 1 | partly cloudy | slight | 17.23 | 33.03 | 12.14 | 33.12 |
| 73.80-B | 6 | 1550 | 34°38.0' | 123°21.5' | 2150 | - | 1 | partly cloudy | moderate | 17.22 | 32.92 | 12.80 | 32.89 |
| 73.90-B | 6 | 0950 | 34°19.0' | 124°03.0' | 2300 | 270° | 2 | partly cloudy | slight | 18.22 | 33.22 | 14.57 | 33.21 |
| 77.50-B | 5 | 0500 | 35°04.5' | 120°52.0' | 75 | - | 1 | partly cloudy | smooth | 14.80 | 33.46 | 11.86 | 33.60 |
| 77.55-B | 5 | 0805 | 34°54.5' | 121°13.0' | 300 | 320° | 2 | partly cloudy | smooth | 16.09 | 33.35 | - | - |
| 77.60-B | 5 | 1125 | 34°44.0' | 121°34.0' | 500 | 270° | 3 | cloudy | slight | 15.57 | 33.46 | - | - |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77.70-B | VI-5 | 1710 | 34°24.0' | 122°16.0' | 2100 | 270° | 3 | partly cloudy | moderate | 16.74 | 33.29 | 10.54 | 33.36 |
| 77.80-B | 5 | 2219 | 34°04.0' | 122°57.0' | 2300 | 300° | 3 | partly cloudy | moderate | 17.79 | 33.03 | 14.83 | 33.20 |
| 77.90-B | 6 | 0405 | 33°45.5' | 123°38.0' | 2400 | 240° | 3 | partly cloudy | slight | 18.09 | 33.30 | 15.27 | 33.24 |
| 82.47-O | 7 | 1310 | 34°16.0' | 119°57.0' | 310 | 260° | 3 | clear | moderate | 13.80 | 33.66 | 10.44 | 33.69 |
| 83.40-O | 7 | 1752 | 34°14.0' | 119°21.5' | 12 | - | 1 | clear | slight | 11.89 | 33.63 | - | - |
| 83.43-O | 7 | 1605 | 34°08.0' | 119°34.0' | 132 | - | 1 | clear | slight | 14.26 | 33.67 | - | - |
| 83.51-O | 7 | 0850 | 33°52.0' | 120°06.0' | 58 | 260° | 2 | partly cloudy | moderate | 14.34 | 33.58 | 10.98 | 33.61 |
| 83.55-O | 7 | 0608 | 33°44.0' | 120°24.0' | 532 | 260° | 2 | clear | slight | 16.18 | 33.53 | 10.65 | 33.46 |
| 83.60-O | 7 | 0311 | 33°33.5' | 120°43.0' | 750 | 270° | 1 | clear | slight | 15.82 | 33.20 | 12.29 | 33.26 |
| 83.65-O | 7 | 0004 | 33°24.0' | 121°05.0' | 2000+ | - | 1 | partly cloudy | slight | 17.50 | 33.05 | 15.73 | 33.41 |
| 83.70-O | 6 | 2110 | 33°16.0' | 121°28.0' | 2000+ | - | 1 | partly cloudy | slight | 17.12 | 33.18 | 15.20 | 33.26 |
| 83.75-O | 6 | 1850 | 33°07.5' | 121°44.0' | 2000+ | - | 1 | partly cloudy | slight | 17.18 | 33.24 | 14.52 | 33.19 |
| 83.80-O | 6 | 1510 | 32°56.0' | 122°08.0' | 2200 | 280° | 1 | cloudy | slight | 17.34 | 33.19 | 15.39 | 33.47 |
| 83.85-O | 6 | 1200 | 32°45.0' | 122°28.0' | 2000 | - | 1 | cloudy | slight | 17.56 | 33.24 | 14.97 | 33.33 |
| 83.90-O | 6 | 0853 | 32°34.5' | 122°48.0' | 2000+ | - | 1 | partly cloudy | slight | 18.29 | 33.35 | 15.79 | 33.55 |
| 87.35-O | 9 | 0000 | 33°50.0' | 118°37.5' | 300 | 280° | 3 | partly cloudy | moderate | 16.18 | 33.51 | 11.13 | 33.63 |
| 87.40-O | 9 | 0320 | 33°40.0' | 118°58.5' | 450 | 280° | 4 | clear | rough | 17.19 | 33.55 | 10.79 | 33.58 |
| 87.45-O | 9 | 0650 | 33°29.5' | 119°18.0' | 917 | 280° | 4 | clear | rough | 15.64 | 33.78 | 9.76 | 33.58 |
| 87.50-O | 9 | 1205 | 33°20.0' | 119°39.0' | 40 | 280° | 5 | clear | rough | 16.18 | 33.59 | 10.44 | 33.66 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 87.55-O | VI-9 | 1615 | 33°10.0' | 120°01.0' | 600+ | 290° | 5 | clear | rough | 16.18 | 33.58 | 11.75 | 33.31 |
| 87.60-O | 9 | 2045 | 33°00.0' | 120°21.0' | 500+ | 290° | 4 | clear | rough | 16.54 | 33.09 | 14.45 | 33.17 |
| 87.65-O | 10 | 0205 | 32°47.0' | 120°44.0' | 2000+ | 290° | 5 | partly cloudy | very rough | 17.74 | 33.23 | 14.94 | 33.19 |
| 87.70-O | 10 | 0420 | 32°36.0' | 121°02.0' | 2100 | 290° | 5 | partly cloudy | very rough | 17.72 | 33.18 | 14.45 | 33.22 |
| 87.75-O | 10 | 0835 | 32°24.0' | 121°27.0' | 2400 | 290° | 5 | partly cloudy | very rough | 18.02 | 33.33 | 15.90 | 33.65 |
| 87.80-O | 10 | 1205 | 32°14.0' | 121°48.0' | 2000+ | 290° | 5 | partly cloudy | very rough | 18.50 | 33.51 | 16.09 | 33.53 |
| 87.85-O | 10 | 1500 | 32°06.5' | 122°02.5' | 2000+ | 290° | 5 | cloudy | very rough | 18.38 | 33.57 | 16.16 | 33.53 |
| 87.90-O | 10 | 1815 | 31°58.0' | 122°19.0' | 2000+ | 290° | 5 | cloudy | very rough | 18.46 | 33.48 | 15.80 | 33.44 |
| 90.28-O | 12 | 1605 | 33°28.5' | 117°46.5' | 200 | - | 1 | partly cloudy | moderate | 13.34 | 33.55 | 10.02 | 33.73 |
| 90.30-O | 12 | 1445 | 33°25.0' | 117°55.0' | 300 | - | 1 | partly cloudy | rough | 14.27 | 33.55 | 10.04 | 33.71 |
| 90.37-O | 12 | 1030 | 33°11.0' | 118°24.0' | 600 | 310° | 4 | clear | rough | 17.82 | 33.60 | 10.58 | 33.52 |
| 90.50-O | 12 | 0115 | 32°42.0' | 119°13.0' | 85 | 300° | 4 | clear | rough | 16.98 | 33.48 | 15.49 | 33.50 |
| 90.55-O | 11 | 2225 | 32°32.5' | 119°34.5' | 605 | 300° | 4 | clear | rough | 17.13 | 33.45 | 14.18 | 33.30 |
| 90.60-O | 11 | 1935 | 32°24.0' | 119°54.0' | 485 | 300° | 4 | clear | rough | 17.22 | 33.40 | - | - |
| 90.65-O | 11 | 1610 | 32°15.0' | 120°18.0' | 2000 | 290° | 4 | cloudy | very rough | 16.75 | 33.26 | - | - |
| 90.70-O | 11 | 1200 | 32°01.5' | 120°45.0' | 2000 | 310° | 4 | partly cloudy | rough | 18.10 | 33.45 | 16.62 | 33.42 |
| 90.75-O | 11 | 0850 | 31°53.0' | 121°02.0' | 2200 | 310° | 4 | partly cloudy | rough | 18.35 | 33.53 | 16.18 | 33.48 |
| 90.80-O | 11 | 0540 | 31°45.0' | 121°19.0' | 2000 | 310° | 4 | partly cloudy | rough | 17.86 | 33.38 | 15.38 | 33.39 |
| 90.85-O | 11 | 0305 | 31°37.0' | 121°35.0' | 2300 | 310° | 4 | partly cloudy | rough | 18.50 | 33.48 | 16.24 | 33.49 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.27-O | VI-20 | 0405 | 32°56.0' | 117°19.0' | 100 | 290° | 1 | clear | slight | 13.01 | 33.57 | 10.08 | 33.68 |
| 93.30-O | 20 | 0600 | 32°50.0' | 117°31.5' | 425 | 290° | 1 | clear | moderate | - | - | 10.67 | 33.60 |
| 93.35-O | 20 | 0910 | 32°40.0' | 117°52.0' | 300 | 280° | 2 | clear | moderate | 18.45 | 33.53 | 10.96 | 33.47 |
| 93.40-O | 20 | 1225 | 32°32.0' | 118°16.5' | 925 | 280° | 2 | partly cloudy | moderate | 18.01 | 33.58 | 11.30 | 33.50 |
| 93.45-O | 20 | 1505 | 32°22.0' | 118°36.5' | 900 | 280° | 4 | partly cloudy | very rough | 16.62 | 33.50 | 12.15 | 33.39 |
| 93.50-O | 20 | 1800 | 32°12.0' | 118°54.0' | 800 | 280° | 4 | partly cloudy | very rough | 16.58 | 33.48 | 13.00 | 33.45 |
| 93.55-O | 20 | 2120 | 32°00.0' | 119°14.0' | 880 | 280° | 6 | partly cloudy | very rough | 16.86 | 33.52 | 13.60 | 33.46 |
| 93.60-O | 21 | 0030 | 31°50.0' | 119°34.0' | 1220 | 290° | 5 | partly cloudy | very rough | 17.10 | 33.48 | 13.32 | 33.44 |
| 93.65-O | 21 | 0330 | 31°42.5' | 119°57.5' | 2000+ | 280° | 3 | clear | rough | 17.48 | 33.22 | 14.74 | 33.15 |
| 93.70-O | 21 | 0605 | 31°32.0' | 120°16.0' | 2000+ | 280° | 3 | clear | rough | 18.23 | 33.35 | 14.86 | 33.33 |
| 93.75-O | 21 | 0850 | 31°21.0' | 120°35.0' | 2000+ | 280° | 3 | clear | rough | 18.70 | 33.53 | 16.06 | 33.53 |
| 93.80-O | 21 | 1140 | 31°10.0' | 120°55.0' | 2000+ | 280° | 3 | partly cloudy | rough | 18.78 | 33.60 | 16.12 | 33.42 |
| 93.85-O | 21 | 1430 | 31°01.0' | 121°15.0' | 2000+ | 280° | 2 | cloudy | moderate | 18.88 | 33.49 | 15.72 | 33.38 |
| 93.90-O | 21 | 1710 | 30°49.0' | 121°33.5' | 2000+ | 280° | 2 | cloudy | moderate | 18.74 | 33.40 | 14.95 | 33.30 |
| 97.30-O | 23 | 0955 | 32°15.5' | 117°09.5' | 33 | - | 1 | clear | slight | 12.58 | 33.50 | - | - |
| 97.35-O | 23 | 0710 | 32°05.0' | 117°28.0' | 400 | 280° | 3 | clear | rough | 18.91 | 33.61 | 10.97 | 33.54 |
| 97.40-O | 23 | 0430 | 31°54.0' | 117°47.0' | 500 | 280° | 4 | clear | rough | 18.64 | 33.62 | 12.40 | 33.49 |
| 97.45-O | 23 | 0055 | 31°41.0' | 118°06.5' | 600 | 280° | 4 | clear | very rough | 18.40 | 33.50 | 14.22 | 33.49 |
| 97.50-O | 22 | 2155 | 31°33.0' | 118°28.5' | 1300 | 280° | 4 | clear | rough | 18.38 | 33.55 | 15.41 | 33.37 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 97.55-O | VI-22 | 1915 | 31°24.5' | 118°48.0' | 250 | 280° | 4 | clear | rough | 18.14 | 33.51 | 14.38 | 33.37 |
| 97.60-O | 22 | 1605 | 31°14.0' | 119°10.0' | 1900 | 280° | 3 | partly cloudy | rough | 17.71 | 33.39 | 14.68 | 33.35 |
| 97.65-O | 22 | 1250 | 31°06.0' | 119°31.0' | 1900 | 280° | 2 | partly cloudy | rough | 17.82 | 33.28 | 16.07 | 33.43 |
| 97.70-O | 22 | 0945 | 30°55.5' | 119°50.5' | 1900+ | 280° | 2 | partly cloudy | moderate | 18.80 | 33.49 | 15.96 | 33.46 |
| 97.75-O | 22 | 0640 | 30°45.0' | 120°11.0' | 1900+ | 280° | 2 | partly cloudy | moderate | 18.72 | 33.48 | 16.11 | 33.46 |
| 97.80-O | 22 | 0330 | 30°35.0' | 120°31.0' | 2000+ | 280° | 2 | partly cloudy | moderate | 19.16 | 33.55 | 15.72 | 33.35 |
| 97.85-O | 22 | 0030 | 30°25.0' | 120°50.5' | 2000 | 280° | 3 | partly cloudy | moderate | 19.12 | 33.57 | 16.37 | 33.49 |
| 97.90-O | 21 | 2130 | 30°16.0' | 121°10.0' | 2000+ | 290° | 2 | partly cloudy | moderate | 19.04 | 33.54 | 15.41 | 33.23 |
| 100.29-O | 23 | 1540 | 31°41.0' | 116°45.5' | 80 | - | 1 | fog | moderate | 12.52 | 33.50 | 10.60 | - |
| 100.33-O | 23 | 1800 | 31°34.0' | 117°00.0' | 650 | 280° | 2 | overcast | moderate | 14.96 | 33.52 | 11.72 | 33.49 |
| 100.40-O | 23 | 2205 | 31°21.0' | 117°27.0' | 1140 | 280° | 5 | cloudy | rough | 18.46 | 33.59 | - | - |
| 100.45-O | 24 | 0125 | 31°11.0' | 117°47.0' | 1100 | 280° | 5 | partly cloudy | very rough | 18.47 | 33.50 | - | - |
| 100.50-O | 24 | 0435 | 31°01.0' | 118°07.0' | 800 | 280° | 5 | cloudy | very rough | 18.56 | 33.60 | 15.08 | - |
| 100.55-O | 24 | 0755 | 30°51.0' | 118°26.0' | 1300 | 280° | 6 | cloudy | very rough | 18.16 | 33.46 | 16.09 | 33.39 |
| 100.60-O | 24 | 1110 | 30°42.0' | 118°45.0' | 1500 | 280° | 6 | cloudy | very rough | 18.56 | 33.53 | 17.46 | 33.39 |
| 100.65-O | 24 | 1425 | 30°33.0' | 119°03.0' | 1300 | 280° | 5 | overcast | very rough | 18.60 | 33.48 | 16.22 | 33.41 |
| 100.75-O | 24 | 2158 | 30°11.5' | 119°45.0' | 2000+ | 280° | 5 | overcast | high | 19.40 | 33.82 | 16.94 | 33.69 |
| 100.80-O | 25 | 0135 | 30°01.0' | 120°07.0' | 2000+ | 280° | 5 | overcast | high | 19.22 | 33.68 | 17.09 | 33.69 |
| 100.85-O | 25 | 0357 | 29°53.0' | 120°25.5' | 2000+ | 280° | 5 | overcast | very rough | 19.32 | 33.51 | 16.78 | 33.64 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100.90-O | VI-25 | 0640 | 29°47.0' | 120°40.0' | 2000+ | 280° | 5 | overcast | very rough | 19.24 | 33.59 | 15.80 | 33.33 |
| 103.30-O | 16 | 1840 | 31°05.5' | 116°25.0' | 39 | 310° | 2 | partly cloudy | moderate | 12.20 | 33.64 | 10.28 | 33.77 |
| 103.35-O | 16 | 2140 | 30°55.0' | 116°45.0' | 1120 | 310° | 2 | partly cloudy | moderate | 16.66 | 33.53 | 11.87 | 33.42 |
| 103.40-O | 17 | 0045 | 30°45.5' | 117°03.5' | 1040 | 310° | 3 | cloudy | rough | 18.39 | 33.59 | 16.42 | 33.47 |
| 103.45-O | 17 | 0345 | 30°34.0' | 117°25.0' | 1250 | 310° | 3 | cloudy | rough | 18.36 | 33.56 | 16.86 | 33.49 |
| 103.50-O | 17 | 0700 | 30°22.5' | 117°46.5' | 1900 | 310° | 3 | cloudy | rough | 18.36 | 33.48 | 16.45 | 33.53 |
| 103.55-O | 17 | 1005 | 30°11.0' | 118°07.5' | 1083 | 310° | 3 | cloudy | rough | 18.55 | 33.51 | 17.26 | 33.60 |
| 103.60-O | 17 | 1240 | 29°59.0' | 118°28.5' | 1800 | 310° | 3 | overcast | rough | 18.60 | 33.51 | 16.42 | 33.50 |
| 107.32-O | 16 | 1305 | 30°26.5' | 116°11.0' | 250 | 310° | 3 | overcast | moderate | 13.94 | 33.48 | 10.67 | 33.49 |
| 107.35-O | 16 | 1045 | 30°20.5' | 116°23.5' | 900 | 310° | 3 | cloudy | rough | 17.19 | 33.55 | 14.40 | 33.54 |
| 107.40-O | 16 | 0750 | 30°10.5' | 116°43.5' | 1550 | 310° | 3 | cloudy | rough | 17.91 | 33.60 | 14.36 | 33.48 |
| 107.45-O | 16 | 0440 | 30°01.0' | 117°04.0' | 1250 | 310° | 3 | cloudy | rough | 18.57 | 33.60 | 16.47 | 33.48 |
| 107.50-O | 16 | 0130 | 29°50.5' | 117°24.0' | 1500 | 310° | 3 | cloudy | rough | 18.62 | 33.62 | 15.86 | 33.33 |
| 107.55-O | 15 | 2230 | 29°43.0' | 117°43.0' | 1750 | 310° | 3 | partly cloudy | rough | 18.44 | 33.62 | 18.50 | 33.68 |
| 110.33-O | 14 | 1948 | 29°50.5' | 115°52.0' | 60 | 310° | 4 | partly cloudy | moderate | 15.34 | 33.53 | 10.74 | 33.56 |
| 110.35-O | 14 | 2110 | 29°46.5' | 116°01.0' | 500 | 310° | 3 | partly cloudy | rough | 15.94 | 33.51 | 12.28 | 33.49 |
| 110.40-O | 15 | 0030 | 29°36.5' | 116°21.0' | 1100 | 310° | 4 | partly cloudy | rough | 17.96 | 33.58 | - | - |
| 110.45-O | 15 | 0330 | 29°26.0' | 116°41.0' | 500 | 310° | 4 | cloudy | rough | 18.74 | 33.72 | 18.31 | 33.68 |
| 110.50-O | 15 | 0635 | 29°15.0' | 117°03.5' | 1900 | 310° | 4 | clear | rough | 18.69 | 33.73 | 18.04 | 33.71 |

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.55-O | VI-15 | 0950 | 29°05.0' | 117°26.0' | 1900 | 310° | 4 | clear | rough | 18.15 | 33.70 | 17.88 | 33.64 |
| 110.60-O | 15 | 1250 | 28°54.0' | 117°49.5' | 2000 | 310° | 3 | cloudy | rough | 18.82 | 33.68 | 17.44 | 33.60 |
| 110.70-S | 22 | 0434 | 28°35.0' | 118°15.0' | 2150 | 320° | 4 | partly cloudy | rough | 19.31 | 33.70 | 17.76 | 33.64 |
| 110.75-S | 22 | 0137 | 28°25.5' | 118°35.0' | 2000 | 010° | 5 | partly cloudy | moderate | 19.26 | 33.68 | 18.93 | 33.67 |
| 110.80-S | 21 | 2255 | 28°16.0' | 118°57.0' | 2000 | 010° | 4 | cloudy | moderate | 19.34 | 33.66 | 18.08 | 33.58 |
| 113.30-S | 23 | 0835 | 29°23.0' | 115°17.5' | 34 | calm | | fog | slight | 16.13 | 33.67 | 11.06 | 33.79 |
| 113.35-S | 23 | 0455 | 29°18.0' | 115°43.5' | 1000 | 330° | 4 | clear | moderate | 17.22 | 33.60 | 14.44 | 33.52 |
| 113.40-S | 23 | 0155 | 29°02.0' | 116°03.0' | 750 | 320° | 4 | cloudy | moderate | 17.64 | 33.58 | 11.86 | 33.63 |
| 113.45-S | 22 | 2302 | 28°54.0' | 116°22.0' | 1350 | 340° | 3 | cloudy | moderate | 17.70 | 33.57 | 16.02 | 33.53 |
| 113.50-S | 22 | 2042 | 28°51.0' | 116°36.5' | 2000 | 340° | 3 | overcast | rough | 18.94 | 33.63 | 17.04 | 33.64 |
| 113.55-S | 22 | 1751 | 28°39.0' | 116°55.0' | 1900 | 330° | 4 | cloudy | rough | 18.51 | 33.63 | 17.65 | 33.58 |
| 113.60-S | 22 | 1452 | 28°26.0' | 117°15.5' | 2000 | 340° | 4 | cloudy | moderate | 18.85 | 33.67 | 17.12 | 33.53 |
| 113.65-S | 22 | 1200 | 28°14.0' | 117°35.0' | 2150 | 320° | 4 | cloudy | moderate | 19.26 | 33.71 | 17.82 | 33.58 |
| 113.70-S | 22 | 0914 | 28°02.0' | 117°55.5' | 1900 | 340° | 4 | partly cloudy | rough | 19.02 | 33.61 | 17.64 | 33.58 |
| 117.26-S | 20 | 0223 | 28°58.0' | 114°41.0' | 40 | 290° | 4 | cloudy | rough | 17.94 | 33.73 | 10.84 | 33.86 |
| 117.30-S | 20 | 0425 | 28°46.0' | 114°55.5' | 60 | 340° | 4 | cloudy | rough | 16.83 | 33.58 | 12.84 | 33.58 |
| 117.35-S | 20 | 0708 | 28°38.0' | 115°16.0' | 120 | 340° | 4 | partly cloudy | moderate | 17.46 | 33.55 | 13.24 | 33.51 |
| 117.40-S | 20 | 0929 | 28°28.0' | 115°35.5' | 540 | 320° | 3 | clear | moderate | 17.42 | 33.59 | 12.82 | 33.53 |
| 117.45-S | 20 | 2310 | 28°18.0' | 115°55.0' | 1600 | 340° | 4 | rain | moderate | 17.03 | 33.55 | 15.01 | 33.56 |



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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 117.50-S | VI-21 | 0200 | 28°06.5' | 116°15.0' | 2500 | 340° | 4 | cloudy | rough | 18.35 | 33.58 | 16.74 | 33.57 |
| 117.55-S | 21 | 0425 | 27°56.0' | 116°35.5' | 2000 | 320° | 3 | partly cloudy | moderate | 19.16 | 33.68 | 16.36 | 33.60 |
| 117.60-S | 21 | 0724 | 27°45.5' | 116°55.0' | 2000+ | 320° | 3 | missing | moderate | 19.26 | 33.66 | 17.70 | 33.53 |
| 117.65-S | 21 | 1007 | 27°35.0' | 117°15.0' | 2000+ | 340° | 4 | partly cloudy | moderate | 19.38 | 33.63 | 17.79 | 33.57 |
| 117.70-S | 21 | 1241 | 27°24.5' | 117°35.5' | 2000 | 340° | 4 | partly cloudy | moderate | 19.31 | 33.62 | 17.88 | 33.58 |
| 118.39-S | 20 | 1130 | 28°18.5' | 115°24.0' | 147 | 320° | 2 | cloudy | moderate | 18.22 | 33.62 | - | - |
| 119.33-S | 19 | 1622 | 28°19.0' | 114°54.0' | 58 | 330° | 5 | partly cloudy | rough | 17.11 | 33.62 | 16.22 | 33.62 |
| 120.25-S | 19 | 2100 | 28°23.0' | 114°14.5' | 40 | 320° | 5 | cloudy | rough | 17.15 | 33.68 | 11.44 | 33.57 |
| 120.30-S | 19 | 1839 | 28°13.0' | 114°34.0' | 48 | 330° | 4 | partly cloudy | moderate | 16.84 | 33.62 | 12.54 | 33.65 |
| 120.35-S | 19 | 1310 | 28°04.0' | 114°52.0' | 41 | 350° | 4 | partly cloudy | rough | 17.57 | 33.68 | 13.66 | 33.58 |
| 120.40-S | 19 | 1050 | 27°56.5' | 115°14.0' | 24 | 290° | 5 | clear | very rough | 18.87 | 33.82 | 16.29a) | 33.66a) |
| 120.45-S | 19 | 0831 | 27°47.0' | 115°33.0' | 650 | 320° | 5 | overcast | very rough | 17.12 | 33.73 | 11.05 | 33.78 |
| 120.55-S | 19 | 0147 | 27°28.0' | 116°13.0' | 2350 | 340° | 5 | cloudy | very rough | 19.22 | 33.72 | - | - |
| 120.60-S | 18 | 2244 | 27°18.0' | 116°31.5' | 2050 | 330° | 4 | cloudy | moderate | 19.06 | 33.70 | 16.95 | 33.45 |
| 120.65-S | 18 | 2027 | 27°07.5' | 116°50.0' | 2150 | 330° | 5 | cloudy | rough | 19.28 | 33.68 | - | - |
| 120.70-S | 18 | 1710 | 26°56.0' | 117°11.0' | 2100 | 340° | 4 | overcast | rough | 19.45 | 33.80 | 19.17 | 34.13 |
| 120.75-S | 18 | 1432 | 26°46.0' | 117°30.0' | 2250 | 330° | 4 | overcast | rough | 19.44 | 33.80 | 18.70 | 34.02 |

a) Depth, 20 meters.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.85-S | VI-18 | 0815 | 26°24.0' | 118°07.0' | 2200 | 330° | 4 | overcast | rough | 19.06 | 33.79 | - | - |
| 120.90-S | 18 | 0505 | 26°13.0' | 118°26.5' | 2250 | 330° | 4 | overcast | rough | 19.78 | 33.89 | 19.17 | 34.18 |
| 123.37-S | 17 | 0519 | 27°24.0' | 114°39.5' | 35 | 270° | 2 | clear | moderate | 14.74 | 33.78 | 12.01 | 33.86 |
| 123.42-S | 17 | 0740 | 27°12.5' | 115°01.0' | 1500 | 340° | 5 | clear | rough | 18.14 | 33.74 | 15.74 | 33.63 |
| 123.50-S | 17 | 1137 | 26°55.0' | 115°32.5' | 1930 | 320° | 4 | overcast | moderate | 18.45 | 33.77 | 16.37 | 33.72 |
| 123.55-S | 17 | 1415 | 26°44.0' | 115°53.0' | 2100 | 320° | 4 | cloudy | moderate | 18.56 | 33.72 | 16.90 | 33.64 |
| 123.60-S | 17 | 1645 | 26°33.5' | 116°14.0' | 2100 | 320° | 4 | overcast | rough | 19.00 | 33.74 | 17.78 | 33.71 |
| 127.34-S | 16 | 2345 | 26°54.0' | 114°06.0' | 41 | 270° | 4 | haze | moderate | 15.76 | 33.86 | 12.94 | 34.09 |
| 127.40-S | 16 | 2023 | 26°38.5' | 114°31.5' | 1950 | 320° | 4 | partly cloudy | moderate | 19.42 | 33.86 | 18.60 | 33.82 |
| 127.45-S | 16 | 1724 | 26°27.5' | 114°51.0' | 1950 | 320° | 4 | cloudy | moderate | 19.36 | 33.88 | 19.14 | 33.91 |
| 127.50-S | 16 | 1450 | 26°17.5' | 115°10.0' | 1600 | 320° | 4 | overcast | moderate | 19.46 | 33.71 | 18.85 | 33.78 |
| 130.30-S | 15 | 2152 | 26°29.0' | 113°29.0' | 41 | 270° | 4 | partly cloudy | slight | 17.84 | 33.94 | 15.37 | 34.01 |
| 130.35-S | 16 | 0043 | 26°18.0' | 113°48.5' | 190 | 290° | 4 | clear | moderate | 16.57 | 33.79 | 12.72 | 33.78 |
| 130.40-S | 16 | 0337 | 26°07.0' | 114°07.0' | 1350 | 290° | 4 | clear | moderate | 16.34 | 33.68 | 14.46 | 33.67 |
| 130.45-S | 16 | 0650 | 25°56.0' | 114°27.0' | 1900 | 320° | 4 | clear | moderate | 18.68 | 33.76 | 18.06 | 33.75 |
| 130.50-S | 16 | 0954 | 25°43.5' | 114°47.0' | 2100 | 320° | 4 | partly cloudy | moderate | 19.78 | 33.86 | 19.86 | 34.00 |
| 133.25-S | 8 | 1842 | 26°03.0' | 112°47.5' | 45 | 320° | 4 | clear | rough | 16.36 | 33.93 | 14.10 | 34.13 |
| 133.30-S | 8 | 1608 | 25°51.5' | 113°06.5' | 106 | 320° | 4 | partly cloudy | very rough | 19.18 | 33.96 | 14.80 | 34.08 |
| 133.35-S | 8 | 1305 | 25°39.5' | 113°29.0' | 125 | 320° | 6 | partly cloudy | very rough | 18.38 | 33.83 | 14.40 | 33.64 |



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## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 133.40-S | VI-8 | 1018 | 25°30.0' | 113°47.5' | 2350 | 320° | 6 | cloudy | high | 18.28 | 33.85 | 17.00 | 33.71 |
| 133.45-S | 8 | 0740 | 25°20.5' | 114°05.5' | 1800 | 320° | 6 | partly cloudy | high | 18.76 | 33.86 | 17.65 | 33.74 |
| 133.50-S | 8 | 0445 | 25°11.0' | 114°23.5' | 1700 | 330° | 6 | partly cloudy | high | 19.18 | 33.88 | 19.40 | 34.20 |
| 137.23-S | 7 | 0804 | 25°32.0' | 112°18.0' | 30 | 320° | 4 | clear | moderate | 19.87 | 34.19 | 14.76 | 34.26 |
| 137.30-S | 7 | 1110 | 25°19.0' | 112°44.0' | 90 | 320° | 6 | clear | rough | 19.96 | 34.14 | 14.76 | 34.14 |
| 137.35-S | 7 | 1430 | 25°09.0' | 113°03.0' | 650 | 320° | 6 | clear | very rough | 19.18 | 33.95 | 15.24 | 33.80 |
| 137.45-S | 7 | 2025 | 24°48.5' | 113°41.5' | 1100 | 320° | 6 | partly cloudy | very rough | 19.97 | 33.95 | 16.48 | 33.78 |
| 137.50-S | 7 | 2310 | 24°38.5' | 114°00.0' | 2100 | 320° | 6 | partly cloudy | high | 19.36 | 33.88 | 18.61 | 34.20 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| STRANGER; July 6, 1958; 1725 GCT; 41°48'N, 124°28'W; sounding, 71 fm; wind, calm; weather, fog; sea, rough; wire angle, 00°. | | | | | | | | | | | | 40.38 |
| 0 | 11.98 | 32.99 | | 292 | 0 | 11.98 | 32.99 | | 25.05 | 292 | 0.00 | |
| 10 | 10.72 | 33.37 | | 241 | 10 | 10.72 | 33.37 | | 25.58 | 241 | 0.03 | |
| 30 | 9.41 | 33.60 | | 204 | 20 | 9.96 | 33.52 | | 25.82 | 218 | 0.05 | |
| 49 | 8.80 | 33.70 | | 187 | 30 | 9.41 | 33.60 | | 25.98 | 204 | 0.07 | |
| 73 | 8.37 | 33.82 | | 172 | 50 | 8.78 | 33.70 | | 26.16 | 186 | 0.11 | |
| 98 | 7.87 | 33.91 | | 158 | 75 | 8.32 | 33.83 | | 26.34 | 170 | 0.15 | |
| | | | | | 100 | (7.85) | (33.91) | | (26.47) | (157) | (0.20) | |
| STRANGER; July 6, 1958; 1925 GCT; 41°43'N, 124°38'W; sounding, 400 fm; wind, 330°, force 4; weather, fog; sea, very rough; wire angle, 23°. | | | | | | | | | | | | 40.40 |
| 0 | 13.08 | 32.84 | | 322 | 0 | 13.08 | 32.84 | | 24.74 | 322 | 0.00 | |
| 8 | 13.05 | 32.85 | | 321 | 10 | 13.04 | 32.85 | | 24.75 | 321 | 0.03 | |
| 27 | 10.45 | 32.92 | | 271 | 20 | 13.02 | 32.85 | | 24.76 | 320 | 0.06 | |
| 40 | 9.64 | 33.13 | | 242 | 30 | 10.22 | 32.94 | | 25.35 | 266 | 0.09 | |
| 48 | 9.30 | 33.30 | | 224 | 50 | 9.28 | 33.32 | | 25.78 | 223 | 0.14 | |
| 57 | 9.22 | 33.42 | | 214 | 75 | 8.80 | 33.57 | | 26.06 | 196 | 0.19 | |
| 65 | 9.02 | 33.53 | | 203 | 100 | 8.42 | 33.70 | | 26.21 | 182 | 0.24 | |
| 82 | 8.68 | 33.59 | | 194 | 150 | 7.90 | 33.92 | | 26.46 | 157 | 0.33 | |
| 124p | 8.18 | 33.82 | | 169 | 200 | 7.26 | 33.99 | | 26.61 | 144 | 0.40 | |
| 184p | 7.44 | 33.99 | | 146 | 250 | 6.58 | 34.00 | | 26.71 | 134 | 0.48 | |
| 258p | 6.41 | 34.00 | | 132 | 300 | 6.06 | 34.03 | | 26.80 | 126 | 0.54 | |
| 359p | 5.66 | 34.11 | | 115 | | | | | | | | |
| STRANGER; July 6, 1958; 2233 GCT; 41°34'N, 124°59'W; sounding, 750 fm; wind, 360°, force 5; weather, fog; sea, high; wire angle, 03°. | | | | | | | | | | | | 40.45 |
| 0 | 14.86 | 32.59 | | 376 | 0 | 14.86 | 32.59 | | 24.17 | 376 | 0.00 | |
| 10 | 14.82 | 32.61 | | 373 | 10 | 14.82 | 32.61 | | 24.20 | 373 | 0.04 | |
| 30 | 10.94 | 32.97 | | 275 | 20 | 14.81 | 32.61 | | 24.20 | 373 | 0.07 | |
| 44 | 10.06 | 33.25 | | 240 | 30 | 10.94 | 32.97 | | 25.23 | 275 | 0.11 | |
| 55 | 9.66 | 33.35 | | 227 | 50 | 9.87 | 33.30 | | 25.67 | 233 | 0.16 | |
| 65 | 9.15 | 33.48 | | 209 | 75 | 8.88 | 33.57 | | 26.04 | 198 | 0.21 | |
| 74 | 8.88 | 33.57 | | 198 | 100 | 8.39 | 33.74 | | 26.24 | 178 | 0.26 | |
| 93 | 8.53 | 33.68 | | 184 | 150 | 7.80 | 33.90 | | 26.46 | 158 | 0.34 | |
| 107 | 8.26 | 33.79 | | 173 | 200 | 7.22 | 33.98 | | 26.60 | 144 | 0.42 | |
| 121 | 8.14 | 33.87 | | 164 | 250 | 6.60 | 34.02 | | 26.72 | 133 | 0.49 | |
| 142 | 7.88 | 33.89 | | 160 | 300 | 6.10 | 34.04 | | 26.81 | 125 | 0.56 | |
| 171 | 7.50 | 33.95 | | 150 | 400 | 5.61 | 34.12 | | 26.92 | 114 | 0.68 | |
| 206 | 7.18 | 33.98 | | 143 | 500 | 5.18 | 34.18 | | 27.03 | 104 | 0.79 | |
| 257 | 6.46 | 34.02 | | 131 | | | | | | | | |
| 336 | 5.84 | 34.07 | | 120 | | | | | | | | |
| 436 | 5.47 | 34.15 | | 110 | | | | | | | | |
| 577 | 4.76 | 34.22 | | 97 | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

**40.50** STRANGER; July 7, 1958; 0158 GCT; 41°24'N, 125°21'W; sounding, 1750 fm; wind, 360°, force 5; weather, fog; sea, high; wire angle, 10°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.22 | 32.76 | 370 | 0 | 15.22 | 32.76 | 24.22 | 370 | 0.00 |
| 10 | 15.20 | 32.75 | 371 | 10 | 15.20 | 32.75 | 24.22 | 371 | 0.04 |
| 29 | 12.38 | 32.91 | 304 | 20 | 15.10 | 32.75 | 24.24 | 369 | 0.07 |
| 43 | 9.99 | 33.17 | 244 | 30 | 10.78 | 32.96 | 25.05 | 292 | 0.11 |
| 53 | 9.71 | 33.21 | 237 | 50 | 9.77 | 33.20 | 25.60 | 239 | 0.16 |
| 63 | 9.46 | 33.34 | 224 | 75 | 9.19 | 33.46 | 25.90 | 211 | 0.22 |
| 72 | 9.27 | 33.43 | 214 | 100 | 8.41 | 33.70 | 26.21 | 181 | 0.27 |
| 90 | 8.62 | 33.63 | 189 | 150 | 7.90 | 33.91 | 26.46 | 158 | 0.35 |
| 104 | 8.36 | 33.73 | 178 | 200 | 7.33 | 33.98 | 26.60 | 145 | 0.43 |
| 117 | 8.16 | 33.81 | 170 | 250 | 6.65 | 34.02 | 26.72 | 133 | 0.50 |
| 139 | 7.98 | 33.89 | 161 | 300 | 6.35 | 34.06 | 26.79 | 127 | 0.57 |
| 166 | 7.76 | 33.93 | 155 | 400 | 5.58 | 34.09 | 26.91 | 115 | 0.69 |
| 200 | 7.33 | 33.98 | 145 | 500 | 5.06 | 34.18 | 27.04 | 103 | 0.80 |
| 248 | 6.64 | 34.02 | 134 | | | | | | |
| 322 | 6.22 | 34.07 | 124 | | | | | | |
| 415 | 5.46 | 34.10 | 114 | | | | | | |
| 536p | 4.95 | 34.24 | 97 | | | | | | |

**40.60** STRANGER; July 7, 1958; 0722 GCT; 41°04'N, 126°07'W; sounding, 1700 fm; wind, 330°, force 4; weather, overcast; sea, very rough; wire angle, 16°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.3 | - | | 0 | 16.3 | (32.57) | (23.84) | (408) | (0.00) |
| 9 | 16.28 | 32.57 | 408 | 10 | 16.28 | 32.57 | 23.84 | 408 | 0.04 |
| 28 | 15.48 | 32.61 | 388 | 20 | 16.22 | 32.58 | 23.86 | 405 | 0.08 |
| 42 | 11.52 | 32.67 | 307 | 30 | 14.66 | 32.62 | 24.23 | 370 | 0.12 |
| 51 | 11.05 | 32.84 | 286 | 50 | 11.10 | 32.82 | 25.09 | 288 | 0.19 |
| 60 | 10.68 | 32.98 | 270 | 75 | 10.32 | 33.20 | 25.52 | 247 | 0.25 |
| 68 | 10.42 | 33.16 | 252 | 100 | 9.58 | 33.39 | 25.79 | 222 | 0.31 |
| 85 | 10.12 | 33.26 | 240 | 150 | 8.07 | 33.86 | 26.40 | 164 | 0.41 |
| 97 | 9.75 | 33.35 | 228 | 200 | 7.61 | 33.94 | 26.52 | 152 | 0.49 |
| 109 | 8.90 | 33.55 | 200 | 250 | 6.99 | 34.02 | 26.67 | 138 | 0.56 |
| 130 | 8.50 | 33.71 | 182 | 300 | 6.39 | 34.04 | 26.77 | 128 | 0.63 |
| 144 | 8.12 | 33.85 | 166 | 400 | 5.50 | 34.10 | 26.93 | 113 | 0.76 |
| 189 | 7.78 | 33.92 | 156 | 500 | 5.02 | 34.14 | 27.01 | 106 | 0.87 |
| 233 | 7.21 | 34.00 | 142 | | | | | | |
| 306 | 6.32 | 34.05 | 127 | | | | | | |
| 397 | 5.54 | 34.10 | 114 | | | | | | |
| 523 | 4.96 | 34.16 | 103 | | | | | | |

**40.70** STRANGER; July 7, 1958; 1408 GCT; 40°43'N, 126°53'W; sounding, 1750 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 05°.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.59 | 32.77 | 400 | 0 | 16.59 | 32.77 | 23.92 | 400 | 0.00 |
| 10 | 16.58 | 32.75 | 401 | 10 | 16.58 | 32.75 | 23.91 | 401 | 0.04 |
| 29 | 13.40 | 32.88 | 326 | 20 | 16.58 | 32.75 | 23.91 | 401 | 0.08 |
| 58 | 11.70 | 32.96 | 288 | 30 | 13.33 | 32.88 | 24.70 | 325 | 0.12 |
| 67 | 11.46 | 32.94 | 286 | 50 | 12.04 | 32.95 | 25.00 | 296 | 0.18 |
| 77 | 11.30 | 33.01 | 278 | 75 | 11.38 | 32.98 | 25.16 | 282 | 0.25 |
| 90 | 10.64 | 33.13 | 258 | 100 | 9.21 | 33.31 | 25.78 | 223 | 0.32 |
| 101 | 9.18 | 33.32 | 221 | 150 | 8.08 | 33.62 | 26.20 | 182 | 0.42 |
| 114 | 8.50 | 33.40 | 205 | 200 | 7.58 | 33.90 | 26.50 | 154 | 0.50 |
| 133 | 8.25 | 33.48 | 196 | 250 | 7.07 | 33.93 | 26.59 | 146 | 0.58 |
| 149 | 8.08 | 33.62 | 182 | 300 | 6.59 | 33.98 | 26.70 | 135 | 0.65 |
| 175 | 7.78 | 33.86 | 160 | 400 | 5.98 | 34.14 | 26.91 | 116 | 0.78 |
| 197 | 7.58 | 33.90a) | 154 | 500 | 5.34 | 34.18 | 27.01 | 106 | 0.90 |
| 246 | 7.12 | 33.93 | 146 | | | | | | |
| 323 | 6.36 | 34.00 | 151 | | | | | | |
| 426 | 5.85 | 34.17 | 113 | | | | | | |
| 561 | 4.84 | 34.18 | 100 | | | | | | |

a) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ cm$^3$/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ cm$^3$/g | ΔD dyn. m |

STRANGER; July 7, 1958; 1922 GCT; 40°23'N, 127°38'W; sounding, 1700 fm; wind, 360°, force 6; weather, overcast; sea, high; wire angle, 11°. 40.80

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.70 | 32.87 | | 394 | 0 | 16.70 | 32.87 | | 23.98 | 394 | 0.00 |
| 9 | 16.69 | 32.97u | | | 10 | 16.69 | 32.87 | | 23.98 | 394 | 0.04 |
| 28 | 16.69 | 32.87 | | 394 | 20 | 16.69 | 32.87 | | 23.98 | 394 | 0.08 |
| 54 | 12.37 | 32.86 | | 308 | 30 | 16.68 | 32.87 | | 23.98 | 394 | 0.12 |
| 65 | 11.86 | 32.89 | | 297 | 50 | 12.65 | 32.86 | | 24.82 | 314 | 0.19 |
| 73 | 11.63 | 32.90 | | 292 | 75 | 11.62 | 32.90 | | 25.06 | 291 | 0.26 |
| 88 | 11.04 | 32.96 | | 278 | 100 | 10.45 | 33.10 | | 25.42 | 257 | 0.34 |
| 101 | 10.40 | 33.10 | | 257 | 150 | 8.46 | 33.49 | | 26.04 | 198 | 0.44 |
| 112 | 9.70 | 33.30 | | 231 | 200 | 7.72 | 33.88 | | 26.46 | 158 | 0.54 |
| 128 | 8.88 | 33.44a) | | 208 | 250 | 6.96 | 33.92 | | 26.60 | 145 | 0.61 |
| 145 | 8.58 | 33.48 | | 200 | 300 | 6.35 | 33.93 | | 26.69 | 136 | 0.69 |
| 169 | 8.08 | 33.70 | | 177 | | | | | | | |
| 190 | 7.86 | 33.86 | | 162 | | | | | | | |
| 234 | 7.20 | 33.92 | | 148 | | | | | | | |
| 310 | 6.24 | 33.93 | | 135 | | | | | | | |

STRANGER; July 8, 1958; 0033, 0120 GCT; 40°06'N, 128°15'W; sounding, 2550 fm; wind, 360, force 5; weather, overcast; sea, high; wire angle, 25°, 48°. 40.90

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.50 | 32.81 | | 395 | 0 | 16.50 | 32.81 | | 23.97 | 395 | 0.00 |
| 8 | 16.48 | 32.88 | | 390 | 10 | 16.48 | 32.87 | | 24.02 | 390 | 0.04 |
| 27 | 16.47 | 32.83 | | 393 | 20 | 16.48 | 32.86 | | 24.01 | 391 | 0.08 |
| 39 | 14.98 | 32.77 | | 366 | 30 | 16.47 | 32.83 | | 23.99 | 393 | 0.12 |
| 48 | 12.56 | 32.81 | | 315 | 50 | 12.32 | 32.82 | | 24.85 | 311 | 0.19 |
| 57 | 11.78 | 32.85 | | 298 | 75 | 10.78 | 32.96 | | 25.26 | 272 | 0.26 |
| 65 | 11.31 | 32.86 | | 290 | 100 | 9.50 | 33.31 | | 25.73 | 227 | 0.32 |
| 81 | 10.50 | 33.05 | | 262 | 150 | 8.18 | 33.89 | | 26.40 | 264 | 0.42 |
| | | | | | 200 | 7.68 | 33.97 | | 26.53 | 151 | 0.50 |
| 100 | 9.50 | 33.31b) | | 227 | 250 | 7.28 | | | | | |
| 117 | 8.76 | 33.62 | | 192 | 300 | 6.75 | | | | | |
| 141 | 8.30 | 33.87 | | 167 | | | | | | | |
| 174 | 7.92 | 33.93 | | 157 | | | | | | | |
| 232 | 7.42 | 34.02 | | 144 | | | | | | | |
| 308 | 6.68 | 33.92r | | | | | | | | | |
| 424c) | 6.26 | 34.11 | | | | | | | | | |

STRANGER; July 6, 1958; 0610 GCT; 40°45'N, 125°08'W; sounding, 1500 fm; wind, 360°, force 4; weather, fog; sea, very rough; wire angle, 20°. 43.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.36 | 32.74 | 6.07 | 354 | 0 | 14.36 | 32.74 | 6.07 | 24.39 | 354 | 0.00 |
| 9 | 14.26 | 32.74 | 6.24 | 352 | 10 | 14.25 | 32.74 | 6.24 | 24.42 | 352 | 0.04 |
| 28 | 10.73 | 32.90 | 5.91 | 276 | 20 | 12.40 | 32.83 | 6.08 | 24.85 | 301 | 0.07 |
| 41 | 10.00 | 33.17 | 5.02 | 245 | 30 | 10.50 | 32.95 | 5.75 | 25.28 | 270 | 0.10 |
| 50 | 9.79 | 33.21 | 4.61 | 238 | 50 | 9.79 | 33.21 | 4.61 | 25.61 | 238 | 0.15 |
| 59 | 9.26 | 33.33 | 4.49 | 222 | 75 | 8.83 | 33.50 | 4.00 | 25.99 | 202 | 0.20 |
| 68 | 9.00 | 33.44 | 4.22 | 209 | 100 | 8.28 | 33.66 | 3.02 | 26.21 | 182 | 0.25 |
| 83 | 8.62 | 33.57 | 3.59 | 194 | 150 | 7.62 | 33.96 | 2.45 | 26.54 | 151 | 0.34 |
| 96 | 8.34 | 33.59 | 3.24 | 188 | 200 | 7.07 | 34.02 | 2.16 | 26.66 | 139 | 0.41 |
| 107 | 8.24 | 33.80 | 2.99 | 172 | 250 | 6.80 | 34.08 | 1.64 | 26.74 | 131 | 0.48 |
| 128 | 7.98 | 33.89 | 2.98 | 161 | 300 | 6.50 | 34.09 | 1.36 | 26.79 | 127 | 0.54 |
| 150 | 7.62 | 33.96 | 2.45 | 151 | 400 | 5.82 | 34.18 | 1.00 | 26.94 | 112 | 0.67 |
| 182 | 7.18 | 33.99 | 2.24 | 142 | 500 | 5.28 | 34.19 | 0.71 | 27.02 | 104 | 0.78 |
| 225 | 6.94 | 34.07 | 1.73 | 134 | | | | | | | |
| 293 | 6.52 | 34.09 | 1.38 | 127 | | | | | | | |
| 375 | 5.98 | 34.17 | 1.03 | 114 | | | | | | | |
| 500 | 5.28 | 34.19 | 0.71 | 104 | | | | | | | |

a) Loose bottle cap; value falls on property curve.
b) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.
c) Depth uncertain owing to malfunction of unprotected thermometer.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| **43.60** | STRANGER; July 6, 1958; 0005 GCT; 40°25'N, 125°45'W; sounding, 1550 fm; wind, 010°, force 4; weather, fog; sea, high; wire angle, 12°. | | | | | | | | | | |
| 0 | 12.96 | 33 06 | 5.71 | 304 | 0 | 12.96 | 33.06 | 5.71 | 24.92 | 304 | 0.00 |
| 10 | 12 93 | 33 05 | 5.65 | 304 | 10 | 12.93 | 33.05 | 5.65 | 24.92 | 304 | 0.03 |
| 29 | 11.18 | 33.04 | 5.12 | 274 | 20 | 12.35 | 33.04 | 5.47 | 25.02 | 305 | 0.06 |
| 52 | 9.55 | 33.29 | 4.29 | 229 | 30 | 11.05 | 33.05 | 5.08 | 25.27 | 271 | 0.09 |
| 62 | 9.23 | 33.37 | 3.89 | 218 | 50 | 9.63 | 33.28 | 4.38 | 25.68 | 232 | 0.14 |
| 71 | 9.08 | 33.48 | 3.66 | 207 | 75 | 9.00 | 33.53 | 3.49 | 25.99 | 203 | 0.19 |
| 80 | 8.90 | 33.58 | 3.33 | 198 | 100 | 8.46 | 33.74 | 3.06 | 26.24 | 179 | 0.24 |
| 93 | 8.62 | 33.71 | 3.04 | 184 | 150 | 7.85 | 33.94 | 2.74 | 26.48 | 156 | 0.33 |
| 105 | 8.36 | 33.76 | 3.07 | 176 | 200 | 7.23 | 33.98 | 2.51 | 26.60 | 145 | 0.40 |
| 122 | 8.08 | 33.84 | 2.89 | 166 | 250 | 7.22 | 34.11a) | 1.80 | 26.70 | 135 | 0.47 |
| 139 | 7.98 | 33.91 | 2.83 | 159 | 300 | 6.54 | 34.08 | 1.16 | 26.79 | 127 | 0.54 |
| 162 | 7.72 | 33.96 | 2.59 | 152 | 400 | 5.86 | 34.16 | 0.77 | 26.92 | 114 | 0.66 |
| 182 | 7.38 | 33.96 | 2.53 | 148 | 500 | 5.23 | 34.21 | 0.50 | 27.05 | 102 | 0.78 |
| 227 | 7.13 | 34.05 | 2.40 | 138 | | | | | | | |
| 290 | 6.60 | 34.07 | 1.24 | 129 | | | | | | | |
| 390 | 5.95 | 34.15 | 0.78 | 115 | | | | | | | |
| 513 | 5.16 | 34.22 | 0.44 | 101 | | | | | | | |
| **43.90** | STRANGER; July 8, 1958; 0635 GCT; 39°29.5'N, 127°52'W; sounding, 2400 fm; wind, 360°, force 5; weather, overcast; sea, high; wire angle, 25°. | | | | | | | | | | |
| 0 | 16.68 | 32.84 | | 397 | 0 | 16.68 | 32.84 | | 23.95 | 397 | 0.00 |
| 8 | 16.68 | 32.83 | | 397 | 10 | 16.68 | 32.83 | | 23.95 | 397 | 0.04 |
| 26 | 16.67 | 32.86 | | 395 | 20 | 16.68 | 32.85 | | 23.96 | 396 | 0.08 |
| 39 | 14.16 | 32.75 | | 350 | 30 | 16.66 | 32.86 | | 23.97 | 395 | 0.12 |
| 48 | 11.88 | 32.77 | | 306 | 50 | 11.78 | 32.80 | | 24.94 | 302 | 0.19 |
| 56 | 11.42 | 32.89 | | 289 | 75 | 9.99 | 32.99 | | 25.41 | 258 | 0.26 |
| 64 | 10.77 | 32.92 | | 276 | 100 | 9.06 | 33.28 | | 25.78 | 222 | 0.32 |
| 80 | 9.72 | 33.04 | | 250 | 150 | 7.98 | 33.76 | | 26.33 | 171 | 0.42 |
| 92 | 9.24 | 33.24 | | 228 | 200 | 7.20 | 33.94 | | 26.58 | 147 | 0.50 |
| 106p | 8.96 | 33.30 | | 219 | 250 | 6.54 | 34.01 | | 26.73 | 133 | 0.57 |
| 128p | 8.40 | 33.58 | | 190 | 300 | 5.92 | 34.04 | | 26.83 | 123 | 0.64 |
| 161p | 7.77 | 33.82 | | 163 | 400 | 5.10 | 34.06 | | 26.95 | 112 | 0.76 |
| 221p | 6.90 | 33.98 | | 140 | | | | | | | |
| 302p | 5.91 | 34.04 | | 123 | | | | | | | |
| 429p | 4.92 | 34.07 | | 109 | | | | | | | |
| **47.50** | STRANGER; July 5, 1958; 1115 GCT; 40°13'N, 124°31.5'W; sounding, 140 fm; wind, 180°, force 2; weather, fog; sea, moderate; wire angle, 20°. | | | | | | | | | | |
| 0 | 12.52 | 33.12 | 5.34 | 292 | 0 | 12.52 | 33.12 | 5.34 | 25.05 | 292 | 0.00 |
| 9 | 12.24 | 33.14 | 5.39 | 285 | 10 | 12.23 | 33.14 | 5.39 | 25.13 | 285 | 0.03 |
| 29 | 11.28 | 33.22 | 4.89 | 262 | 20 | 12.12 | 33.15 | 5.35 | 25.16 | 282 | 0.06 |
| 47 | 10.00 | 33.58 | 4.33 | 214 | 30 | 11.27 | 33.24 | 4.88 | 25.38 | 260 | 0.08 |
| 69 | 8.72 | 33.74 | 3.66 | 182 | 50 | 9.90 | 33.60 | 4.32 | 25.90 | 212 | 0.13 |
| 92 | 8.01 | 33.90 | 2.40 | 161 | 75 | 8.45 | 33.78 | 3.40 | 26.28 | 175 | 0.18 |
| 116 | 7.89 | 33.95 | 2.00 | 155 | 100 | 7.99 | 33.92 | 2.28 | 26.45 | 158 | 0.22 |
| 145 | 7.75 | 34.00 | 1.87 | 150 | 150 | (7.70) | (34.02) | (1.85) | (26.57) | (148) | (0.30) |

a) This value results from an unusual feature produced in the salinity curve by inclusion of a bathythermograph feature in the temperature curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| STRANGER; July 5, 1958; 1453 GCT; 40°03.5'N, 124°54'W; sounding, 800 fm; wind, 110°, force 2; weather, fog; sea, high; wire angle, 03°. | | | | | | | | | | | 47.55 |
| 0 | 15.72 | 32.73 | 5.75 | 383 | 0 | 15.72 | 32.73 | 5.75 | 24.10 | 383 | 0.00 |
| 10 | 15.70 | 32.81 | 5.81 | 377 | 10 | 15.70 | 32.81 | 5.81 | 24.16 | 377 | 0.04 |
| 30 | 13.08 | 32.74 | 6.55 | 330 | 20 | 15.42 | 32.81 | 5.90 | 24.21 | 372 | 0.08 |
| 44 | 11.64 | 32.74 | 6.48 | 304 | 30 | 13.08 | 32.74 | 6.55 | 24.65 | 330 | 0.11 |
| 54 | 11.20 | 32.80 | 6.12 | 292 | 50 | 11.39 | 32.77 | 6.29 | 24.99 | 298 | 0.17 |
| 63 | 10.72 | 32.86 | 5.79 | 279 | 75 | 10.04 | 33.02 | 5.44 | 25.42 | 257 | 0.24 |
| 71 | 10.32 | 32.97 | 5.52 | 264 | 100 | 8.95 | 33.26 | 5.21 | 25.99 | 222 | 0.30 |
| 90 | 9.26 | 33.24 | 5.25 | 236 | 150 | 8.38 | 33.79 | 3.20 | 26.29 | 174 | 0.40 |
| 105 | 8.81 | 33.33 | 5.21 | 215 | 200 | 7.74 | 33.98 | 2.58 | 26.54 | 151 | 0.49 |
| 140p | 8.50 | 33.70 | 3.36 | 183 | 250 | 7.18 | 34.04 | 2.02 | 26.66 | 139 | 0.56 |
| 183p | 7.98 | 33.95 | 2.75 | 156 | 300 | 6.77 | 34.05 | 1.55 | 26.72 | 133 | 0.63 |
| 249p | 7.18 | 34.04 | 2.02 | 139 | 400 | 6.19 | 34.10 | 0.88 | 26.85 | 121 | 0.76 |
| 337p | 6.48 | 34.05 | 1.22 | 129 | | | | | | | |
| 469p | 5.86 | 34.16 | 0.56 | 114 | | | | | | | |
| STRANGER; July 5, 1958; 1807 GCT; 39°52'N, 125°19.5'W; sounding, 1600 fm; wind, 360°, force 3; weather, fog; sea, very rough; wire angle, 03°. | | | | | | | | | | | 47.60 |
| 0 | 15.62 | 32.74 | | 380 | 0 | 15.62 | 32.74 | | 24.10 | 380 | 0.00 |
| 9 | 15.55 | 32.81 | | 374 | 10 | 15.54 | 32.80 | | 24.18 | 374 | 0.04 |
| 29 | 15.47 | 32.75 | | 377 | 20 | 15.50 | 32.78 | | 24.17 | 375 | 0.08 |
| 38 | 15.46 | 32.76 | | 376 | 30 | 15.47 | 32.75 | | 24.16 | 376 | 0.11 |
| 49 | 15.22 | 32.72 | | 373 | 50 | 15.19 | 32.72 | | 24.20 | 373 | 0.19 |
| 58 | 14.51 | 32.70 | | 360 | 75 | 10.11 | 33.10 | | 25.45 | 254 | 0.27 |
| 67 | 11.29 | 32.98 | | 280 | 100 | 9.08 | 33.37 | | 25.85 | 216 | 0.33 |
| 82 | 9.67 | 33.16 | | 240 | 150 | 8.25 | 33.81 | | 26.32 | 171 | 0.42 |
| 131p | 8.38 | 33.66 | | 184 | 200 | 7.97 | 33.98 | | 26.50 | 154 | 0.50 |
| 167p | 8.20 | 33.89 | | 164 | 250 | 7.38 | 34.03 | | 26.63 | 142 | 0.58 |
| 231p | 7.62 | 34.02 | | 146 | 300 | 6.66 | 34.04 | | 26.73 | 132 | 0.65 |
| 315p | 6.48 | 34.05 | | 130 | 400 | 6.12 | 34.16 | | 26.90 | 116 | 0.78 |
| 433p | 5.98 | 34.23 | | 110 | | | | | | | |
| STRANGER; July 8, 1958; 1145 GCT; 38°54'N, 127°30'W; sounding, 2450 fm; wind, 360°, force 6; weather, overcast; sea, high; wire angle, 13°. | | | | | | | | | | | 47.90 |
| 0 | 17.00 | 33.01 | | 391 | 0 | 17.00 | 33.01 | | 24.01 | 391 | 0.00 |
| 10 | 17.00 | 33.04 | | 388 | 10 | 17.00 | 33.04 | | 24.04 | 388 | 0.04 |
| 29 | 17.00 | 32.98 | | 393 | 20 | 17.00 | 33.01 | | 24.01 | 391 | 0.08 |
| 43 | 13.16 | 32.97 | | 314 | 30 | 17.00 | 32.98 | | 23.99 | 393 | 0.12 |
| 52 | 12.16 | 32.95 | | 298 | 50 | 12.22 | 32.95 | | 24.98 | 299 | 0.19 |
| 61 | 11.91 | 32.97 | | 290 | 75 | 11.68 | 33.03 | | 25.14 | 284 | 0.26 |
| 71 | 11.76 | 33.02 | | 285 | 100 | 10.46 | 33.11 | | 25.42 | 257 | 0.33 |
| 89 | 11.51 | 33.06 | | 278 | 150 | 8.35 | 33.47 | | 26.04 | 198 | 0.44 |
| 102 | 10.24 | 33.12 | | 253 | 200 | 7.95 | 33.92 | | 26.46 | 158 | 0.53 |
| 117 | 9.14 | 33.30 | | 222 | 250 | 7.22 | 33.98 | | 26.60 | 144 | 0.61 |
| 140 | 8.45 | 33.42 | | 203 | 300 | 6.54 | 33.97 | | 26.69 | 136 | 0.68 |
| 168 | 8.18 | 33.62 | | 184 | 400 | 5.58 | 33.99 | | 26.84 | 122 | 0.81 |
| 205 | 7.92 | 33.93 | | 157 | 500 | 4.97 | 34.07 | | 26.97 | 110 | 0.94 |
| 256 | 7.15 | 33.98 | | 143 | | | | | | | |
| 336 | 6.17 | 33.96 | | 132 | | | | | | | |
| 434 | 5.27 | 34.02 | | 117 | | | | | | | |
| 572 | 4.62 | 34.15 | | 100 | | | | | | | |

SIO

CCOFI 5807

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **50.60** | STRANGER; July 9, 1958; 1455 GCT; 39°25'N, 124°50'W; sounding, 1220 fm; wind, 340°, force 7; weather, overcast; sea, very high; wire angle, 05°. | | | | | | | | | | |
| 0 | 15.20 | 32.78 | | 369 | 0 | 15.20 | 32.78 | | 24.24 | 369 | 0.00 |
| 9 | 15.18 | 32.79 | | 368 | 10 | (15.18) | (32.79) | | (24.26) | (367) | (0.04) |
| 58 | 13.42 | 32.84 | | 329 | 20 | (15.18) | (32.79) | | (24.26) | (367) | (0.07) |
| 114 | 9.16 | 33.33 | | 220 | 30 | 15.2 | (32.79) | | (24.26) | (367) | (0.11) |
| | | | | | 50 | 15.2 | (32.79) | | (24.26) | (367) | (0.18) |
| | | | | | 75 | 11.8 | 33.03 | | 25.11 | 286 | (0.26) |
| | | | | | 100 | 10.38 | 33.20 | | 25.51 | 248 | (0.33) |
| **50.70** | STRANGER; July 9, 1958; 0654 GCT; 39°06'N, 125°38'W; sounding, 2000 fm; wind, 360°, force 7; weather, overcast; sea, high; wire angle, 05°. | | | | | | | | | | |
| 0 | 14.38 | 32.85 | | 346 | 0 | 14.38 | 32.85 | | 24.48 | 346 | 0.00 |
| 11 | 14.36 | 32.90 | | 343 | 10 | 14.36 | 32.90 | | 24.52 | 343 | 0.03 |
| 30 | 13.74 | 32.84 | | 335 | 20 | 14.35 | 32.90 | | 24.52 | 343 | 0.07 |
| 44 | 12.68 | 32.92 | | 310 | 30 | 13.74 | 32.84 | | 24.60 | 335 | 0.10 |
| 54 | 11.98 | 32.95 | | 294 | 50 | 12.27 | 32.94 | | 24.96 | 301 | 0.17 |
| 63 | 11.17 | 32.98 | | 278 | 75 | 10.21 | 33.14 | | 25.46 | 253 | 0.24 |
| 73 | 10.52 | 33.12 | | 253 | 100 | 9.38 | 33.42 | | 25.86 | 215 | 0.30 |
| 92 | 9.31 | 33.35 | | 220 | 150 | 8.52 | 33.79 | | 26.27 | 176 | 0.39 |
| 105 | 9.40 | 33.47 | | 213 | 200 | 8.06 | 33.98 | | 26.48 | 156 | 0.48 |
| 120 | 8.97 | 33.58 | | 198 | 250 | 7.48 | 34.03 | | 26.61 | 144 | 0.56 |
| 143 | 8.58 | 33.77 | | 178 | 300 | 6.95 | 34.09 | | 26.74 | 132 | 0.63 |
| 171 | 8.34 | 33.88 | | 166 | 400 | 6.12 | 34.14 | | 26.88 | 118 | 0.76 |
| 207 | 7.98 | 33.99 | | 154 | 500 | 5.57 | 34.19 | | 27.00 | 107 | 0.87 |
| 257 | 7.40 | 34.04 | | 142 | | | | | | | |
| 338 | 6.62 | 34.12 | | 126 | | | | | | | |
| 437 | 5.88 | 34.15 | | 115 | | | | | | | |
| 578 | 5.13 | 32.27 | | 97 | | | | | | | |
| **50.80** | STRANGER; July 9, 1958; 0013 GCT; 38°42.5'N, 126°23'W; sounding, 2320 fm; wind, 360°, force 6; weather, cloudy; sea, very high; wire angle, 20°. | | | | | | | | | | |
| 0 | 16.52 | 32.87 | | 390 | 0 | 16.52 | 32.87 | | 24.02 | 390 | 0.00 |
| 9 | 16.50 | 32.86 | | 391 | 10 | 16.50 | 32.86 | | 24.01 | 391 | 0.04 |
| 28 | 16.52 | 32.92 | | 386 | 20 | 16.51 | 32.89 | | 24.03 | 389 | 0.08 |
| 55 | 14.15 | 33.02 | | 330 | 30 | 16.52 | 32.92 | | 24.06 | 386 | 0.12 |
| 63 | 13.40 | 33.04 | | 314 | 50 | 16.48 | 32.92 | | 24.06 | 386 | 0.19 |
| 71 | 12.87 | 33.03 | | 305 | 75 | 12.62 | 33.02 | | 24.96 | 301 | 0.28 |
| 84 | 12.25 | 33.01 | | 295 | 100 | 10.80 | 33.09 | | 25.35 | 264 | 0.35 |
| 95 | 11.84 | 33.04 | | 285 | 150 | 8.20 | 33.53 | | 26.11 | 191 | 0.46 |
| 106 | 10.18 | 33.13 | | 250 | 200 | 7.94 | 33.92 | | 26.46 | 158 | 0.56 |
| 120 | 9.22 | 33.22 | | 229 | 250 | 7.30 | 33.98 | | 26.59 | 145 | 0.63 |
| 136 | 8.42 | 33.37 | | 206 | 300 | 6.73 | 34.02 | | 26.71 | 134 | 0.70 |
| 159 | 8.16 | 33.65 | | 181 | 400 | 6.18 | 34.12 | | 26.86 | 120 | 0.84 |
| 177 | 8.12 | 33.80 | | 177 | 500 | 5.35 | 34.16 | | 26.99 | 108 | 0.96 |
| 218 | 7.76 | 33.95 | | 153 | | | | | | | |
| 286 | 6.82 | 34.00 | | 137 | | | | | | | |
| 379 | 6.30 | 34.11 | | 122 | | | | | | | |
| 504 | 5.27 | 34.16 | | 106 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| STRANGER; July 8, 1958; 1649 GCT; 38°19'N, 127°08'W; sounding, 2520 fm; wind, 360°, force 6; weather, overcast; sea, high; wire angle, 15°. | | | | | | | | | | | | 50.90 |
| 0 | 17.00 | 32.99 | | 390 | 0 | 17.00 | 32.99 | | 24.00 | 390 | 0.00 | |
| 9 | 16.99 | 32.97 | | 394 | 10 | 16.99 | 32.97 | | 23.98 | 394 | 0.04 | |
| 28 | 16.99 | 32.97 | | 394 | 20 | 16.99 | 32.97 | | 23.98 | 394 | 0.08 | |
| 55 | 13.08 | 32.99 | | 312 | 30 | 16.99 | 32.97 | | 23.98 | 394 | 0.12 | |
| 66 | 12.64 | 33.00 | | 302 | 50 | 15.46 | 32.98 | | 24.33 | 360 | 0.19 | |
| 74 | 12.44 | 33.04 | | 296 | 75 | 12.43 | 33.04 | | 25.00 | 296 | 0.28 | |
| 89 | 12.14 | 33.10 | | 286 | 100 | 11.55 | 33.21 | | 25.31 | 268 | 0.35 | |
| 101 | 11.54 | 33.21 | | 267 | 150 | 9.28 | 33.58 | | 25.98 | 203 | 0.46 | |
| 115 | 10.10 | 33.34 | | 234 | 200 | 8.66 | 33.86 | | 26.30 | 173 | 0.56 | |
| 132 | 9.65 | 33.46 | | 218 | 250 | 8.10 | 34.02 | | 26.52 | 153 | 0.64 | |
| 151 | 9.26 | 33.58 | | 203 | 300 | 7.60 | 34.09 | | 26.64 | 141 | 0.72 | |
| 177 | 8.96 | 33.75 | | 185 | 400 | 6.83 | 34.15 | | 26.79 | 126 | 0.86 | |
| 198 | 8.66 | 33.86 | | 173 | 500 | 6.38 | 34.20 | | 26.93 | 114 | 0.98 | |
| 248 | 8.08 | 34.02 | | 153 | | | | | | | | |
| 325 | 7.42 | 34.11 | | 137 | | | | | | | | |
| 427 | 6.63 | 34.16a) | | 123 | | | | | | | | |
| 559 | 5.84 | 34.24 | | 108 | | | | | | | | |
| PAOLINA-T; July 17, 1958; 2225 GCT; 39°02.5'N, 123°51'W; sounding, 52 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | | 53.52 |
| 0 | 11.84 | 33.44 | 6.86 | 256 | 0 | 11.84 | 33.44 | 6.86 | 25.43 | 256 | 0.00 | |
| 10 | 9.54 | 33.55 | 5.45 | 209 | 10 | 9.54 | 33.55 | 5.45 | 25.92 | 209 | 0.02 | |
| 31 | 8.74 | 33.71 | 3.21 | 185 | 20 | 9.05 | 33.62 | 4.91 | 26.05 | 197 | 0.04 | |
| 51 | 8.60 | 33.84 | 2.74 | 174 | 30 | 8.76 | 33.71 | 3.24 | 26.17 | 186 | 0.06 | |
| 77 | 8.40 | 33.93 | 2.15 | 164 | 50 | 8.60 | 33.84 | 2.74 | 26.29 | 174 | 0.10 | |
| | | | | | 75 | 8.40 | 33.93 | 2.18 | 26.39 | 164 | 0.14 | |
| PAOLINA-T; July 17, 1958; 2005 GCT; 38°56.5'N, 124°02.5'W; sounding, 380 fm; wind, variable, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 53.55 |
| 0 | 13.31 | 33.19 | 6.41 | 301 | 0 | 13.31 | 33.19 | 6.41 | 24.96 | 301 | 0.00 | |
| 10 | 11.32 | 33.21 | 6.09 | 263 | 10 | 11.32 | 33.21 | 6.09 | 25.36 | 263 | 0.03 | |
| 31 | 10.78 | 33.38 | 6.53 | 242 | 20 | 11.05 | 33.34 | 6.29 | 25.49 | 250 | 0.05 | |
| 42 | 10.20 | 33.39 | 5.79 | 232 | 30 | 10.79 | 33.38 | 6.51 | 25.58 | 242 | 0.08 | |
| 52 | 9.30 | 33.47 | 4.15 | 212 | 50 | 9.43 | 33.45 | 4.37 | 25.86 | 215 | 0.12 | |
| 61 | 9.18 | 33.59 | 4.25 | 201 | 75 | 9.07 | 33.65 | 3.39 | 26.08 | 194 | 0.18 | |
| 72 | 9.08 | 33.66 | 3.41 | 194 | 100 | 8.92 | 33.72 | 3.15 | 26.16 | 187 | 0.22 | |
| 87 | 9.02 | 33.65 | 3.36 | 194 | 150 | 8.30 | 33.92 | 2.37 | 26.40 | 164 | 0.31 | |
| 103 | 8.86 | 33.73 | 3.02 | 186 | 200 | 7.98 | 33.99 | 2.08 | 26.50 | 154 | 0.39 | |
| 118 | 8.55 | 33.80 | 2.86 | 176 | 250 | 7.41 | 34.04 | 1.78 | 26.62 | 143 | 0.47 | |
| 143 | 8.36 | 33.88 | 2.41 | 167 | 300 | 7.02 | 34.08 | 1.40 | 26.72 | 134 | 0.54 | |
| 174 | 8.19 | 33.96 | 2.24 | 159 | 400 | 6.44 | 34.14 | 0.88 | 26.84 | 122 | 0.67 | |
| 208 | 7.89 | 34.00 | 2.02 | 152 | 500 | 5.95 | 34.19 | 0.56 | 26.94 | 112 | 0.79 | |
| 258 | 7.35 | 34.04 | 1.75 | 141 | | | | | | | | |
| 338 | 6.80 | 34.12 | 1.12 | 128 | | | | | | | | |
| 438 | 6.22 | 34.15 | 0.73 | 119 | | | | | | | | |
| 569 | 5.62 | 34.24 | 0.40 | 105 | | | | | | | | |

a) Loose bottle cap; value falls on property curve.

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53.60 PAOLINA-T; July 17, 1958; 1639 GCT; 38°46.5'N, 124°26.5'W; sounding, 1960 fm; wind, calm; weather, fog; sea, moderate; wire angle, 16°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| 0 | 13.66 | 32.81 | 6.01 | 336 | 0 | 13.66 | 32.81 | 6.01 | 24.59 | 336 | 0.00 |
| 10 | 10.98 | 33.06 | 5.86 | 269 | 10 | 10.98 | 33.06 | 5.86 | 25.29 | 269 | 0.03 |
| 29 | 10.59 | 33.13 | 5.54 | 257 | 20 | 10.75 | 33.10 | 5.69 | 25.36 | 262 | 0.06 |
| 39 | 10.36 | 33.22 | 5.55 | 246 | 30 | 10.56 | 33.13 | 5.54 | 25.42 | 256 | 0.08 |
| 49 | 10.16 | 33.24 | 5.45 | 242 | 50 | 10.14 | 33.24 | 5.43 | 25.58 | 242 | 0.13 |
| 59 | 10.08 | 33.30 | 5.40 | 237 | 75 | 9.87 | 33.32 | 5.38 | 25.68 | 232 | 0.19 |
| 69 | 10.03 | 33.30 | 5.41 | 236 | 100 | 9.45 | 33.55 | 5.07 | 25.93 | 208 | 0.25 |
| 83 | 9.61 | 33.34 | 5.19 | 226 | 150 | 8.62 | 33.94 | 2.25 | 26.37 | 166 | 0.34 |
| 98 | 9.51 | 33.55 | 5.05 | 209 | 200 | 8.02 | 34.04 | 1.74 | 26.54 | 150 | 0.42 |
| 111 | 8.84 | 33.53 | 5.24 | 200 | 250 | 7.37 | 34.06 | 1.51 | 26.65 | 140 | 0.50 |
| 134 | 8.78 | 33.82 | 2.76 | 178 | 300 | 7.12 | 34.10 | 1.17 | 26.71 | 134 | 0.57 |
| 162 | 8.52 | 33.98 | 2.06 | 162 | 400 | 6.53 | 34.16 | 0.78 | 26.84 | 122 | 0.70 |
| 192 | 8.18 | 34.04 | 1.79 | 152 | 500 | 6.81 | 34.20 | 0.54 | 26.96 | 110 | 0.82 |
| 237 | 7.45 | 34.05 | 1.63 | 142 | | | | | | | |
| 314 | 7.05 | 34.11 | 1.21 | 132 | | | | | | | |
| 408 | 6.44 | 34.16 | 0.75 | 120 | | | | | | | |
| 535 | 5.58 | 34.21 | 0.47 | 106 | | | | | | | |

57.51 PAOLINA-T; July 17, 1958; 0325 GCT; 38°30'N, 123°22'W; sounding, 58 fm; wind, calm; weather, fog; sea, slight; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.58 | 33.28 | 6.17 | 263 | 0 | 11.58 | 33.28 | 6.17 | 25.36 | 263 | 0.00 |
| 10 | 10.25 | 33.64 | 5.75 | 214 | 10 | 10.25 | 33.64 | 5.75 | 25.87 | 214 | 0.02 |
| 30 | 9.59 | 33.68 | 5.07 | 200 | 20 | 9.87 | 33.67 | 5.44 | 25.96 | 206 | 0.04 |
| 50 | 8.94 | 33.75 | 3.26 | 185 | 30 | 9.59 | 33.68 | 5.07 | 26.02 | 200 | 0.06 |
| 77 | 8.64 | 33.80 | 2.58 | 178 | 50 | 8.94 | 33.75 | 3.26 | 26.18 | 185 | 0.10 |
| | | | | | 75 | 8.65 | 33.80 | 2.60 | 26.24 | 178 | 0.15 |

57.55 PAOLINA-T; July 17, 1958; 0603, 0630 GCT; 38°22'N, 123°39.5'W; sounding, 400 fm; wind, 340°, force 3; weather, fog; sea, moderate; wire angle, 05°, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.08 | 33.33 | 6.32 | 287 | 0 | 13.08 | 33.33 | 6.32 | 25.10 | 287 | 0.00 |
| 10 | 12.92 | 33.30 | 6.17 | 286 | 10 | 12.92 | 33.30 | 6.17 | 25.12 | 286 | 0.03 |
| 31 | 11.00 | 33.42 | 5.00 | 243 | 20 | 12.02 | 33.36 | 5.60 | 25.34 | 265 | 0.06 |
| 47 | 10.59 | 33.53 | 5.15 | 228 | 30 | 11.02 | 33.42 | 5.00 | 25.56 | 243 | 0.08 |
| 57 | 10.24 | 33.52 | 4.73 | 223 | 50 | 10.47 | 33.53 | 5.03 | 25.74 | 226 | 0.13 |
| 67 | 9.86 | 33.47 | 4.37 | 220 | 75 | 8.81 | 33.42 | 4.37 | 25.92 | 209 | 0.18 |
| 77 | 8.76 | 33.41 | 4.37 | 208 | 100 | 8.60 | 33.78 | 3.20 | 26.25 | 178 | 0.23 |
| 97 | 8.60 | 33.75 | 3.27 | 180 | 150 | 8.55 | 33.93 | 2.01 | 26.38 | 166 | 0.32 |
| 111 | 8.66 | 33.86 | 2.46 | 173 | 200 | 8.35 | 34.01 | 1.65 | 26.48 | 156 | 0.40 |
| 127 | 8.72 | 33.89 | 2.10 | 172 | 250 | 7.89 | 34.04 | 1.42 | 26.56 | 149 | 0.48 |
| 152 | 8.55 | 33.93 | 2.01 | 166 | 300 | 7.65 | 34.07 | 1.31 | 26.62 | 143 | 0.55 |
| 181 | 8.42 | 34.00 | 1.74 | 160 | 400 | 6.85 | 34.11 | 0.96 | 26.76 | 130 | 0.70 |
| 222 | 8.12 | 34.01 | 1.59 | 154 | 500 | 6.11 | 34.14 | 0.63 | 26.88 | 118 | 0.82 |
| 276 | 7.77 | 34.06 | 1.35 | 145 | 600 | 5.73 | 34.17 | 0.49 | 26.95 | 111 | 0.94 |
| 362 | 7.34 | 34.09 | 1.14 | 137 | | | | | | | |
| 456 | 6.32 | 34.13 | 0.72 | 121 | | | | | | | |
| 604 | 5.72 | 34.17 | 0.49 | 111 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| PAOLINA-T; July 17, 1958; 1003 GCT; 38°12'N, 124°01.5'W; sounding, 1980 fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 08°. | | | | | | | | | | | | 57.60 |
| 0 | 12.36 | 33.21 | 6.67 | 282 | 0 | 12.36 | 33.21 | 6.67 | 25.16 | 282 | 0.00 | |
| 10 | 11.67 | 33.24 | 6.35 | 268 | 10 | 11.67 | 33.24 | 6.35 | 25.30 | 268 | 0.03 | |
| 30 | 10.92 | 33.31 | 5.95 | 250 | 20 | 11.30 | 33.28 | 6.15 | 25.40 | 258 | 0.05 | |
| 40 | 9.94 | 33.39 | 5.13 | 227 | 30 | 10.92 | 33.31 | 5.95 | 25.50 | 250 | 0.08 | |
| 50 | 9.32 | 33.40 | 4.60 | 217 | 50 | 9.32 | 33.40 | 4.60 | 25.84 | 217 | 0.12 | |
| 60 | 9.00 | 33.42 | 4.25 | 211 | 75 | 8.95 | 33.56 | 3.77 | 26.02 | 200 | 0.18 | |
| 69 | 9.02 | 33.50 | 4.03 | 205 | 100 | 8.72 | 33.67 | 3.01 | 26.14 | 188 | 0.23 | |
| 84 | 8.78 | 33.62 | 3.45 | 192 | 150 | 8.10 | 33.89 | 2.17 | 26.41 | 163 | 0.32 | |
| 99 | 8.74 | 33.84u | 3.00 | | 200 | 7.84 | 34.05 | 1.45 | 26.58 | 147 | 0.39 | |
| 113 | 8.43 | 33.78 | 3.13 | 176 | 250 | 7.43 | 34.10 | 1.23 | 26.67 | 138 | 0.47 | |
| 137 | 8.16 | 33.84 | 3.45 | 167 | 300 | 7.12 | 34.12 | 1.05 | 26.73 | 132 | 0.54 | |
| 166 | 8.08 | 33.95 | 2.02 | 158 | 400 | 6.55 | 34.18 | 0.73 | 26.88 | 118 | 0.66 | |
| 200 | 7.84 | 34.05 | 1.45 | 147 | 500 | 5.90 | 34.20 | 0.49 | 26.95 | 111 | 0.78 | |
| 249 | 7.44 | 34.10 | 1.24 | 138 | | | | | | | | |
| 327 | 6.95 | 34.13 | 0.98 | 130 | | | | | | | | |
| 425 | 6.39 | 34.18 | 0.65 | 118 | | | | | | | | |
| 554 | 5.56 | 34.20 | 0.43 | 106 | | | | | | | | |
| STRANGER; July 10, 1958; 0636 GCT; 37°47.5'N, 123°15'W; sounding, 55 fm; wind, 320°, force 4; weather, fog; sea, very rough; wire angle, 08°. | | | | | | | | | | | | 60.55 |
| 0 | 13.96 | 33.02 | | 326 | 0 | 13.96 | 33.02 | | 24.69 | 326 | 0.00 | |
| 10 | 13.90 | 33.01 | | 326 | 10 | 13.90 | 33.01 | | 24.70 | 326 | 0.03 | |
| 29 | 10.78 | 33.29 | | 248 | 20 | 10.94 | 33.10 | | 25.34 | 265 | 0.06 | |
| 48 | 10.45 | 33.47 | | 230 | 30 | 10.78 | 33.31 | | 25.52 | 247 | 0.09 | |
| 73 | 8.68 | 33.67 | | 188 | 50 | 10.30 | 33.47 | | 25.72 | 228 | 0.14 | |
| | | | | | 75 | (8.68) | (33.69) | | (26.17) | (186) | (0.19) | |
| STRANGER; July 10, 1958; 1003 GCT; 37°37'N, 123°37'W; sounding, 1540 fm; wind, 320°, force 4; weather, fog; sea, rough; wire angle, 20°. | | | | | | | | | | | | 60.60 |
| 0 | 15.98 | 33.01 | | 368 | 0 | 15.98 | 33.01 | | 24.25 | 368 | 0.00 | |
| 9 | 15.98 | 32.97 | | 371 | 10 | 15.98 | 32.97 | | 24.22 | 371 | 0.04 | |
| 28 | 12.70 | 33.04 | | 301 | 20 | 15.98 | 32.97 | | 24.22 | 371 | 0.07 | |
| 42 | 11.39 | 33.15 | | 270 | 30 | 12.47 | 33.05 | | 25.00 | 296 | 0.11 | |
| 51 | 10.74 | 33.27 | | 249 | 50 | 11.10 | 33.26 | | 25.42 | 257 | 0.16 | |
| 60 | 9.72 | 33.32 | | 229 | 75 | 9.10 | 33.42 | | 25.88 | 212 | 0.22 | |
| 69 | 9.25 | 33.35 | | 220 | 100 | 8.71 | 33.60 | | 26.10 | 192 | 0.27 | |
| 85 | 8.70 | 33.52 | | 199 | 150 | 8.22 | 33.90 | | 26.40 | 164 | 0.36 | |
| 98 | 8.70 | 33.60 | | 193 | 200 | 7.30 | 33.97 | | 26.59 | 146 | 0.44 | |
| 109 | 8.68 | 33.68 | | 186 | 250 | 6.85 | 34.02 | | 26.69 | 136 | 0.51 | |
| 130 | 8.37 | 33.82 | | 172 | 300 | 6.80 | 34.10 | | 26.76 | 129 | 0.58 | |
| 154 | 8.20 | 33.92 | | 162 | 400 | 6.25 | 34.24 | | 26.94 | 113 | 0.71 | |
| 188 | 7.46 | 33.96 | | 149 | 500 | 5.72 | 34.28 | | 27.04 | 103 | 0.82 | |
| 238 | 6.92 | 34.00 | | 138 | | | | | | | | |
| 308 | 6.78 | 34.14 | | 126 | | | | | | | | |
| 392 | 6.29 | 34.23 | | 113 | | | | | | | | |
| 537 | 5.54 | 34.29 | | 100 | | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |
| **60.70** | STRANGER; July 10, 1958; 1627, 1713 GCT; 37°17'N, 124°21'W; sounding, 2250 fm; wind, 330°, force 5; weather, overcast; sea, high; wire angle, 13°, 20°. | | | | | | | | | | |
| 0 | 15.27 | 33.04 | | 352 | 0 | 15.27 | 33.04 | | 24.42 | 352 | 0.00 |
| 10 | 15.24 | 33.06 | | 350 | 10 | 15.24 | 33.06 | | 24.44 | 350 | 0.04 |
| 30 | 11.63a) | 33.27 | | 264 | 20 | 15.22 | 33.06 | | 24.45 | 349 | 0.07 |
| 45 | 10.01 | 33.39 | | 229 | 30 | 11.63 | 33.27 | | 25.34 | 264 | 0.10 |
| 53 | 9.74 | 33.43 | | 221 | 50 | 9.85 | 33.41 | | 25.76 | 224 | 0.15 |
| 62 | 9.26 | 33.46 | | 212 | 75 | 9.05 | 33.49 | | 25.94 | 207 | 0.20 |
| 70 | 9.08 | 33.48 | | 208 | 100 | 8.73 | 33.70 | | 26.16 | 186 | 0.25 |
| 89 | 8.86 | 33.66 | | 191 | 150 | 8.16 | 33.90 | | 26.40 | 163 | 0.34 |
| 101b) | 8.55 | 33.73 | | | 200 | 7.42 | 33.99 | | 26.59 | 146 | 0.42 |
| | | | | | 250 | 6.92 | 34.00 | | 26.67 | 138 | 0.49 |
| 111b) | 8.72 | 33.68 | | | 300 | 6.72 | 34.10 | | 26.78 | 128 | 0.56 |
| 133 | 8.32 | 33.82 | | 171 | 400 | 5.68 | 34.13 | | 26.93 | 114 | 0.69 |
| 159 | 8.05 | 33.93 | | 159 | 500 | 5.06 | 34.19 | | 27.05 | 102 | 0.80 |
| 195 | 7.50 | 33.99 | | 147 | | | | | | | |
| 244 | 6.97 | 34.00 | | 139 | | | | | | | |
| 319 | 6.62 | 34.13 | | 125 | | | | | | | |
| 417 | 5.44 | 34.13 | | 111 | | | | | | | |
| 553 | 4.96 | 34.22 | | 98 | | | | | | | |
| **60.80** | STRANGER; July 10, 1958; 2200, 2230 GCT; 36°57'N, 125°04'W; sounding, 2375 fm; wind, 350°, force 4; weather, overcast; sea, very rough; wire angle, 15°, 22°. | | | | | | | | | | |
| 0 | 15.10 | 32.81 | | 365 | 0 | 15.10 | 32.81 | | 24.28 | 365 | 0.00 |
| 10 | 15.08 | 32.84 | | 363 | 10 | 15.08 | 32.84 | | 24.30 | 363 | 0.04 |
| 29 | 15.03 | 32.83 | | 362 | 20 | 15.07 | 32.84 | | 24.30 | 363 | 0.07 |
| 42 | 12.91 | 32.85 | | 318 | 30 | 15.02 | 32.83 | | 24.32 | 362 | 0.11 |
| 51 | 12.34 | 32.88 | | 306 | 50 | 12.37 | 32.88 | | 24.89 | 307 | 0.18 |
| 60 | 11.94 | 32.88 | | 299 | 75 | 11.40 | 33.04 | | 25.10 | 277 | 0.25 |
| 69 | 11.82 | 32.97 | | 290 | 100 | 9.82 | 33.32 | | 25.69 | 231 | 0.31 |
| 89 | 10.16 | 33.24 | | 242 | 150 | 8.55 | 33.72 | | 26.21 | 182 | 0.42 |
| | | | | | 200 | 8.02 | 33.95 | | 26.47 | 157 | 0.50 |
| 98 | 9.86 | 33.30 | | 233 | 250 | 7.20 | 34.03 | | 26.65 | 140 | 0.58 |
| 109 | 9.44 | 33.46 | | 214 | 300 | 6.65 | 34.06 | | 26.75 | 130 | 0.65 |
| 133 | 8.94 | 33.59 | | 197 | 400 | 6.08 | 34.12 | | 26.87 | 119 | 0.78 |
| 158 | 8.38 | 33.78 | | 175 | 500 | 5.37 | 34.17 | | 27.00 | 106 | 0.90 |
| 191 | 8.14 | 33.93 | | 160 | | | | | | | |
| 238 | 7.37 | 34.02 | | 143 | | | | | | | |
| 311 | 6.58 | 34.07 | | 128 | | | | | | | |
| 406 | 6.02 | 34.13 | | 118 | | | | | | | |
| 540 | 5.00 | 34.19 | | 102 | | | | | | | |
| **60.90** | STRANGER; July 11, 1958; 0325 GCT; 36°37'N, 125°47'W; sounding, 2500 fm; wind, 360°, force 4; weather, overcast; sea, very rough; wire angle, 09°. | | | | | | | | | | |
| 0 | 16.68 | 32.85 | | 396 | 0 | 16.68 | 32.85 | | 23.96 | 396 | 0.00 |
| 10 | 16.67 | 32.81 | | 398 | 10 | 16.67 | 32.81 | | 23.94 | 398 | 0.04 |
| 29 | 16.67 | 32.84 | | 396 | 20 | 16.67 | 32.84 | | 23.95 | 397 | 0.08 |
| 43 | 13.89 | 32.84 | | 338 | 30 | 16.67 | 32.84 | | 23.96 | 396 | 0.12 |
| 53 | 12.52 | 32.86 | | 310 | 50 | 12.88 | 32.86 | | 24.78 | 318 | 0.19 |
| 62 | 11.74 | 32.86 | | 297 | 75 | 11.34 | 32.93 | | 25.14 | 284 | 0.26 |
| 71 | 11.33 | 32.83 | | 292 | 100 | 10.19 | 33.20 | | 25.53 | 246 | 0.33 |
| 89 | 11.36 | 33.14 | | 269 | 150 | 8.73 | 33.69 | | 26.16 | 186 | 0.44 |
| 104 | 9.79 | 33.22 | | 238 | 200 | 8.46 | 33.96 | | 26.41 | 163 | 0.53 |
| 116 | 9.26 | 33.43 | | 214 | 250 | 8.00 | 34.02 | | 26.53 | 152 | 0.61 |
| 138 | 8.82 | 33.62 | | 193 | 300 | 7.47 | 34.09 | | 26.66 | 139 | 0.68 |
| 163 | 8.64 | 33.80 | | 177 | 400 | 6.60 | 34.14 | | 26.82 | 124 | 0.82 |
| 198 | 8.46 | 33.96 | | 163 | 500 | 6.00 | 34.18 | | 26.92 | 114 | 0.95 |
| 245 | 8.04 | 34.01 | | 153 | | | | | | | |
| 318 | 7.28 | 34.11 | | 136 | | | | | | | |
| 411 | 6.54 | 34.14 | | 123 | | | | | | | |
| 543 | 5.74 | 34.21 | | 108 | | | | | | | |

a) Mean value of 11.57 and 11.69°C.

b) Depth uncertain; not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

STRANGER; July 12, 1958; 0610 GCT; 37°19'N, 122°36'W; sounding, 46 fm; wind, 340°, force 3; weather, fog; sea, moderate; wire angle, 03°. 63.52

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.81 | 33.07 | 301 | 0 | 12.81 | 33.07 | 24.96 | 301 | 0.00 |
| 10 | 11.05 | 33.37 | 247 | 10 | 11.05 | 33.37 | 25.52 | 247 | 0.03 |
| 29 | 9.24 | 33.64 | 198 | 20 | 9.82 | 33.54 | 25.86 | 234 | 0.05 |
| 49 | 8.95 | 33.78 | 183 | 30 | 9.23 | 33.64 | 26.04 | 198 | 0.07 |
| 73 | 8.82 | 33.89 | 174 | 50 | 8.94 | 33.78 | 26.20 | 183 | 0.11 |
| | | | | 75 | (8.81) | (33.91) | (26.31) | (172) | (0.15) |

STRANGER; July 12, 1958; 0137 GCT; 37°02.5'N, 123°12'W; sounding, 1125 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 02°. 63.60

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.30 | 33.17 | 302 | 0 | 13.30 | 33.17 | 24.94 | 302 | 0.00 |
| 10 | 13.28 | 33.21 | 300 | 10 | 13.28 | 33.21 | 24.97 | 300 | 0.03 |
| 29 | 10.39 | 33.40 | 234 | 20 | 13.26 | 33.22 | 24.99 | 298 | 0.06 |
| 44 | 9.72 | 33.49 | 216 | 30 | 10.37 | 33.40 | 25.67 | 333 | 0.09 |
| 63 | 9.45 | 33.71 | 196 | 50 | 9.61 | 33.57 | 25.92 | 209 | 0.13 |
| 72 | 9.38 | 33.78 | 190 | 75 | 9.37 | 33.80 | 26.14 | 188 | 0.18 |
| 91 | 9.26 | 33.83 | 185 | 100 | 9.06 | 33.84 | 26.22 | 181 | 0.23 |
| 105 | 8.98 | 33.84 | 179 | 150 | 8.57 | 33.99 | 26.44 | 160 | 0.31 |
| 118 | 8.87 | 33.91 | 173 | 200 | 7.82 | 34.05 | 26.58 | 147 | 0.39 |
| 140 | 8.71 | 33.99 | 164 | 250 | 7.40 | 34.15 | 26.71 | 134 | 0.46 |
| 167 | 8.03 | 34.00 | 154 | 300 | 6.81 | 34.14 | 26.79 | 127 | 0.53 |
| 204 | 7.80 | 34.07 | 145 | 400 | 6.06 | 34.19 | 26.92 | 114 | 0.65 |
| 254 | 7.38 | 34.15 | 133 | 500 | 5.65 | 34.27 | 27.04 | 103 | 0.77 |
| 332 | 6.48 | 34.14 | 123 | | | | | | |
| 431 | 5.93 | 34.22 | 110 | | | | | | |
| 571 | 5.40 | 34.31 | 96 | | | | | | |

STRANGER; July 11, 1958; 1940 GCT; 36°42'N, 123°55'W; sounding, 2150 fm; wind, 350°, force 5; weather, overcast; sea, very rough; wire angle, 08°. 63.70

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.58 | 33.01 | 360 | 0 | 15.58 | 33.01 | 24.33 | 360 | 0.00 |
| 10 | 15.58 | 33.03 | 358 | 10 | 15.58 | 33.03 | 24.35 | 358 | 0.04 |
| 29 | 15.54 | 32.98 | 361 | 20 | 15.56 | 33.01 | 24.34 | 359 | 0.07 |
| 44 | 11.36 | 33.14 | 269 | 30 | 15.54 | 32.98 | 24.32 | 361 | 0.11 |
| 53 | 10.47 | 33.33 | 240 | 50 | 10.77 | 33.25 | 25.47 | 252 | 0.17 |
| 62 | 9.84 | 33.48 | 220 | 75 | 9.40 | 33.58 | 25.96 | 206 | 0.23 |
| 71 | 9.46 | 33.56 | 208 | 100 | 8.81 | 33.69 | 26.15 | 188 | 0.28 |
| 89 | 9.11 | 33.64 | 196 | 150 | 8.20 | 33.84 | 26.36 | 168 | 0.37 |
| 103 | 8.76 | 33.71 | 185 | 200 | 7.53 | 33.96 | 26.55 | 150 | 0.45 |
| 116 | 8.68 | 33.78 | 180 | 250 | 6.89 | 34.00 | 26.67 | 138 | 0.52 |
| 139 | 8.36 | 33.78 | 174 | 300 | 6.61 | 34.08 | 26.76 | 129 | 0.59 |
| 164 | 8.02 | 33.94 | 158 | 400 | 5.96 | 34.16 | 26.91 | 115 | 0.72 |
| 202 | 7.51 | 33.96 | 150 | 500 | 5.48 | 34.21 | 27.02 | 105 | 0.83 |
| 252 | 6.87 | 34.00 | 138 | | | | | | |
| 330 | 6.43 | 34.12 | 123 | | | | | | |
| 429 | 5.78 | 34.17 | 112 | | | | | | |
| 568 | 5.20 | 34.27 | 98 | | | | | | |

63.80 STRANGER; July 11, 1958; 1425 GCT; 36°22.5'N, 124°38'W; sounding, 2300 fm; wind, 330°, force 5; weather, overcast; sea, very rough; wire angle, 05°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |
| 0 | 16.05 | 32.88 | | 379 | 0 | 16.05 | 32.88 | | 24.13 | 379 | 0.00 |
| 10 | 16.04 | 32.89 | | 378 | 10 | 16.04 | 32.89 | | 24.14 | 378 | 0.04 |
| 29 | 16.04 | 32.89 | | 378 | 20 | 16.04 | 32.89 | | 24.14 | 378 | 0.08 |
| 44 | 16.06 | 32.93 | | 376 | 30 | 16.04 | 32.89 | | 24.14 | 378 | 0.11 |
| 53 | 16.06 | 32.94 | | 376 | 50 | 16.06 | 32.94 | | 24.16 | 376 | 0.19 |
| 63 | 14.57 | 33.15 | | 329 | 75 | 13.00 | 33.20 | | 25.03 | 294 | 0.27 |
| 73 | 13.88 | 33.20 | | 312 | 100 | 10.75 | 33.38 | | 25.58 | 242 | 0.34 |
| 91 | 11.94 | 33.27 | | 270 | 150 | 8.61 | 33.68 | | 26.18 | 184 | 0.45 |
| 105 | 10.15 | 33.43 | | 228 | 200 | 8.05 | 33.93 | | 26.45 | 159 | 0.54 |
| 117 | 9.12 | 33.36 | | 217 | 250 | 7.54 | 33.99 | | 26.57 | 147 | 0.62 |
| 140 | 8.78 | 33.57 | | 196 | 300 | 6.86 | 33.99 | | 26.67 | 138 | 0.69 |
| 166 | 8.56 | 33.78 | | 177 | 400 | 6.04 | 34.09 | | 26.85 | 122 | 0.82 |
| 203 | 8.02 | 33.93 | | 159 | 500 | 5.68 | 34.16 | | 26.96 | 111 | 0.94 |
| 253 | 7.52 | 33.99 | | 147 | | | | | | | |
| 332 | 6.47 | 33.99 | | 134 | | | | | | | |
| 430 | 5.88 | 34.13 | | 116 | | | | | | | |
| 570 | 5.42 | 34.18 | | 107 | | | | | | | |

63.90 STRANGER; July 11, 1958; 0815, 0857 GCT; 36°03'N, 125°21'W; sounding, 2550 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 06°, 06°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.18 | 32.99 | | 396 | 0 | 17.18 | 32.99 | | 23.96 | 396 | 0.00 |
| 10 | 17.18 | 33.01 | | 395 | 10 | 17.18 | 33.01 | | 23.97 | 395 | 0.04 |
| 30 | 17.16 | 33.01 | | 395 | 20 | 17.17 | 33.01 | | 23.97 | 395 | 0.08 |
| 44 | 15.64 | 32.94 | | 366 | 30 | 17.16 | 33.01 | | 23.97 | 395 | 0.12 |
| 54 | 13.15 | 32.92 | | 318 | 50 | 13.62 | 32.94 | | 24.70 | 326 | 0.19 |
| 63 | 12.49 | 32.88 | | 309 | 75 | 11.62 | 32.92 | | 25.06 | 291 | 0.27 |
| | | | | | 100 | 10.00 | 33.23 | | 25.60 | 240 | 0.34 |
| 73 | 11.80 | 32.90 | | 285 | 150 | 8.64 | 33.68 | | 26.17 | 186 | 0.44 |
| 91 | 10.52 | 33.08 | | 260 | 200 | 8.05 | 33.95 | | 26.46 | 158 | 0.53 |
| 104 | 9.78 | 33.31 | | 231 | 250 | 7.48 | 34.03 | | 26.61 | 144 | 0.61 |
| 117 | 9.24 | 33.42 | | 215 | 300 | 6.95 | 34.07 | | 26.72 | 134 | 0.68 |
| 138 | 8.71 | 33.61 | | 192 | 400 | 6.41 | 34.13 | | 26.83 | 123 | 0.81 |
| 165 | 8.57 | 33.85 | | 172 | 500 | 5.93 | 34.20 | | 26.96 | 111 | 0.93 |
| 202 | 8.02 | 33.95 | | 157 | | | | | | | |
| 252 | 7.47 | 34.03 | | 144 | | | | | | | |
| 331 | 6.72 | 34.09 | | 129 | | | | | | | |
| 430 | 6.30 | 34.15 | | 120 | | | | | | | |
| 569 | 5.58 | 34.24 | | 104 | | | | | | | |

67.55 STRANGER; July 12, 1958; 1346 GCT; 36°39'N, 122°26'W; sounding, 1325 fm; wind, 315°, force 4; weather, overcast; sea, rough; wire angle, 08°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.34 | 33.60 | | 235 | 0 | 11.34 | 33.60 | | 25.64 | 235 | 0.00 |
| 10 | 11.31 | 33.62 | | 234 | 10 | 11.31 | 33.62 | | 25.66 | 234 | 0.02 |
| 29 | 10.74 | 33.57 | | 227 | 20 | 11.10 | 33.60 | | 25.69 | 231 | 0.05 |
| 39 | 9.55 | 33.55 | | 209 | 30 | 10.70 | 33.57 | | 25.73 | 227 | 0.07 |
| 48 | 9.89 | 33.71 | | 204 | 50 | 9.87 | 33.71 | | 25.98 | 203 | 0.11 |
| 57 | 9.75 | 33.73 | | 200 | 75 | 9.35 | 33.82 | | 26.15 | 185 | 0.16 |
| 67 | 9.54 | 33.78 | | 192 | 100 | 9.17 | 33.94 | | 26.28 | 175 | 0.21 |
| 81 | 9.21 | 33.85 | | 182 | 150 | 8.95 | 33.99 | | 26.36 | 168 | 0.29 |
| 94 | 9.21 | 33.89 | | 180 | 200 | 8.50 | 34.08 | | 26.50 | 144 | 0.37 |
| 107 | 9.16 | 33.95 | | 174 | 250 | 8.23 | 34.12 | | 26.57 | 148 | 0.45 |
| 130 | 9.10 | 33.96 | | 172 | 300 | 7.80 | 34.14 | | 26.65 | 140 | 0.52 |
| 157 | 8.88 | 34.01 | | 165 | 400 | 6.85 | 34.21 | | 26.84 | 122 | 0.66 |
| 188 | 8.58 | 34.05 | | 158 | 500 | 6.10 | 34.23 | | 26.95 | 111 | 0.78 |
| 233 | 8.38 | 34.12 | | 150 | | | | | | | |
| 307 | 7.76 | 34.14 | | 139 | | | | | | | |
| 402 | 6.83 | 34.21 | | 122 | | | | | | | |
| 527 | 5.86 | 34.23 | | 108 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T_3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T_3}$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

STRANGER; July 12, 1958; 1653 GCT; 36°29'N, 122°47.5'W; sounding, 1700 fm; wind, 340°, force 5; weather, overcast; sea, very rough; wire angle, 21°. 67.60

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.48 | 33.44 | 268 | 0 | 12.48 | 33.44 | 25.30 | 268 | 0.00 |
| 9 | 12.43 | 33.41 | 269 | 10 | 12.43 | 33.41 | 25.29 | 269 | 0.03 |
| 28 | 12.32 | 33.46 | 263 | 20 | 12.37 | 33.44 | 25.33 | 266 | 0.05 |
| 37 | 11.95 | 33.47 | 256 | 30 | 12.26 | 33.46 | 25.36 | 262 | 0.08 |
| 46 | 11.21 | 33.53 | 238 | 50 | 11.00 | 33.53 | 25.66 | 234 | 0.13 |
| 54 | 10.76 | 33.53 | 231 | 75 | 9.82 | 33.73 | 25.93 | 208 | 0.18 |
| 63 | 10.24 | 33.58 | 218 | 100 | 8.84 | 33.69 | 26.14 | 188 | 0.24 |
| 76 | 9.80 | 33.63 | 208 | 150 | 8.20 | 33.91 | 26.41 | 163 | 0.32 |
| 87 | 9.32 | 33.67 | 197 | 200 | 7.98 | 34.10 | 26.59 | 146 | 0.40 |
| 99 | 8.84 | 33.69 | 188 | 250 | 7.41 | 34.10 | 26.68 | 137 | 0.47 |
| 118 | 8.83 | 33.77 | 182 | 300 | 7.00 | 34.12 | 26.74 | 131 | 0.54 |
| 141 | 8.26 | 33.88 | 166 | 400 | 6.34 | 34.16 | 26.86 | 120 | 0.67 |
| 169 | 8.14 | 33.98 | 156 | 500 | (5.60) | (34.22) | (27.01) | (106) | (0.79) |
| 210 | 7.92 | 34.10 | 145 | | | | | | |
| 277 | 7.14 | 34.11 | 133 | | | | | | |
| 366 | 6.58 | 34.14 | 124 | | | | | | |
| 486 | 5.71 | 34.21 | 108 | | | | | | |

STRANGER; July 12, 1958; 2215 GCT; 36°07.5'N, 123°29'W; sounding, 2000 fm; wind, 340°, force 5; weather, overcast; sea, high; wire angle, 07°. 67.70

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.76 | 33.01 | 386 | 0 | 16.76 | 33.01 | 24.06 | 386 | 0.00 |
| 10 | 16.73 | 33.01 | 385 | 10 | 16.73 | 33.01 | 24.07 | 385 | 0.04 |
| 29 | 16.71 | 32.97 | 387 | 20 | 16.72 | 32.99 | 24.06 | 386 | 0.08 |
| 44 | 16.65 | 33.00 | 384 | 30 | 16.71 | 32.97 | 24.05 | 387 | 0.12 |
| 54 | 14.68 | 33.04 | 339 | 50 | 16.57 | 33.00 | 24.10 | 382 | 0.19 |
| 63 | 13.84 | 33.08 | 320 | 75 | 13.10 | 33.14 | 24.96 | 301 | 0.28 |
| 72 | 13.26 | 33.12 | 306 | 100 | 10.52 | 33.40 | 25.62 | 237 | 0.35 |
| 91 | 11.50 | 33.33 | 258 | 150 | 8.95 | 33.69 | 26.12 | 190 | 0.46 |
| 105 | 10.21 | 33.42 | 230 | 200 | 8.26 | 33.96 | 26.44 | 160 | 0.54 |
| 118 | 9.85 | 33.49 | 218 | 250 | 7.63 | 34.04 | 26.60 | 145 | 0.62 |
| 140 | 9.10 | 33.65 | 195 | 300 | 7.30 | 34.10 | 26.69 | 136 | 0.70 |
| 167 | 8.68 | 33.81 | 177 | 400 | 6.41 | 34.16 | 26.86 | 120 | 0.83 |
| 203 | 8.22 | 33.96 | 159 | 500 | 5.80 | 34.14 | 26.92 | 114 | 0.95 |
| 252 | 7.62 | 34.04 | 145 | | | | | | |
| 329 | 7.13 | 34.13 | 132 | | | | | | |
| 420 | 6.25 | 34.16 | 118 | | | | | | |
| 566 | 5.40 | 34.11a) | 112 | | | | | | |

STRANGER; July 13, 1958; 0303 GCT; 35°47'N, 124°12.5'W; sounding, 2200 fm; wind, 340°, force 6; weather, overcast; sea, high; wire angle, 12°. 67.80

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.40 | 33.15 | 390 | 0 | 17.40 | 33.15 | 24.02 | 390 | 0.00 |
| 10 | 17.40 | 33.15 | 390 | 10 | 17.40 | 33.15 | 24.02 | 390 | 0.04 |
| 30 | 17.42 | 33.19 | 387 | 20 | 17.41 | 33.17 | 24.04 | 388 | 0.08 |
| 39 | 17.42 | 33.19 | 387 | 30 | 17.42 | 33.19 | 24.05 | 387 | 0.12 |
| 48 | 17.26 | 33.15 | 386 | 50 | 16.80 | 33.16 | 24.17 | 376 | 0.19 |
| 57 | 14.90 | 33.18 | 334 | 75 | 13.63 | 33.12 | 24.84 | 312 | 0.28 |
| 66 | 13.90 | 33.06 | 322 | 100 | 11.90 | 33.18 | 25.20 | 277 | 0.36 |
| 80 | 13.56 | 33.13 | 310 | 150 | 9.07 | 33.61 | 26.04 | 198 | 0.47 |
| 85p | 13.46 | 33.12 | 308 | 200 | 8.28 | 33.94 | 26.42 | 162 | 0.56 |
| 95p | 12.66 | 33.12 | 295 | 250 | 7.54 | 34.01 | 26.59 | 146 | 0.64 |
| 108p | 10.90 | 33.30 | 250 | 300 | 6.93 | 34.04 | 26.70 | 136 | 0.72 |
| 129p | 9.63 | 33.48 | 216 | 400 | 6.34 | 34.16 | 26.87 | 119 | 0.85 |
| 149p | 9.08 | 33.61 | 198 | | | | | | |
| 182p | 8.58 | 33.90 | 168 | | | | | | |
| 239p | 7.70 | 34.00 | 149 | | | | | | |
| 321p | 6.74 | 34.05 | 132 | | | | | | |
| 438p | 6.18 | 34.21 | 113 | | | | | | |

a) Value seems unusually low; nevertheless it was accepted.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

67.90 STRANGER; July 13, 1958; 0805 GCT; 35°28.5'N, 124°52'W; sounding, 2450 fm; wind, 340°, force 4; weather, partly cloudy; sea, high; wire angle, 15°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.36 | 33.01 | | 399 | 0 | 17.36 | 33.01 | | 23.93 | 399 | 0.00 |
| 9 | 17.36 | 32.96 | | 403 | 10 | 17.36 | 32.96 | | 23.89 | 403 | 0.04 |
| 28 | 17.34 | 33.02 | | 398 | 20 | 17.35 | 33.00 | | 23.92 | 400 | 0.08 |
| 57 | 13 66a) | 32.98 | | 324 | 30 | 17.34 | 33.02 | | 23.94 | 398 | 0.12 |
| 66 | 12.93 | 32.95 | | 312 | 50 | 14.05 | 32.98 | | 24.64 | 331 | 0.19 |
| 75 | 12.48 | 32.97 | | 302 | 75 | 12.48 | 32.97 | | 24.94 | 302 | 0.27 |
| 90 | 12.08 | 33.12 | | 284 | 100 | 11.26 | 33.24 | | 25.37 | 261 | 0.34 |
| 103 | 11.00 | 33.27 | | 254 | 150 | 9.24 | 33.59 | | 26.01 | 201 | 0.46 |
| 118 | 10.04 | 33.37 | | 231 | 200 | 8.79 | 33.92 | | 26.33 | 170 | 0.55 |
| 135 | 9.40 | 33.46 | | 214 | 250 | 8.05 | 33.98 | | 26.49 | 155 | 0.64 |
| 154 | 9.12 | 33.60 | | 199 | 300 | 7.46 | 34.06 | | 26.64 | 141 | 0.72 |
| 180 | 9.04 | 33.86 | | 179 | 400 | 6.48 | 34.14 | | 26.84 | 122 | 0.85 |
| 202 | 8.75 | 33.93 | | 169 | 500 | 5.72 | 34.18 | | 26.97 | 110 | 0.97 |
| 252 | 8.01 | 33.98 | | 155 | | | | | | | |
| 327 | 7.20 | 34.11 | | 134 | | | | | | | |
| 429 | 6.21 | 34.15 | | 118 | | | | | | | |
| 560 | 5.30 | 34.22 | | 102 | | | | | | | |

67.100 STRANGER; July 13, 1958; 1301 GCT; 35°09'N, 125°33'W; sounding, 2600 fm; wind, 340°, force 6; weather, cloudy; sea, high; wire angle, 20°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.38 | 33.02 | | 399 | 0 | 17.38 | 33.02 | | 23.92 | 399 | 0.00 |
| 9 | 17.39 | 32.99 | | 401 | 10 | 17.39 | 32.99 | | 23.90 | 401 | 0.04 |
| 28 | 17.40 | 33.03 | | 398 | 20 | 17.40 | 33.02 | | 23.92 | 399 | 0.08 |
| 41 | 16.12 | 33.12 | | 364 | 30 | 17.40 | 33.04 | | 23.95 | 397 | 0.12 |
| 50 | 14.54 | 33.13 | | 330 | 50 | 14.54 | 33.13 | | 24.65 | 330 | 0.19 |
| 60 | 13.94 | 33.08 | | 322 | 75 | 12.79 | 32.98 | | 24.88 | 308 | 0.27 |
| 68 | 13.23 | 32.96 | | 317 | 100 | 11.62 | 33.21 | | 25.29 | 269 | 0.35 |
| 84 | 12.28 | 33.01 | | 295 | 150 | 8.86 | 33.65 | | 26.10 | 192 | 0.46 |
| 97 | 11.80 | 33.19 | | 274 | 200 | 8.17 | 33.86 | | 26.38 | 165 | 0.55 |
| 110 | 10.90 | 33.31 | | 249 | 250 | 7.65 | 33.98 | | 26.55 | 150 | 0.63 |
| 130 | 9.34 | 33.48 | | 231 | 300 | 7.40 | 34.10 | | 26.68 | 137 | 0.71 |
| 155 | 8.78 | 33.68 | | 188 | 400 | 6.52 | 34.16 | | 26.85 | 121 | 0.84 |
| 188 | 8.28 | 33.84 | | 169 | 500 | 5.87 | 34.21 | | 26.96 | 110 | 0.96 |
| 236 | 7.77 | 33.96 | | 152 | | | | | | | |
| 309 | 7.36 | 34.12 | | 135 | | | | | | | |
| 402 | 6.50 | 34.16 | | 121 | | | | | | | |
| 535 | 5.63 | 34.23 | | 106 | | | | | | | |

70.52 PAOLINA-T; July 15, 1958; 0125 GCT; 36°09'N, 121°48'W; sounding, 350 fm; wind, 290°, force 6; weather, clear; sea, very rough; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.88 | 33.56 | 6.47 | 248 | 0 | 11.88 | 33.56 | 6.47 | 25.51 | 248 | 0.00 |
| 9 | 11.86 | 33.58 | 6.36 | 246 | 10 | 11.86 | 33.58 | 6.36 | 25.53 | 246 | 0.02 |
| 28 | 11.34 | 33.52 | 6.00 | 241 | 20 | 11.82 | 33.58 | 6.32 | 25.54 | 246 | 0.05 |
| 37 | 11.03 | 33.53 | 4.84 | 236 | 30 | 11.30 | 33.52 | 5.92 | 25.59 | 240 | 0.07 |
| 47 | 9.92 | 33.55 | 3.78 | 215 | 50 | 9.95 | 33.62 | 3.53 | 25.91 | 210 | 0.12 |
| 56 | 9.96 | 33.69 | 3.22 | 205 | 75 | 9.63 | 33.79 | 2.91 | 26.08 | 194 | 0.17 |
| 65 | 9.83 | 33.79 | 3.04 | 197 | 100 | 9.15 | 33.87 | 2.57 | 26.23 | 180 | 0.22 |
| 78 | 9.59 | 33.79 | 2.86 | 192 | 150 | 8.82 | 34.01 | 1.94 | 26.40 | 164 | 0.30 |
| 91 | 9.26 | 33.85 | 2.65 | 183 | 200 | 8.60 | 34.08 | 1.67 | 26.48 | 156 | 0.38 |
| 105 | 9.10 | 33.87 | 2.53 | 179 | 250 | 8.06 | 34.11 | 1.96 | 26.59 | 146 | 0.46 |
| 128 | 9.02 | 33.96 | 2.13 | 171 | 300 | 7.60 | 34.11 | 1.32 | 26.66 | 140 | 0.54 |
| 155 | 8.80 | 34.02 | 1.92 | 164 | 400 | 7.17 | 34.19 | 0.92 | 26.78 | 128 | 0.67 |
| 188 | 8.70 | 34.06 | 1.85 | 159 | 500 | 6.45 | 34.22 | 0.63 | 26.90 | 116 | 0.80 |
| 234 | 8.21 | 34.11 | 1.52 | 148 | | | | | | | |
| 309 | 7.56 | 34.11 | 1.29 | 138 | | | | | | | |
| 405 | 7.16 | 34.19 | 0.88 | 128 | | | | | | | |
| 532 | 6.20 | 34.22 | 0.57 | 113 | | | | | | | |

a) Mean value of 13.60 and 13.73°C.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ $cm^3/g$ | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ $cm^3/g$ | ΔD dyn. m |
| PAOLINA-T; July 14, 1958; 1955 GCT; 35°49.5'N, 122°23'W; sounding, 2000 fm; wind, 320°, force 5; weather, cloudy; sea, high; wire angle, 22°. | | | | | | | | | | | 70.60 |
| 0 | 15.69 | 32.99 | 5.90 | 364 | 0 | 15.69 | 32.99 | 5.90 | 24.30 | 364 | 0.00 |
| 10 | 14.82 | 33.03 | 5.93 | 343 | 10 | 14.82 | 33.03 | 5.93 | 24.51 | 343 | 0.04 |
| 32 | 13.12 | 33.17 | 6.21 | 299 | 20 | 14.14 | 33.09 | 6.04 | 24.70 | 325 | 0.07 |
| 43 | 11.39 | 33.00 | 5.65 | 280 | 30 | 13.30 | 33.16 | 6.18 | 24.93 | 303 | 0.10 |
| 57 | 10.31 | 33.13 | 5.21 | 252 | 50 | 10.75 | 33.07 | 5.38 | 25.34 | 264 | 0.16 |
| 66 | 10.14 | 33.16 | 5.12 | 248 | 75 | 9.50 | 33.22 | 5.01 | 25.67 | 233 | 0.22 |
| 75 | 9.50 | 33.22 | 5.01 | 233 | 100 | 9.13 | 33.49 | 4.13 | 25.94 | 208 | 0.28 |
| 92 | 9.01 | 33.35 | 4.61 | 216 | 150 | 8.73 | 33.75 | 3.32 | 26.21 | 182 | 0.37 |
| 110 | 9.26 | 33.63 | 3.70 | 200 | 200 | 8.02 | 33.98 | 2.40 | 26.49 | 155 | 0.46 |
| 122 | 9.16 | 33.67 | 3.59 | 194 | 250 | 7.38 | 34.02 | 1.79 | 26.62 | 143 | 0.54 |
| 143 | 8.84 | 33.73 | 3.39 | 186 | 300 | 7.03 | 34.10 | 1.40 | 26.72 | 133 | 0.61 |
| 177 | 8.14 | 33.89 | 3.02 | 163 | 400 | 6.39 | 34.16 | 0.88 | 26.86 | 120 | 0.74 |
| 211 | 7.97 | 34.01 | 1.97 | 152 | 500 | 5.76 | 34.20 | 0.67 | 26.98 | 109 | 0.86 |
| 262 | 7.24 | 34.03 | 1.73 | 141 | 600 | (5.21) | (34.30) | | (27.11) | (96) | (0.96) |
| 340 | 6.86 | 34.14 | 1.05 | 128 | | | | | | | |
| 445 | 6.02 | 34.17 | 0.77 | 115 | | | | | | | |
| 589 | 5.28 | 34.29 | 0.40 | 97 | | | | | | | |
| PAOLINA-T; July 14, 1958; 1138 GCT; 35°30'N, 123°12'W; sounding, 2350 fm; wind, 290°, force 7; weather, partly cloudy; sea, high; wire angle, 29°. | | | | | | | | | | | 70.70 |
| 0 | 16.52 | 32.91 | 5.66 | 387 | 0 | 16.52 | 32.91 | 5.66 | 24.05 | 387 | 0.00 |
| 9 | 16.53 | 32.95 | 5.63 | 385 | 10 | 16.51 | 32.95 | 5.63 | 24.08 | 384 | 0.04 |
| 30 | 15.77 | 32.97 | 5.75 | 366 | 20 | 16.30 | 32.96 | 5.67 | 24.13 | 379 | 0.08 |
| 42 | 14.12 | 32.97 | 5.95 | 333 | 30 | 15.77 | 32.97 | 5.75 | 24.27 | 366 | 0.11 |
| 56 | 12.79 | 32.97 | 5.83 | 308 | 50 | 13.33 | 32.97 | 5.89 | 24.78 | 318 | 0.18 |
| 62 | 12.14 | 33.15 | 5.46 | 283 | 75 | 11.80 | 33.25 | 5.12 | 25.29 | 269 | 0.26 |
| 72 | 11.90 | 33.22 | 5.23 | 273 | 100 | 11.02 | 33.44 | 4.48 | 25.58 | 242 | 0.32 |
| 89 | 11.28 | 33.39 | 4.69 | 250 | 150 | 9.62 | 33.74 | 2.76 | 26.05 | 197 | 0.43 |
| 109 | 10.76 | 33.48 | 4.23 | 234 | 200 | 8.47 | 33.84 | 2.77 | 26.31 | 172 | 0.52 |
| 121 | 10.26 | 33.63 | 3.63 | 215 | 250 | 8.15 | 34.00 | 1.58 | 26.49 | 155 | 0.61 |
| 142 | 9.77 | 33.71 | 2.93 | 201 | 300 | 7.93 | 34.05 | 1.43 | 26.56 | 148 | 0.69 |
| 177 | 9.35 | 33.87 | 2.40 | 183 | 400 | 6.86 | 34.10 | 0.98 | 26.74 | 131 | 0.83 |
| 213 | 8.32 | 33.88 | 2.77 | 167 | 500 | 5.83 | 34.12 | 0.57 | 26.90 | 116 | 0.96 |
| 264 | 8.12 | 34.02 | 1.56 | 153 | 600 | (5.30) | (34.19) | (0.36) | (27.02) | (105) | (1.08) |
| 345 | 7.56 | 34.08 | 1.27 | 141 | | | | | | | |
| 450 | 6.20 | 34.10 | 0.70 | 122 | | | | | | | |
| 599 | 5.30 | 34.19 | 0.36 | 105 | | | | | | | |
| STRANGER; July 14, 1958; 0752 GCT; 35°07.5'N, 123°50'W; sounding, 2300 fm; wind, 340°, force 6; weather, clear; sea, high; wire angle, 21°. | | | | | | | | | | | 70.80 |
| 0 | 15.9 | - | | 376 | 0 | 15.9 | (32.89) | | (24.17) | (376) | (0.00) |
| 9 | 15.90 | 32.89 | | 376 | 10 | 15.90 | 32.89 | | 24.17 | 376 | 0.04 |
| 27 | 15.92 | 32.88 | | 376 | 20 | 15.91 | 32.88 | | 24.17 | 376 | 0.08 |
| 41 | 15.88 | 32.88 | | 376 | 30 | 15.91 | 32.88 | | 24.17 | 376 | 0.11 |
| 50 | 14.80 | 32.92 | | 350 | 50 | 14.80 | 32.92 | | 24.44 | 350 | 0.18 |
| 58 | 13.54 | 33.04 | | 317 | 75 | 12.38 | 32.96 | | 24.96 | 301 | 0.27 |
| 67 | 12.88 | 32.97 | | 310 | 100 | 10.57 | 33.19 | | 25.47 | 252 | 0.34 |
| 84 | 11.80 | 32.95 | | 291 | 150 | 9.39 | 33.83 | | 26.16 | 186 | 0.45 |
| 104 | 10.18 | 33.30 | | 238 | 200 | 8.60 | 33.97 | | 26.40 | 164 | 0.54 |
| 125 | 9.36 | 33.52 | | 209 | 250 | 7.90 | 34.10 | | 26.91 | 144 | 0.62 |
| 147 | 9.42 | 33.82 | | 188 | 300 | 7.37 | 34.17 | | 26.70 | 135 | 0.69 |
| 178 | 8.64 | 33.87 | | 172 | 400 | 6.72 | 34.20 | | 26.85 | 121 | 0.82 |
| 222 | 8.18 | 34.02 | | 154 | 500 | 5.58 | 34.22 | | 26.99 | 108 | 0.94 |
| 292 | 7.60 | 34.16 | | 136 | | | | | | | |
| 385 | 6.84 | 34.20 | | 123 | | | | | | | |
| 517 | 5.60 | 34.22 | | 106 | | | | | | | |

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70.90 STRANGER; July 14, 1958; 0017 GCT; 34°51.5'N, 124°27'W; sounding, 2425 fm; wind, 340°, force 5; weather, partly cloudy; sea, high; wire angle, 12°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| 0 | 17.14 | 33.08 | | 389 | 0 | 17.14 | 33.08 | | 24.03 | 389 | 0.00 |
| 10 | 17.10 | 33.04 | | 391 | 10 | 17.10 | 33.04 | | 24.01 | 391 | 0.04 |
| 29 | 17.01 | 33.08 | | 386 | 20 | 17.05 | 33.06 | | 24.04 | 388 | 0.08 |
| 43 | 16.68 | 33.06 | | 380 | 30 | 17.01 | 33.08 | | 24.06 | 386 | 0.12 |
| 52 | 14.23 | 33.07 | | 328 | 50 | 14.75 | 33.07 | | 24.55 | 339 | 0.19 |
| 61 | 13.46 | 33.04 | | 316 | 75 | 12.73 | 33.04 | | 24.95 | 302 | 0.27 |
| 70 | 12.95 | 33.02 | | 307 | 100 | 11.25 | 33.25 | | 25.39 | 260 | 0.34 |
| 88 | 12.16 | 33.12 | | 285 | 150 | 9.68 | 33.76 | | 26.06 | 196 | 0.45 |
| 102 | 11.12 | 33.29 | | 254 | 200 | 8.80 | 33.96 | | 26.35 | 168 | 0.55 |
| 114 | 10.50 | 33.46 | | 232 | 250 | 7.98 | 34.01 | | 26.52 | 152 | 0.63 |
| 136 | 9.87 | 33.67 | | 206 | 300 | 7.32 | 34.04 | | 26.65 | 140 | 0.70 |
| 161 | 9.53 | 33.84 | | 188 | 400 | 6.61 | 34.14 | | 26.80 | 124 | 0.84 |
| 195 | 8.86 | 33.95 | | 170 | 500 | 6.00 | 34.21 | | 26.95 | 112 | 0.96 |
| 244 | 8.04 | 34.01 | | 153 | | | | | | | |
| 319 | 7.16 | 34.05 | | 138 | | | | | | | |
| 414 | 6.54 | 34.15 | | 122 | | | | | | | |
| 550 | 5.66 | 34.24 | | 104 | | | | | | | |

70.100 STRANGER; July 13, 1958; 1752 GCT; 34°32.5'N, 125°09'W; sounding, 2550 fm; wind, 340°, force 5; weather, cloudy; sea, high; wire angle, 15°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.75 | 33.04 | 406 | 0 | 17.75 | 33.04 | | 23.85 | 406 | 0.00 |
| 10 | 17.76 | 33.04 | 406 | 10 | 17.76 | 33.04 | | 23.85 | 406 | 0.04 |
| 29 | 17.72 | 33.06 | 403 | 20 | 17.74 | 33.05 | | 23.86 | 405 | 0.08 |
| 43 | 16.65 | 33.06 | 380 | 30 | 17.72 | 33.06 | | 23.88 | 403 | 0.12 |
| 52 | 15.76 | 33.04 | 362 | 50 | 15.95 | 33.04 | | 24.25 | 366 | 0.20 |
| 62 | 13.66 | 33.07 | 317 | 75 | 12.72 | 33.16 | | 25.04 | 293 | 0.28 |
| 71 | 13.04 | 33.14 | 300 | 100 | 10.98 | 33.34 | | 25.51 | 248 | 0.35 |
| 88 | 11.73 | 33.19 | 272 | 150 | 9.08 | 33.60 | | 26.03 | 199 | 0.46 |
| 101 | 10.83 | 33.35 | 245 | 200 | 8.66 | 34.02 | | 26.43 | 161 | 0.55 |
| 113 | 9.96 | 33.38 | 228 | 250 | 7.82 | 34.10 | | 26.62 | 143 | 0.63 |
| 135 | 9.45 | 33.49 | 213 | 300 | 7.08 | 34.13 | | 26.71 | 134 | 0.70 |
| 160 | 8.90 | 33.68 | 190 | 400 | 6.70 | 34.19 | | 26.87 | 119 | 0.84 |
| 194 | 8.75 | 34.00 | 164 | 500 | 5.92 | 34.25 | | 27.00 | 107 | 0.95 |
| 240 | 7.98 | 34.09 | 146 | | | | | | | |
| 315 | 7.17 | 34.14 | 131 | | | | | | | |
| 409 | 6.43 | 34.19 | 118 | | | | | | | |
| 546 | 5.66 | 34.29 | 102 | | | | | | | |

73.55 PAOLINA-T; July 13, 1958; 0447 GCT; 35°28.5'N, 121°36.5'W; sounding, 550 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.34 | 33.59 | 5.93 | 254 | 0 | 12.34 | 33.59 | 5.93 | 25.45 | 254 | 0.00 |
| 10 | 12.33 | 33.62 | 5.96 | 251 | 10 | 12.33 | 33.62 | 5.96 | 25.48 | 251 | 0.02 |
| 29 | 11.99 | 33.58 | 5.32 | 248 | 20 | 12.30 | 33.62 | 5.93 | 25.48 | 251 | 0.05 |
| 44 | 11.04 | 33.57 | 4.61 | 233 | 30 | 11.97 | 33.58 | 5.30 | 25.51 | 248 | 0.08 |
| 53 | 10.84 | 33.69 | 3.72 | 220 | 50 | 10.94 | 33.65 | 4.24 | 25.76 | 224 | 0.12 |
| 64 | 10.32 | 33.73 | 3.28 | 208 | 75 | 10.06 | 33.76 | 3.18 | 25.98 | 203 | 0.18 |
| 73 | 10.12 | 33.75 | 3.22 | 204 | 100 | 9.17 | 33.84 | 2.72 | 26.20 | 182 | 0.22 |
| 91 | 9.68 | 33.80 | 2.69 | 193 | 150 | 8.75 | 34.06 | 1.97 | 26.44 | 160 | 0.31 |
| 105 | 8.89 | 33.87 | 2.76 | 176 | 200 | 7.87 | 34.04 | 1.94 | 26.56 | 148 | 0.39 |
| 120 | 9.19 | 34.00 | 2.01 | 170 | 250 | 7.34 | 34.13 | 1.52 | 26.72 | 134 | 0.46 |
| 142 | 8.94 | 34.07 | 1.87 | 162 | 300 | 6.93 | 34.20 | 1.05 | 26.82 | 124 | 0.53 |
| 170 | 8.21 | 34.01 | 2.29 | 156 | 400 | 6.43 | 34.22 | 0.69 | 26.90 | 116 | 0.65 |
| 209 | 7.80 | 34.05 | 1.84 | 147 | 500 | 6.00 | 34.25 | 0.47 | 26.98 | 108 | 0.77 |
| 259 | 7.24 | 34.31u | 1.47 | | 600 | (5.60) | (34.34) | | (27.10) | (97) | (0.87) |
| 339 | 6.76 | 34.22 | 0.84 | 120 | | | | | | | |
| 440 | 6.22 | 34.22 | 0.59 | 113 | | | | | | | |
| 586 | 5.66 | 34.32 | 0.34 | 99 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; July 13, 1958; 0825 GCT; 35°19.5'N, 121°58.5'W; sounding, 1300 fm; wind, 320°, force 5; weather, drizzle; sea, rough; wire angle, 10°. 73.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.80 | 33.14 | 5.96 | 295 | 0 | 12.80 | 33.14 | 5.96 | 25.02 | 295 | 0.00 |
| 10 | 12.61 | 33.15 | 5.94 | 291 | 10 | 12.61 | 33.15 | 5.94 | 25.06 | 291 | 0.03 |
| 30 | 12.18 | 33.17 | 5.76 | 281 | 20 | 12.67 | 33.17 | 5.81 | 25.07 | 290 | 0.06 |
| 45 | 12.06 | 33.40 | 5.52 | 263 | 30 | 12.18 | 33.17 | 5.76 | 25.16 | 281 | 0.09 |
| 56 | 10.05 | 33.22 | 5.09 | 242 | 50 | 11.28 | 33.33 | 5.33 | 25.45 | 254 | 0.14 |
| 65 | 9.54 | 33.30 | 4.92 | 228 | 75 | 9.17 | 33.47 | 4.74 | 25.91 | 210 | 0.20 |
| 76 | 9.16 | 33.47 | 4.74 | 210 | 100 | 8.69 | 33.64 | 3.90 | 26.12 | 190 | 0.25 |
| 96 | 8.72 | 33.57 | 4.15 | 196 | 150 | 8.39 | 33.97 | 2.39 | 26.43 | 161 | 0.34 |
| 110 | 8.68 | 33.73 | 3.46 | 183 | 200 | 7.75 | 34.03 | 2.00 | 26.57 | 148 | 0.42 |
| 120 | 8.68 | 33.87 | 2.71 | 172 | 250 | 7.34 | 34.11 | 1.58 | 26.69 | 136 | 0.49 |
| 150 | 8.39 | 33.97 | 2.39 | 161 | 300 | 7.20 | 34.15 | 1.20 | 26.74 | 131 | 0.55 |
| 179 | 8.03 | 34.00 | 2.14 | 154 | 400 | 6.60 | 34.25 | 0.61 | 26.91 | 116 | 0.68 |
| 218 | 7.52 | 34.05 | 1.89 | 143 | 500 | 5.85 | 34.28 | 0.44 | 27.02 | 105 | 0.80 |
| 271 | 7.26 | 34.13 | 1.39 | 134 | 600 | 5.17 | 34.30 | 0.33 | 27.12 | 95 | 0.90 |
| 355 | 6.96 | 34.22 | 0.85 | 122 | | | | | | | |
| 459 | 6.15 | 34.27 | 0.50 | 108 | | | | | | | |
| 605 | 5.12 | 34.30 | 0.33 | 95 | | | | | | | |

PAOLINA-T; July 13, 1958; 1529 GCT; 35°00.5'N, 122°43.5'W; sounding, 2480 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 10°. 73.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.61 | 32.97 | 5.81 | 364 | 0 | 15.61 | 32.97 | 5.81 | 24.29 | 364 | 0.00 |
| 10 | 15.53 | 32.98 | 5.78 | 361 | 10 | 15.53 | 32.98 | 5.78 | 24.32 | 361 | 0.04 |
| 30 | 14.66 | 32.99 | 5.93 | 343 | 20 | 15.16 | 32.98 | 5.84 | 24.40 | 354 | 0.07 |
| 45 | 14.46 | 33.03 | 5.97 | 336 | 30 | 14.66 | 32.99 | 5.93 | 24.52 | 343 | 0.11 |
| 56 | 13.85 | 33.13 | 5.89 | 316 | 50 | 14.22 | 33.08 | 5.93 | 24.68 | 327 | 0.17 |
| 65 | 13.24 | 33.16 | 5.75 | 302 | 75 | 11.41 | 33.04 | 5.50 | 25.20 | 278 | 0.25 |
| 74 | 11.44 | 33.04 | 5.52 | 279 | 100 | 10.58 | 33.46 | 4.10 | 25.68 | 232 | 0.31 |
| 94 | 10.56 | 33.40 | 4.34 | 236 | 150 | 9.00 | 33.79 | 2.99 | 26.19 | 184 | 0.42 |
| 111 | 10.01 | 33.58 | 3.57 | 215 | 200 | 8.24 | 34.01 | 2.31 | 26.48 | 156 | 0.50 |
| 126 | 9.58 | 33.69 | 3.20 | 200 | 250 | 7.63 | 34.09 | 1.90 | 26.64 | 142 | 0.58 |
| 150 | 9.00 | 33.79 | 2.99 | 184 | 300 | 7.15 | 34.12 | 1.47 | 26.73 | 132 | 0.65 |
| 179 | 8.51 | 33.95 | 2.48 | 164 | 400 | 6.36 | 34.19 | 0.78 | 26.89 | 117 | 0.78 |
| 215 | 8.03 | 34.04 | 2.17 | 151 | 500 | 5.81 | 34.26 | 0.47 | 27.02 | 106 | 0.90 |
| 267 | 7.46 | 34.11 | 1.74 | 138 | 600 | (5.25) | (34.29) | (0.35) | (27.11) | (96) | (1.00) |
| 348 | 6.68 | 34.14 | 1.07 | 125 | | | | | | | |
| 451 | 6.06 | 34.24 | 0.58 | 110 | | | | | | | |
| 595 | 5.32 | 34.29 | 0.36 | 98 | | | | | | | |

PAOLINA-T; July 13, 1958; 2150 GCT; 34°41'N, 123°24'W; sounding, 2500 fm; wind, 320°, force 6; weather, cloudy; sea, high; wire angle, 24°. 73.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.52 | 33.04 | 5.69 | 378 | 0 | 16.52 | 33.04 | 5.69 | 24.14 | 378 | 0.00 |
| 10 | 16.44 | 33.08 | 5.73 | 374 | 10 | 16.44 | 33.08 | 5.73 | 24.19 | 374 | 0.04 |
| 28 | 13.04 | 33.30 | 5.72 | 288 | 20 | 16.41 | 33.08 | 5.73 | 24.20 | 373 | 0.07 |
| 43 | 11.46 | 33.41 | 4.86 | 252 | 30 | 12.87 | 33.31 | 5.67 | 25.13 | 284 | 0.11 |
| 52 | 10.54 | 33.49 | 4.51 | 230 | 50 | 10.73 | 33.48 | 4.57 | 25.67 | 233 | 0.16 |
| 61 | 9.88 | 33.49 | 4.14 | 219 | 75 | 9.38 | 33.58 | 3.54 | 25.97 | 204 | 0.21 |
| 70 | 9.46 | 33.55 | 3.65 | 208 | 100 | 8.97 | 33.70 | 3.29 | 26.13 | 189 | 0.26 |
| 90 | 9.08 | 33.68 | 3.32 | 193 | 150 | 8.38 | 33.91 | 2.67 | 26.38 | 166 | 0.35 |
| 104 | 8.89 | 33.71 | 3.27 | 188 | 200 | 7.79 | 33.99 | 2.20 | 26.54 | 151 | 0.43 |
| 118 | 8.72 | 33.77 | 3.13 | 180 | 250 | 7.21 | 34.04 | 1.64 | 26.66 | 140 | 0.51 |
| 142 | 8.44 | 33.88 | 2.78 | 168 | 300 | 6.93 | 34.09 | 1.23 | 26.74 | 132 | 0.58 |
| 169 | 8.15 | 33.96 | 2.29 | 158 | 400 | 6.19 | 34.17 | 0.68 | 26.89 | 117 | 0.71 |
| 207 | 7.70 | 34.00 | 2.18 | 149 | 500 | 5.55 | 34.18 | 0.52 | 26.98 | 108 | 0.82 |
| 258 | 7.18 | 34.04 | 1.60 | 139 | | | | | | | |
| 338 | 6.68 | 34.14 | 0.89 | 125 | | | | | | | |
| 437 | 5.94 | 34.17 | 0.61 | 114 | | | | | | | |
| 575 | 5.02 | 34.18 | 0.43 | 103 | | | | | | | |

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77.55 PAOLINA-T; July 11, 1958; 1335 GCT; 34°54'N, 121°13.5'W; sounding, 312 fm; wind, 360°, force 5; weather, overcast; sea, very rough; wire angle, 08°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| 0 | 13.98 | 33.46 | 6.07 | 294 | 0 | 13.98 | 33.46 | 6.07 | 25.03 | 294 | 0.00 |
| 9 | 13.96 | 33.46 | 6.02 | 294 | 10 | 13.96 | 33.46 | 5.98 | 25.03 | 294 | 0.03 |
| 30 | 12.02 | 33.58 | 5.07 | 249 | 20 | 13.88 | 33.46 | 5.96 | 25.04 | 293 | 0.06 |
| 41 | 11.30 | 33.63 | 4.23 | 232 | 30 | 12.02 | 33.58 | 5.07 | 25.50 | 249 | 0.08 |
| 52 | 10.06 | 33.66 | 3.68 | 210 | 50 | 10.10 | 33.66 | 3.71 | 25.90 | 211 | 0.13 |
| 62 | 10.05 | 33.67 | 3.46 | 209 | 75 | 9.22 | 33.68 | 3.50 | 26.07 | 195 | 0.18 |
| 72 | 9.28 | 33.64 | 3.63 | 199 | 100 | 9.25 | 33.93 | 2.70 | 26.26 | 177 | 0.23 |
| 85 | 9.23 | 33.81 | 2.93 | 186 | 150 | 8.95 | 34.04 | 1.79 | 26.40 | 164 | 0.32 |
| 101 | 9.26 | 33.93 | 2.62 | 177 | 200 | 8.57 | 34.12 | 1.52 | 26.52 | 152 | 0.40 |
| 114 | 9.12 | 33.98 | 2.41 | 171 | 250 | 8.37 | 34.16 | 1.47 | 26.58 | 146 | 0.47 |
| 141 | 9.01 | 34.01 | 1.93 | 168 | 300 | 8.00 | 34.23 | 1.26 | 26.69 | 136 | 0.54 |
| 170 | 9.76 | 34.10 | 1.61 | 156 | 400 | 7.30 | 34.22 | 1.01 | 26.79 | 127 | 0.68 |
| 204 | 8.52 | 34.13 | 1.52 | 151 | 500 | 6.42 | 34.26 | 0.63 | 26.94 | 112 | 0.80 |
| 254 | 8.32 | 34.17 | 1.45 | 145 | | | | | | | |
| 304 | 7.98 | 34.23 | 1.25 | 136 | | | | | | | |
| 409 | 7.24 | 34.22 | 0.99 | 127 | | | | | | | |
| 510 | 6.36 | 34.27 | 0.61 | 111 | | | | | | | |

77.60 PAOLINA-T; July 11, 1958; 0952 GCT; 34°44.5'N, 121°34'W; sounding, 550 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.98 | 33.43 | 5.95 | 296 | 0 | 13.98 | 33.43 | 5.95 | 25.00 | 296 | 0.00 |
| 10 | 13.95 | 33.34 | 5.94 | 302 | 10 | 13.95 | 33.34 | 5.94 | 24.94 | 302 | 0.03 |
| 31 | 12.94 | 33.51 | 5.71 | 270 | 20 | 13.81 | 33.36 | 5.92 | 24.98 | 299 | 0.06 |
| 46 | 11.87 | 33.57 | 4.95 | 247 | 30 | 13.00 | 33.50 | 5.73 | 25.25 | 273 | 0.09 |
| 57 | 10.82 | 33.49 | 4.15 | 235 | 50 | 11.45 | 33.54 | 4.67 | 25.57 | 242 | 0.14 |
| 67 | 10.34 | 33.55 | 3.79 | 222 | 75 | 9.95 | 33.59 | 3.55 | 25.89 | 212 | 0.20 |
| 77 | 9.84 | 33.60 | 3.51 | 210 | 100 | 9.27 | 33.70 | 3.01 | 26.08 | 194 | 0.25 |
| 97 | 9.36 | 33.69 | 3.13 | 196 | 150 | 8.62 | 33.87 | 2.74 | 26.32 | 172 | 0.34 |
| 113 | 9.17 | 33.79 | 2.89 | 186 | 200 | 8.35 | 34.05 | 2.05 | 26.50 | 154 | 0.42 |
| 128 | 9.02 | 33.82 | 2.92 | 182 | 250 | 7.93 | 34.14 | 1.50 | 26.63 | 142 | 0.50 |
| 152 | 8.61 | 33.87 | 2.73 | 172 | 300 | 7.57 | 34.18 | 1.24 | 26.72 | 134 | 0.57 |
| 182 | 8.46 | 34.02 | 2.20 | 158 | 400 | 6.85 | 34.26 | 0.58 | 26.87 | 119 | 0.70 |
| 220 | 8.34 | 34.11 | 1.77 | 150 | 500 | 6.08 | (34.29) | 0.53 | (27.01) | (106) | (0.82) |
| 277 | 7.69 | 34.16 | 1.37 | 137 | 600 | 5.39 | | 0.38 | | | |
| 359 | 7.20 | 34.24 | 0.63 | 124 | | | | | | | |
| 468 | 6.32 | 34.27 | 0.56 | 110 | | | | | | | |
| 613 | 5.24 | 34.41u | 0.35 | | | | | | | | |

77.70 PAOLINA-T; July 11, 1958; 0100 GCT; 34°25'N, 122°16.5'W; sounding, 2200 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.50 | 33.26 | 5.50 | 362 | 0 | 16.50 | 33.26 | 5.50 | 24.32 | 362 | 0.00 |
| 8 | 16.54 | 33.22 | 5.53 | 365 | 10 | 16.54 | 33.22 | 5.54 | 24.28 | 365 | 0.04 |
| 33 | 11.82 | 33.48 | 4.67 | 253 | 20 | 16.45 | 33.22 | 5.53 | 24.30 | 363 | 0.07 |
| 41 | 10.72 | 33.42 | 4.32 | 238 | 30 | 13.20 | 33.41 | 4.91 | 25.15 | 283 | 0.10 |
| 55 | 10.02 | 33.48 | 4.02 | 222 | 50 | 10.20 | 33.46 | 4.09 | 25.73 | 227 | 0.16 |
| 65 | 9.68 | 33.57 | 3.78 | 210 | 75 | 9.30 | 33.61 | 3.53 | 26.00 | 202 | 0.21 |
| 74 | 9.33 | 33.61 | 3.57 | 202 | 100 | 8.90 | 33.74 | 3.24 | 26.17 | 186 | 0.26 |
| 92 | 9.06 | 33.70 | 3.36 | 191 | 150 | 8.62 | 34.00 | 2.12 | 26.42 | 162 | 0.35 |
| 108 | 8.76 | 33.78 | 3.12 | 180 | 200 | 7.89 | 34.06 | 1.99 | 26.57 | 147 | 0.42 |
| 123 | 8.90 | 33.93 | 2.34 | 172 | 250 | 7.39 | 34.09 | 1.64 | 26.67 | 138 | 0.50 |
| 143 | 8.76 | 33.99 | 2.17 | 165 | 300 | 6.89 | 34.10 | 1.50 | 26.75 | 131 | 0.57 |
| 180 | 8.05 | 34.04 | 2.07 | 151 | 400 | 6.35 | 34.17 | 1.12 | 26.88 | 118 | 0.70 |
| 215 | 7.74 | 34.07 | 1.88 | 144 | 500 | 5.82 | 34.28 | 0.46 | 27.03 | 104 | 0.81 |
| 267 | 7.21 | 34.09 | 1.54 | 136 | 600 | 5.27 | 34.33 | 0.37 | 27.14 | 94 | 0.92 |
| 349 | 6.58 | 34.11 | 1.47 | 126 | | | | | | | |
| 455 | 6.05 | 34.25 | 0.53 | 109 | | | | | | | |
| 602 | 5.26 | 34.33 | 0.36 | 94 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

PAOLINA-T; July 10, 1958; 1755 GCT; 34°02.5'N, 122°56'W; sounding, 2500 fm; wind, 320°, force 6; weather, overcast; sea, very rough; wire angle, 18°. 77.80

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.89 | 33.01 | 5.43 | 389 | 0 | 16.89 | 33.01 | 5.43 | 24.03 | 389 | 0.00 | |
| 10 | 16.89 | 32.99 | 5.57 | 390 | 10 | 16.89 | 32.99 | 5.57 | 24.02 | 390 | 0.04 | |
| 35 | 15.58 | 33.07 | 5.92 | 355 | 20 | 16.83 | 32.99 | 5.59 | 24.03 | 389 | 0.08 | |
| 45 | 14.00 | 33.01 | 6.15 | 328 | 30 | 16.80 | 32.99 | 5.60 | 24.04 | 388 | 0.12 | |
| 59 | 12.54 | 32.90 | 6.22 | 308 | 50 | 13.70 | 33.00 | 6.18 | 24.73 | 323 | 0.19 | |
| 68 | 12.32 | 32.92 | 6.00 | 303 | 75 | 12.21 | 32.94 | 5.58 | 24.97 | 300 | 0.26 | |
| 78 | 12.13 | 32.95 | 5.43 | 297 | 100 | 11.30 | 33.13 | 5.30 | 25.29 | 269 | 0.34 | |
| 97 | 11.40 | 33.08 | 5.38 | 275 | 150 | 9.30 | 33.74 | 3.59 | 26.10 | 192 | 0.45 | |
| 117 | 10.45 | 33.35 | 4.71 | 239 | 200 | 8.45 | 33.97 | 2.48 | 26.42 | 162 | 0.54 | |
| 132 | 9.53 | 33.49 | 4.13 | 214 | 250 | 8.00 | 34.05 | 2.00 | 26.55 | 150 | 0.62 | |
| 156 | 9.15 | 33.77 | 3.15 | 187 | 300 | 7.27 | 34.06 | 1.73 | 26.66 | 138 | 0.70 | |
| 195 | 8.54 | 33.94 | 2.58 | 166 | 400 | 6.19 | 34.12 | 0.95 | 26.86 | 120 | 0.83 | |
| 233 | 8.20 | 34.04 | 2.10 | 153 | 500 | 5.60 | 34.20 | 0.51 | 27.00 | 107 | 0.95 | |
| 292 | 7.39 | 34.06 | 1.79 | 140 | 600 | 5.15 | 34.28 | 0.32 | 27.11 | 96 | 1.06 | |
| 378 | 6.34 | 34.11 | 1.08 | 123 | | | | | | | | |
| 491 | 5.65 | 34.19 | 0.56 | 109 | | | | | | | | |
| 641 | 4.98 | 34.31 | 0.26 | 92 | | | | | | | | |

PAOLINA-T; July 10, 1958; 1055 GCT; 33°46'N, 123°39.5'W; sounding, 2500 fm; wind, 330°, force 5; weather, overcast; sea, very rough; wire angle, 06°. 77.90

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.00 | 33.19 | 5.28 | 401 | 0 | 18.00 | 33.19 | 5.28 | 23.91 | 401 | 0.00 | |
| 11 | 18.01 | 33.21 | 5.30 | 400 | 10 | 18.01 | 33.21 | 5.30 | 23.92 | 400 | 0.04 | |
| 36 | 18.00 | 33.18 | 5.31 | 402 | 20 | 18.00 | 33.18 | 5.31 | 23.90 | 402 | 0.08 | |
| 66 | 14.66 | 33.26 | 5.49 | 323 | 30 | 18.00 | 33.18 | 5.31 | 23.90 | 402 | 0.12 | |
| 76 | 14.37 | 33.30 | 5.41 | 314 | 50 | 18.00 | 33.18 | 5.31 | 23.90 | 402 | 0.20 | |
| 92 | 14.20 | 33.28 | 5.51 | 312 | 75 | 14.39 | 33.30 | 5.41 | 24.82 | 314 | 0.29 | |
| 100 | 13.62 | 33.22 | 5.42 | 305 | 100 | 13.62 | 33.22 | 5.42 | 24.91 | 305 | 0.37 | |
| 121 | 12.40 | 33.41 | 5.15 | 268 | 150 | 9.89 | 33.45 | 4.68 | 25.78 | 223 | 0.50 | |
| 134 | 11.06 | 33.38 | 4.95 | 247 | 200 | 8.72 | 33.77 | 3.46 | 26.22 | 180 | 0.60 | |
| 153 | 9.70 | 33.46 | 4.60 | 218 | 250 | 8.22 | 34.00 | 2.16 | 26.48 | 156 | 0.69 | |
| 177 | 9.04 | 33.58 | 4.02 | 200 | 300 | 7.42 | 34.04 | 1.67 | 26.63 | 142 | 0.77 | |
| 207 | 8.67 | 33.78 | 3.39 | 180 | 400 | 6.20 | 34.08 | 1.15 | 26.83 | 123 | 0.91 | |
| 236 | 8.41 | 33.98 | 2.33 | 161 | 500 | 5.78 | (34.18) | 0.47 | (26.96) | (110) | (1.03) | |
| 293 | 7.54 | 34.04 | 1.68 | 144 | 600 | 5.30 | | 0.32 | | | | |
| 382 | 6.38 | 34.06 | 1.34 | 127 | | | | | | | | |
| 497 | 5.79 | 34.18 | 0.48 | 111 | | | | | | | | |
| 644 | 5.06 | 34.49r | 0.25 | | | | | | | | | |

PAOLINA-T; July 8, 1958; 2140 GCT; 34°26.5'N, 120°32.5'W; sounding, 50 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 13°. 80.51

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.05 | 33.64 | 3.28u | 264 | 0 | 13.05 | 33.64 | | 25.35 | 264 | 0.00 |
| 26 | 10.94 | 33.63 | 3.56u | 226 | 10 | 12.90 | 33.64 | | 25.38 | 260 | 0.03 |
| 46 | 10.48 | 33.67 | 3.91u | 216 | 20 | 12.20 | 33.64 | | 25.51 | 248 | 0.05 |
| 65 | 10.31 | 33.71 | 5.59u | 210 | 30 | 10.79 | 33.63 | | 25.77 | 224 | 0.08 |
| 74 | 10.21 | 33.75 | 3.32u | 206 | 50 | 10.42 | 33.68 | | 25.87 | 214 | 0.12 |
| | | | | | 75 | (10.20) | (33.75) | | (25.97) | (205) | (0.17) |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

80.55 PAOLINA-T; July 9, 1958; 0035 GCT; 34°18.5'N, 120°48.5'W; sounding, 414 fm; wind, 320°, force 7; weather, overcast; sea, very rough; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.11 | 33.46 | 5.96 | 278 | 0 | 13.11 | 33.46 | 5.96 | 25.20 | 278 | 0.00 |
| 8 | 13.10 | 33.48 | 5.90 | 276 | 10 | 13.07 | 33.48 | 5.87 | 25.22 | 276 | 0.03 |
| 26 | 12.88 | 33.50 | 5.83 | 270 | 20 | 12.99 | 33.49 | 5.86 | 25.25 | 273 | 0.06 |
| 39 | 11.25 | 33.40 | 4.57 | 248 | 30 | 12.60 | 33.49 | 5.62 | 25.31 | 267 | 0.08 |
| 48 | 10.22 | 33.37 | 4.40 | 234 | 50 | 10.23 | 33.42 | 4.35 | 25.70 | 230 | 0.13 |
| 57 | 10.43 | 33.53 | 3.99 | 225 | 75 | 10.12 | 33.74 | 3.16 | 25.97 | 204 | 0.19 |
| 65 | 10.70 | 33.67 | 3.58 | 219 | 100 | 9.41 | 33.94 | 2.30 | 26.24 | 179 | 0.24 |
| 81 | 9.80 | 33.77 | 2.97 | 197 | 150 | 9.10 | 34.01 | 1.72 | 26.35 | 168 | 0.32 |
| 93 | 9.46 | 33.89 | 2.50 | 183 | 200 | 8.75 | 34.12 | 1.48 | 26.49 | 155 | 0.40 |
| 103 | 9.40 | 33.95 | 2.27 | 178 | 250 | 8.55 | 34.16 | 1.28 | 26.55 | 149 | 0.48 |
| 119 | 9.36 | 33.95 | 2.13 | 176 | 300 | 8.20 | 34.20 | 1.11 | 26.64 | 141 | 0.56 |
| 142 | 9.18 | 33.98 | 1.72 | 172 | 400 | 7.40 | 34.23 | 0.68 | 26.78 | 128 | 0.70 |
| 170 | 8.96 | 34.07 | 1.71 | 162 | 500 | (6.60) | (34.27) | (0.37) | (26.92) | (114) | (0.82) |
| 213 | 8.66 | 34.13 | 1.36 | 153 | | | | | | | |
| 281 | 8.36 | 34.19 | 1.21 | 144 | | | | | | | |
| 368 | 7.63 | 34.22 | 0.78 | 132 | | | | | | | |
| 498 | 6.60 | 34.27 | 0.37 | 114 | | | | | | | |

80.60 PAOLINA-T; July 9, 1958; 0420 GCT; 34°08.5'N, 121°09'W; sounding, 1250 fm; wind, 340°, force 6; weather, overcast; sea, very rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.72 | 33.31 | 6.02 | 320 | 0 | 14.72 | 33.31 | 6.02 | 24.76 | 320 | 0.00 |
| 10 | 14.70 | 33.34 | 6.06 | 318 | 10 | 14.70 | 33.34 | 6.06 | 24.78 | 318 | 0.03 |
| 34 | 13.16 | 33.46 | 5.52 | 278 | 20 | 14.66 | 33.34 | 6.05 | 24.78 | 317 | 0.06 |
| 44 | 11.45 | 33.23 | 5.11 | 265 | 30 | 13.80 | 33.41 | 5.74 | 25.03 | 294 | 0.09 |
| 59 | 10.48 | 33.36 | 4.64 | 238 | 50 | 11.00 | 33.28 | 4.93 | 25.46 | 253 | 0.15 |
| 68 | 10.10 | 33.47 | 4.29 | 224 | 75 | 10.00 | 33.47 | 4.02 | 25.78 | 223 | 0.21 |
| 78 | 9.97 | 33.48 | 3.94 | 221 | 100 | 9.29 | 33.67 | 3.22 | 26.04 | 198 | 0.26 |
| 99 | 9.32 | 33.66 | 3.24 | 198 | 150 | 8.76 | 33.90 | 2.27 | 26.36 | 168 | 0.35 |
| 119 | 9.07 | 33.76 | 2.76 | 187 | 200 | 8.07 | 34.01 | 1.82 | 26.50 | 154 | 0.44 |
| 133 | 8.96 | 33.86 | 2.32 | 177 | 250 | 7.60 | 34.06 | 1.39 | 26.62 | 143 | 0.51 |
| 157 | 8.68 | 33.88 | 2.25 | 172 | 300 | 7.05 | 34.10 | 1.17 | 26.72 | 133 | 0.58 |
| 196 | 8.11 | 34.00 | 1.85 | 155 | 400 | 6.55 | 34.18 | 0.53 | 26.86 | 120 | 0.71 |
| 235 | 7.80 | 34.05 | 1.48 | 146 | 500 | 5.85 | 34.27 | 0.36 | 27.02 | 105 | 0.83 |
| 293 | 7.14 | 34.09 | 1.22 | 135 | 600 | 5.27 | 34.32 | 0.27 | 27.12 | 95 | 0.94 |
| 382 | 6.64 | 34.16 | 0.61 | 123 | | | | | | | |
| 494 | 5.88 | 34.27 | 0.38 | 106 | | | | | | | |
| 646 | 5.01 | 34.33 | 0.24 | 92 | | | | | | | |

80.70 PAOLINA-T; July 9, 1958; 1130 GCT; 33°46'N, 121°49'W; sounding, 2200 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.58 | 33.27 | 5.61 | 362 | 0 | 16.58 | 33.27 | 5.61 | 24.31 | 362 | 0.00 |
| 9 | 16.56 | 33.34 | 5.65 | 355 | 10 | 16.56 | 33.34 | 5.66 | 24.37 | 355 | 0.04 |
| 34 | 15.24 | 33.28 | 5.99 | 333 | 20 | 16.52 | 33.34 | 5.67 | 24.38 | 356 | 0.07 |
| 44 | 13.80 | 33.28 | 6.22 | 304 | 30 | 15.78 | 33.31 | 5.83 | 24.51 | 343 | 0.11 |
| 59 | 11.88 | 33.21 | 5.34 | 274 | 50 | 13.02 | 33.25 | 5.90 | 25.06 | 291 | 0.17 |
| 68 | 11.22 | 33.20 | 5.04 | 263 | 75 | 10.93 | 33.29 | 4.67 | 25.48 | 251 | 0.24 |
| 78 | 10.76 | 33.32 | 4.55 | 246 | 100 | 10.08 | 33.44 | 4.27 | 25.73 | 227 | 0.30 |
| 98 | 10.10 | 33.43 | 4.31 | 227 | 150 | 8.85 | 33.82 | 2.90 | 26.25 | 178 | 0.40 |
| 117 | 9.26 | 33.60 | 3.54 | 202 | 200 | 7.89 | 34.00 | 3.07 | 26.52 | 152 | 0.48 |
| 132 | 9.09 | 33.71 | 3.28 | 191 | 250 | 7.39 | 34.10 | 2.10 | 26.68 | 137 | 0.56 |
| 155 | 8.74 | 33.85 | 2.84 | 175 | 300 | 7.00 | 34.13 | 1.22 | 26.76 | 130 | 0.63 |
| 191 | 8.02 | 33.97a) | 3.10 | 156 | 400 | 6.32 | 34.18 | 0.62 | 26.88 | 118 | 0.75 |
| 229 | 7.54 | 34.07a) | 2.55 | 142 | 500 | 5.81 | 34.26 | 0.33 | 27.02 | 105 | 0.87 |
| 285 | 7.14 | 34.12 | 1.40 | 133 | 600 | 5.36 | 34.32 | 0.21 | 27.12 | 96 | 0.98 |
| 369 | 6.46 | 34.15 | 0.73 | 122 | | | | | | | |
| 479 | 5.90 | 34.25 | 0.36 | 107 | | | | | | | |
| 627 | 5.20 | 34.33 | 0.19 | 93 | | | | | | | |

a) Salinity samples at 191 and 229 meters appear to have been reversed; they are assumed to be listed in correct order.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |
| PAOLINA-T; July 9, 1958; 1816, 1855 GCT; 33°25'N, 122°30.5'W; sounding, 2400 fm; wind, 330°, force 6; weather, overcast; sea, very rough; wire angle, 26°, 23°. | | | | | | | | | | | 80.80 |
| 0 | 17.58 | 33.06 | 5.56 | 400 | 0 | 17.58 | 33.06 | 5.56 | 23.92 | 400 | 0.00 |
| 9 | 17.60 | 33.03 | 5.48 | 403 | 10 | 17.60 | 33.03 | 5.48 | 23.89 | 403 | 0.04 |
| 32 | 16.54 | 33.08 | 5.65 | 376 | 20 | 17.60 | 33.03 | 5.48 | 23.89 | 403 | 0.08 |
| 41 | 16.18 | 33.15 | 5.66 | 362 | 30 | 16.65 | 33.08 | 5.64 | 24.13 | 379 | 0.12 |
| 55 | 15.19 | 33.06 | 5.86 | 348 | 50 | 15.61 | 33.10 | 5.75 | 24.40 | 354 | 0.19 |
| 64 | 14.00 | 33.01 | 5.97 | 328 | 75 | 13.35 | 33.03 | 5.95 | 24.83 | 313 | 0.28 |
| 72 | 13.54 | 33.04 | 5.96 | 317 | 100 | 12.27 | 33.02 | 5.67 | 25.03 | 294 | 0.35 |
| 90 | 12.59 | 33.00 | 5.87 | 302 | 150 | 10.02 | 33.43 | 4.37 | 25.74 | 226 | 0.48 |
| 107 | 12.02 | 33.06 | 5.50 | 287 | 200 | 8.80 | 33.80 | 3.17 | 26.23 | 180 | 0.59 |
| 120 | 11.26 | 33.22 | 5.09 | 262 | 250 | 8.10 | 33.96 | 2.82 | 26.46 | 158 | 0.68 |
| | | | | | 300 | 7.43 | 34.00 | 2.42 | 26.59 | 146 | 0.75 |
| 148 | 10.08 | 33.42 | 4.39 | 228 | 400 | 6.37 | 34.08 | 1.36 | 26.80 | 126 | 0.90 |
| 186 | 9.02 | 33.69 | 3.36 | 191 | 500 | 5.61 | 34.16 | 0.72 | 26.96 | 110 | 1.02 |
| 223 | 8.53 | 33.91 | 2.98 | 168 | 600 | 5.17 | 34.25 | 0.34 | 27.08 | 99 | 1.13 |
| 277 | 7.77 | 33.98 | 2.65 | 151 | | | | | | | |
| 362 | 6.78 | 34.04 | 1.75 | 134 | | | | | | | |
| 468 | 5.76 | 34.14 | 0.85 | 114 | | | | | | | |
| 613 | 5.06 | 34.27 | 0.29 | 96 | | | | | | | |
| PAOLINA-T; July 10, 1958; 0130 GCT; 33°10'N, 123°14'W; sounding, 2400+ fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 11°. | | | | | | | | | | | 80.90 |
| 0 | 17.96 | 33.15 | 5.48 | 402 | 0 | 17.96 | 33.15 | 5.48 | 23.89 | 402 | 0.00 |
| 11 | 17.96 | 33.15 | 5.44 | 402 | 10 | 17.96 | 33.15 | 5.45 | 23.89 | 402 | 0.04 |
| 36 | 18.01 | 33.34 | 5.46 | 390 | 20 | 17.98 | 33.21 | 5.45 | 23.93 | 399 | 0.08 |
| 46 | 17.41 | 33.40 | 5.79 | 372 | 30 | 18.00 | 33.25 | 5.45 | 23.96 | 396 | 0.12 |
| 61 | 14.76 | 33.33 | 6.04 | 320 | 50 | 16.06 | 33.37 | 5.92 | 24.50 | 344 | 0.19 |
| 71 | 14.71 | 33.31 | 5.93 | 320 | 75 | 14.62 | 33.31 | 5.87 | 24.77 | 318 | 0.28 |
| 80 | 14.50 | 33.31 | 5.82 | 316 | 100 | 14.30 | 33.42 | 5.75 | 24.93 | 304 | 0.36 |
| 100 | 14.30 | 33.42 | 5.75 | 304 | 150 | 10.28 | 33.56 | 3.90 | 25.80 | 221 | 0.48 |
| 121 | 11.56 | 33.51 | 4.32 | 246 | 200 | 9.27 | 33.78 | 2.94 | 26.14 | 188 | 0.59 |
| 136 | 10.52 | 33.48 | 4.17 | 230 | 250 | 8.22 | 34.00 | 2.14 | 26.48 | 156 | 0.68 |
| 161 | 10.16 | 33.61 | 3.69 | 215 | 300 | 7.62 | 34.06 | 1.81 | 26.61 | 144 | 0.75 |
| 199 | 9.28 | 33.78 | 2.95 | 189 | 400 | 6.80 | 34.17 | 0.82 | 26.82 | 124 | 0.89 |
| 237 | 8.42 | 33.98 | 2.26 | 161 | 500 | 6.05 | 34.20 | 0.37 | 26.94 | 113 | 1.02 |
| 296 | 7.70 | 34.05 | 1.88 | 145 | 600 | 5.45 | 34.25 | 0.25 | 27.05 | 102 | 1.13 |
| 383 | 6.92 | 34.16 | 0.92 | 127 | | | | | | | |
| 496 | 6.08 | 34.20 | 0.38 | 113 | | | | | | | |
| 648 | 5.16 | 34.29 | 0.22 | 96 | | | | | | | |
| PAOLINA-T; July 8, 1958; 0431 GCT; 34°14.5'N, 119°58'W; sounding, 325 fm; wind, 300°, force 2; weather, fog; sea, moderate; wire angle, 12°. | | | | | | | | | | | 82.47 |
| 0 | 14.32 | 33.78 | 7.16 | 278 | 0 | 14.32 | 33.78 | 7.16 | 25.20 | 278 | 0.00 |
| 10 | 13.26 | 33.82 | 6.72 | 254 | 10 | 13.26 | 33.82 | 6.72 | 25.45 | 254 | 0.03 |
| 30 | 10.42 | 33.68 | 3.43 | 214 | 20 | 11.80 | 33.74 | 4.92 | 25.67 | 233 | 0.05 |
| 41 | 9.56 | 33.86 | 2.45 | 186 | 30 | 10.42 | 33.68 | 3.43 | 25.87 | 214 | 0.07 |
| 51 | 9.45 | 33.89 | 2.34 | 183 | 50 | 9.45 | 33.89 | 2.35 | 26.20 | 183 | 0.11 |
| 60 | 9.42 | 33.92 | 2.20 | 180 | 75 | 9.40 | 33.94 | 2.20 | 26.25 | 178 | 0.16 |
| 71 | 9.41 | 33.89u | 2.20 | | 100 | 9.30 | 33.96 | 1.91 | 26.28 | 175 | 0.20 |
| 86 | 9.36 | 33.96 | 2.00 | 176 | 150 | 9.09 | 34.06 | 1.63 | 26.39 | 165 | 0.29 |
| 100 | 9.30 | 33.96 | 1.91 | 175 | 200 | 8.81 | 34.11 | 1.26 | 26.47 | 157 | 0.37 |
| 114 | 9.25 | 33.96 | 1.82 | 174 | 250 | 8.40 | 34.18 | 1.02 | 26.58 | 146 | 0.45 |
| 138 | 9.14 | 34.05 | 1.67 | 166 | 300 | 7.82 | 34.20 | 0.72 | 26.69 | 136 | 0.52 |
| 166 | 9.02 | 34.06 | 1.60 | 164 | 400 | 7.07 | 34.25 | 0.33 | 26.84 | 122 | 0.65 |
| 200 | 8.81 | 34.11 | 1.26 | 157 | 500 | 6.54 | 34.27 | 0.16 | 26.93 | 114 | 0.78 |
| 248 | 8.42 | 34.18 | 1.04 | 146 | | | | | | | |
| 297 | 7.87 | 34.20 | 0.74 | 136 | | | | | | | |
| 399 | 7.08 | 34.25 | 0.35 | 122 | | | | | | | |
| 500 | 6.54 | 34.27 | 0.16 | 114 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

83.43 PAOLINA-T; July 8, 1958; 0805 GCT; 34°07'N, 119°34.5'W; sounding, 150 fm; wind, 300°, force 3; weather, fog; sea, rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.14 | 33.66 | 6.33 | 324 | 0 | 16.14 | 33.66 | 6.33 | 24.71 | 324 | 0.00 |
| 10 | 16.07 | 33.80 | 6.31 | 312 | 10 | 16.07 | 33.80 | 6.31 | 24.84 | 312 | 0.03 |
| 29 | 11.68 | 33.54 | 4.60 | 246 | 20 | 15.73 | 33.78 | 6.17 | 24.89 | 307 | 0.06 |
| 48 | 10.60 | 33.60 | 3.69 | 223 | 30 | 11.60 | 33.54 | 4.54 | 25.55 | 244 | 0.09 |
| 71 | 9.94 | 33.74 | 3.17 | 202 | 50 | 10.58 | 33.60 | 3.67 | 25.78 | 222 | 0.14 |
| 96 | 9.58 | 33.84 | 2.91 | 188 | 75 | 9.82 | 33.76 | 3.09 | 26.04 | 198 | 0.19 |
| 120 | 9.47 | 33.94 | 2.47 | 180 | 100 | 9.57 | 33.85 | 2.88 | 26.15 | 188 | 0.24 |
| 157 | 9.26 | 34.09 | 1.84 | 165 | 150 | 9.27 | 34.08 | 1.85 | 26.37 | 167 | 0.33 |
| 195 | 9.06 | 34.15 | 1.57 | 158 | 200 | 9.00 | 34.16 | 1.52 | 26.48 | 156 | 0.41 |
| 244 | 8.53 | 34.17 | 1.16 | 148 | 250 | (8.42) | (34.17) | (1.11) | (26.58) | (146) | (0.49) |

83.51 PAOLINA-T; July 8, 1958; 0015 GCT; 33°51.5'N, 120°07.5'W; sounding, missing; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.24 | 33.56 | 6.21 | 334 | 0 | 16.24 | 33.56 | 6.21 | 24.61 | 334 | 0.00 |
| 10 | 14.28 | 33.58 | 5.95 | 292 | 10 | 14.28 | 33.58 | 5.95 | 25.05 | 292 | 0.03 |
| 32 | 11.51 | 33.60 | 4.57 | 238 | 20 | 13.90 | 33.58 | 5.73 | 25.13 | 284 | 0.06 |
| 52 | 10.90 | 33.60 | 4.11 | 228 | 30 | 11.60 | 33.60 | 4.60 | 25.60 | 240 | 0.09 |
| 77 | 10.19 | 33.66 | 3.57 | 212 | 50 | 10.97 | 33.60 | 4.15 | 25.71 | 229 | 0.13 |
| 103 | 9.47 | 33.87 | 2.74 | 185 | 75 | 10.25 | 33.65 | 3.62 | 25.88 | 213 | 0.19 |
| 130 | 9.30 | 33.91 | 2.64 | 179 | 100 | 9.55 | 33.86 | 2.82 | 26.16 | 186 | 0.24 |

83.55 PAOLINA-T; July 7, 1958; 2135 GCT; 33°43.5'N, 120°24'W; sounding, 595 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.06 | 33.58 | 6.20 | 308 | 0 | 15.06 | 33.58 | 6.20 | 24.88 | 308 | 0.00 |
| 10 | 14.58 | 33.62 | 6.04 | 294 | 10 | 14.58 | 33.62 | 6.04 | 25.02 | 294 | 0.03 |
| 30 | 10.47 | 33.64 | 3.64 | 218 | 20 | 14.00 | 33.62 | 5.68 | 25.14 | 283 | 0.06 |
| 41 | 10.32 | 33.64 | 3.54 | 215 | 30 | 10.47 | 33.64 | 3.64 | 25.83 | 218 | 0.08 |
| 51 | 10.07 | 33.70 | 3.39 | 207 | 50 | 10.08 | 33.70 | 3.40 | 25.94 | 207 | 0.13 |
| 61 | 9.84 | 33.73 | 3.11 | 201 | 75 | 9.42 | 33.88 | 2.66 | 26.19 | 184 | 0.18 |
| 71 | 9.54 | 33.84 | 2.79 | 188 | 100 | 9.15 | 34.02 | 2.26 | 26.34 | 169 | 0.22 |
| 85 | 9.27 | 33.96 | 2.49 | 175 | 150 | 8.97 | 34.10 | 1.81 | 26.44 | 160 | 0.30 |
| 101 | 9.15 | 34.02 | 2.26 | 169 | 200 | 8.62 | 34.14 | 1.59 | 26.52 | 152 | 0.38 |
| 115 | 9.13 | 34.05 | 2.04 | 166 | 250 | 8.29 | 34.20 | 1.28 | 26.62 | 143 | 0.46 |
| 140 | 9.00 | 34.07 | 1.92 | 163 | 300 | 7.95 | 34.23 | 1.07 | 26.70 | 135 | 0.53 |
| 170 | 8.92 | 34.14 | 1.72 | 156 | 400 | 7.23 | 34.27 | 0.70 | 26.84 | 122 | 0.66 |
| 204 | 8.58 | 34.14 | 1.57 | 151 | 500 | 6.47 | 34.30 | 0.42 | 26.96 | 110 | 0.78 |
| 253 | 8.27 | 34.20 | 1.27 | 142 | | | | | | | |
| 333 | 7.64 | 34.25 | 0.92 | 130 | | | | | | | |
| 433 | 7.01 | 34.28 | 0.61 | 119 | | | | | | | |
| 564 | 5.84 | 34.33 | 0.31 | 101 | | | | | | | |

83.60 PAOLINA-T; July 7, 1958; 1819 GCT; 33°33.5'N, 120°44'W; sounding, 800 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.44 | 33.46 | 7.06a) | 284 | 0 | 13.44 | 33.46 | 7.06 | 25.13 | 284 | 0.00 |
| 10 | 12.71 | 33.58 | 6.03 | 261 | 10 | 12.71 | 33.58 | 6.03 | 25.38 | 261 | 0.03 |
| 30 | 12.23 | 33.58 | 5.42 | 253 | 20 | 12.42 | 33.58 | 5.69 | 25.42 | 257 | 0.05 |
| 40 | 11.86 | 33.59 | 5.09 | 245 | 30 | 12.23 | 33.58 | 5.42 | 25.46 | 253 | 0.08 |
| 50 | 11.06 | 33.50 | 4.74 | 238 | 50 | 11.06 | 33.50 | 4.74 | 25.62 | 238 | 0.13 |
| 60 | 10.66 | 33.51 | 4.33 | 230 | 75 | 10.35 | 33.55 | 4.03 | 25.79 | 221 | 0.18 |
| 69 | 10.74 | 33.60 | 4.10 | 225 | 100 | 9.32 | 33.58 | 3.71 | 25.98 | 204 | 0.24 |
| 83 | 9.62 | 33.49 | 3.95 | 216 | 150 | 8.67 | 33.96 | 2.10 | 26.38 | 166 | 0.33 |
| 99 | 9.34 | 33.58 | 3.72 | 204 | 200 | 8.17 | 34.02 | 1.73 | 26.50 | 154 | 0.41 |
| 112 | 9.10 | 33.73 | 3.18 | 190 | 250 | 7.85 | 34.14 | 1.26 | 26.64 | 141 | 0.49 |
| 135 | 8.84 | 33.89 | 2.35 | 174 | 300 | 7.35 | 34.15 | 1.13 | 26.73 | 133 | 0.56 |
| 164 | 8.50 | 33.99 | 1.95 | 161 | 400 | 6.39 | 34.20 | 0.61 | 26.89 | 117 | 0.69 |
| 197 | 8.18 | 34.02 | 1.75 | 154 | 500 | 5.95 | 34.26 | 0.37 | 27.00 | 107 | 0.80 |
| 241 | 7.94 | 34.13 | 1.30 | 142 | | | | | | | |
| 320 | 7.14 | 34.16 | 1.05 | 130 | | | | | | | |
| 416 | 6.29 | 34.21 | 0.56 | 115 | | | | | | | |
| 546 | 5.65 | 34.31 | 0.25 | 100 | | | | | | | |

a) Mean value of 6.99 and 7.14 ml/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

83.70

PAOLINA-T; July 7, 1958; 1120 GCT; 33°14'N, 121°25.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.26 | 33.07 | 5.60 | 392 | 0 | 17.26 | 33.07 | 5.60 | 24.00 | 392 | 0.00 |
| 10 | 17.24 | 33.12 | 5.61 | 388 | 10 | 17.24 | 33.12 | 5.61 | 24.04 | 388 | 0.04 |
| 30 | 16.80 | 33.08 | 5.80 | 381 | 20 | 17.04 | 33.10 | 5.72 | 24.07 | 385 | 0.08 |
| 44 | 14.35 | 33.09 | 6.18 | 329 | 30 | 16.80 | 33.08 | 5.80 | 24.11 | 381 | 0.12 |
| 55 | 14.21 | 33.21 | 5.89 | 317 | 50 | 14.25 | 33.18 | 6.00 | 24.75 | 321 | 0.19 |
| 65 | 13.84 | 33.21 | 5.83 | 310 | 75 | 13.13 | 33.03 | 5.65 | 24.87 | 309 | 0.26 |
| 74 | 13.13 | 33.03 | 5.65 | 310 | 100 | 11.60 | 33.26 | 5.07 | 25.34 | 264 | 0.34 |
| 93 | 12.25 | 33.11 | 5.38 | 288 | 150 | 9.05 | 33.68 | 3.55 | 26.10 | 192 | 0.45 |
| 108 | 10.89 | 33.43 | 4.77 | 240 | 200 | 8.25 | 33.95 | 2.27 | 26.43 | 161 | 0.54 |
| 123 | 9.98 | 33.44 | 4.11 | 224 | 250 | 7.62 | 34.01 | 1.62 | 26.57 | 147 | 0.62 |
| 147 | 9.12 | 33.64 | 3.68 | 196 | 300 | 7.21 | 34.06 | 1.23 | 26.67 | 138 | 0.70 |
| 176 | 8.76 | 33.86 | 2.48 | 174 | 400 | 6.39 | 34.16 | 0.67 | 26.86 | 120 | 0.83 |
| 212 | 8.10 | 33.98 | 2.19 | 156 | 500 | 5.80 | 34.23 | 0.39 | 27.00 | 107 | 0.95 |
| 267 | 7.46 | 34.03 | 1.49 | 144 | 600 | (5.32) | (34.33) | (0.28) | (27.13) | (94) | (1.06) |
| 350 | 6.81 | 34.12 | 0.95 | 128 | | | | | | | |
| 454 | 6.00 | 34.20 | 0.48 | 112 | | | | | | | |
| 595 | 5.36 | 34.32 | 0.29 | 96 | | | | | | | |

83.80

PAOLINA-T; July 7, 1958; 0443, 0502 GCT; 32°54'N, 122°08'W; sounding, 2400 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 17°, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.62 | 33.13 | 5.51 | 396 | 0 | 17.62 | 33.13 | 5.51 | 23.96 | 396 | 0.00 |
| 10 | 17.41 | 33.15 | 5.54 | 390 | 10 | 17.41 | 33.15 | 5.54 | 24.02 | 390 | 0.04 |
| 29 | 16.88 | 33.24 | 5.54 | 372 | 20 | 17.10 | 33.20 | 5.54 | 24.13 | 379 | 0.08 |
| 44 | 15.86 | 33.36 | 5.73 | 340 | 30 | 16.87 | 33.24 | 5.54 | 24.22 | 371 | 0.12 |
| 53 | 14.65 | 33.27 | 5.96 | 322 | 50 | 15.00 | 33.30 | 5.90 | 24.68 | 327 | 0.18 |
| 63 | 14.20 | 33.28 | 5.99 | 312 | 75 | 13.63 | 33.31 | 5.97 | 24.98 | 299 | 0.26 |
| 73 | 13.76 | 33.30 | 5.97 | 302 | 100 | 12.41 | 33.43 | 5.92 | 25.31 | 267 | 0.34 |
| 93 | 12.84 | 33.42 | 5.93 | 276 | 150 | 9.64 | 33.65 | 3.55 | 25.98 | 204 | 0.45 |
| 108 | 11.86 | 33.43 | 5.83 | 257 | 200 | 8.65 | 33.94 | 2.53 | 26.36 | 167 | 0.55 |
| 122 | 10.88 | 33.48 | 5.23 | 236 | 250 | 7.92 | 34.06 | 1.93 | 26.57 | 148 | 0.63 |
| | | | | | 300 | 7.46 | 34.10 | 1.55 | 26.66 | 139 | 0.70 |
| 147 | 9.72 | 33.64 | 3.60 | 206 | 400 | 6.68 | 34.18 | 0.83 | 26.84 | 122 | 0.84 |
| 176 | 9.00 | 33.84 | 3.04 | 180 | 500 | 5.83 | 34.25 | 0.42 | 27.00 | 106 | 0.96 |
| 214 | 8.44 | 34.00 | 2.31 | 160 | 600 | (5.35) | (34.32) | (0.28) | (27.12) | (95) | (1.07) |
| 265 | 7.73 | 34.07 | 1.79 | 144 | | | | | | | |
| 348 | 7.16 | 34.15 | 1.15 | 130 | | | | | | | |
| 451 | 6.18 | 34.22 | 0.52 | 113 | | | | | | | |
| 597 | 5.35 | 34.31 | 0.29 | 96 | | | | | | | |

83.90

PAOLINA-T; July 6, 1958; 2158, 2215 GCT; 32°27'N, 122°43'W; sounding, 2400 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 05°, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.07 | 33.58 | 5.43a) | 397 | 0 | 19.07 | 33.58 | 5.43 | 23.95 | 397 | 0.00 |
| 10 | 18.71 | 33.57 | 5.37a) | 390 | 10 | 18.71 | 33.57 | 5.37 | 24.02 | 390 | 0.04 |
| 31 | 18.77 | 33.58 | 5.29a) | 390 | 20 | 18.73 | 33.57 | 5.35 | 24.02 | 390 | 0.08 |
| 61 | 15.99 | 33.53 | 5.77a) | 330 | 30 | 18.77 | 33.58 | 5.30 | 24.02 | 390 | 0.12 |
| 71 | 15.58 | 33.55 | 5.76 | 320 | 50 | 18.78 | 33.58 | 5.29 | 24.02 | 390 | 0.20 |
| 81 | 14.72 | 33.49 | 5.72 | 307 | 75 | 15.20 | 33.52 | 5.75 | 24.81 | 315 | 0.28 |
| 96 | 13.07 | 33.44 | 5.33 | 278 | 100 | 12.45 | 33.43 | 5.13 | 25.30 | 268 | 0.36 |
| 112 | 11.02 | 33.42 | 4.67 | 244 | 150 | 9.55 | 33.63 | 3.80 | 25.99 | 203 | 0.48 |
| 127 | 10.20 | 33.49 | 4.20 | 224 | 200 | 8.66 | 33.95 | 2.52 | 26.37 | 167 | 0.57 |
| 147 | 9.60 | 33.62 | 3.91 | 205 | 250 | 7.90 | 34.02 | 2.02 | 26.54 | 150 | 0.65 |
| | | | | | 300 | 7.40 | 34.09 | 1.52 | 26.67 | 138 | 0.73 |
| 164 | 9.27 | 33.70 | 3.29 | 194 | 400 | 6.59 | 34.20 | 0.72 | 26.86 | 120 | 0.86 |
| 193 | 8.80 | 33.94 | 2.63 | 169 | 500 | 5.99 | 34.27 | 0.36 | 27.01 | 106 | 0.98 |
| 217 | 8.36 | 33.95 | 2.29 | 162 | 600 | 5.47 | 34.33 | 0.25 | 27.11 | 96 | 1.09 |
| 270 | 7.72 | 34.05 | 1.87 | 146 | | | | | | | |
| 354 | 6.88 | 34.16 | 0.99 | 126 | | | | | | | |
| 460 | 6.19 | 34.25 | 0.43 | 110 | | | | | | | |
| 601 | 5.46 | 34.33 | 0.25 | 96 | | | | | | | |

a) Owing to error in measuring oxygen samples, these values may be about 5 per cent high.

87.35 PAOLINA-T; July 4, 1958; 2130 GCT; 33°50'N, 118°37.5'W; sounding, 235 fm; wind, 270°, force 1; weather, clear; sea, moderate; wire angle, 22°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 0 | 19.47 | 33.54 | 6.92 | 410 | 0 | 19.47 | 33.54 | 6.92 | 23.81 | 410 | 0.00 |
| 9 | 18.15 | 33.54 | 6.63 | 380 | 10 | 18.00 | 33.52 | 6.57 | 24.16 | 377 | 0.04 |
| 28 | 11.62 | 33.57 | 4.13 | 242 | 20 | 12.20 | 33.57 | 4.32 | 25.46 | 253 | 0.07 |
| 47 | 10.64 | 33.58 | 3.60 | 225 | 30 | 11.58 | 33.57 | 4.11 | 25.58 | 242 | 0.10 |
| 70 | 10.04 | 33.69 | 3.08 | 208 | 50 | 10.56 | 33.58 | 3.52 | 25.77 | 224 | 0.14 |
| 92 | 9.88 | 33.80 | 3.09 | 196 | 75 | 10.00 | 33.72 | 3.08 | 25.97 | 204 | 0.20 |
| 113 | 9.66 | 33.85 | 2.55 | 189 | 100 | 9.80 | 33.82 | 3.04 | 26.08 | 194 | 0.25 |
| 147 | 9.31 | 33.96 | 1.95 | 176 | 150 | 9.24 | 34.00 | 1.87 | 26.31 | 172 | 0.34 |
| 180 | 9.12 | 34.08 | 1.53 | 164 | 200 | 9.17 | 34.13 | 1.40 | 26.44 | 160 | 0.42 |
| 222 | 9.18 | 34.15 | 1.30 | 159 | 250 | 8.93 | 34.19 | 1.13 | 26.52 | 152 | 0.50 |
| 264 | 8.80 | 34.20 | 1.10 | 150 | 300 | 8.47 | 34.24 | 1.02 | 26.62 | 142 | 0.58 |
| 357 | 7.93 | 34.32 | 0.87 | 128 | | | | | | | |

87.40 PAOLINA-T; July 5, 1958; 0059 GCT; 33°41'N, 118°59'W; sounding, 525 fm; wind, 330°, force 1; weather, cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.56 | 33.62 | 5.86 | 432 | 0 | 20.56 | 33.62 | 5.86 | 23.58 | 432 | 0.00 |
| 10 | 12.83 | 33.62 | 6.14 | 261 | 10 | 12.83 | 33.62 | 6.14 | 25.38 | 261 | 0.03 |
| 29 | 10.74 | 33.62 | 3.85 | 224 | 20 | 11.22 | 33.62 | 4.33 | 25.68 | 232 | 0.06 |
| 46 | 10.24 | 33.66 | 3.49 | 213 | 30 | 10.70 | 33.62 | 3.82 | 25.78 | 223 | 0.08 |
| 56 | 9.88 | 33.78 | 3.22 | 200 | 50 | 10.08 | 33.70 | 3.37 | 25.94 | 207 | 0.12 |
| 67 | 9.77 | 33.82 | 3.12 | 193 | 75 | 9.64 | 33.89 | 2.70 | 26.16 | 187 | 0.17 |
| 77 | 9.63 | 33.89 | 2.60 | 186 | 100 | 9.57 | 33.93 | 2.57 | 26.21 | 182 | 0.22 |
| 97 | 9.58 | 33.93 | 2.58 | 182 | 150 | 9.41 | 33.98 | 2.22 | 26.27 | 176 | 0.31 |
| 112 | 9.51 | 33.95 | 2.46 | 179 | 200 | 8.93 | 34.14 | 1.75 | 26.48 | 156 | 0.40 |
| 127 | 9.48 | 33.96 | 2.32 | 178 | 250 | 8.75 | 34.29 | 1.10 | 26.62 | 143 | 0.47 |
| 153 | 9.40 | 33.99 | 2.21 | 174 | 300 | 8.15 | 34.30 | 0.80 | 26.72 | 133 | 0.54 |
| 183 | 9.16 | 34.09 | 2.00 | 164 | 400 | 7.07 | 34.30 | 0.53 | 26.87 | 119 | 0.67 |
| 223 | 8.98 | 34.27 | 1.34 | 147 | 500 | 6.38 | 34.31 | 0.32 | 26.98 | 108 | 0.79 |
| 280 | 8.32 | 34.29 | 0.85 | 136 | 600 | 5.78 | 34.38 | 0.30 | 27.11 | 96 | 0.90 |
| 365 | 7.44 | 34.30 | 0.69 | 124 | | | | | | | |
| 460p | 6.60 | 34.29 | 0.35 | 113 | | | | | | | |
| 609p | 5.73 | 34.38 | 0.30 | 95 | | | | | | | |

87.45 PAOLINA-T; July 5, 1958; 0501 GCT; 33°30'N, 119°19'W; sounding, 950 fm; wind, 300°, force 1; weather, cloudy; sea, moderate; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.84 | 33.62 | 5.72 | 366 | 0 | 17.84 | 33.62 | 5.72 | 24.27 | 366 | 0.00 |
| 10 | 11.51 | 33.55 | 4.64 | 242 | 10 | 11.51 | 33.55 | 4.64 | 25.58 | 242 | 0.03 |
| 30 | 10.42 | 33.68 | 3.85 | 214 | 20 | 10.85 | 33.63 | 4.31 | 25.75 | 225 | 0.05 |
| 40 | 10.16 | 33.66 | 3.45 | 211 | 30 | 10.42 | 33.68 | 3.85 | 25.87 | 214 | 0.08 |
| 50 | 9.84 | 33.74 | 3.23 | 200 | 50 | 9.84 | 33.74 | 3.23 | 26.02 | 200 | 0.12 |
| 60 | 9.56 | 33.77 | 3.04 | 193 | 75 | 9.25 | 33.90 | 2.47 | 26.24 | 179 | 0.16 |
| 70 | 9.32 | 33.87 | 2.59 | 182 | 100 | 8.99 | 34.04 | 2.18 | 26.39 | 165 | 0.21 |
| 85 | 9.18 | 33.95 | 2.28 | 174 | 150 | 8.42 | 34.10 | 1.86 | 26.52 | 152 | 0.29 |
| 102 | 8.98 | 34.04 | 2.17 | 164 | 200 | 8.27 | 34.21 | 1.27 | 26.64 | 141 | 0.36 |
| 116 | 8.88 | 34.08 | 1.95 | 160 | 250 | 7.84 | 34.36 | 1.07 | 26.82 | 124 | 0.43 |
| 141 | 8.60 | 34.10 | 1.88 | 154 | 300 | 7.53 | 34.36 | 0.82 | 26.86 | 120 | 0.49 |
| 170 | 8.48 | 34.16 | 1.47 | 148 | 400 | 6.80 | 34.32 | 0.42 | 26.94 | 113 | 0.61 |
| 205 | 8.21 | 34.22 | 1.22 | 140 | 500 | 6.19 | 34.33 | 0.30 | 27.03 | 104 | 0.72 |
| 256 | 7.80 | 34.37a) | 1.05 | 123 | | | | | | | |
| 335 | 7.28 | - | 0.66 | | | | | | | | |
| 437 | 6.56 | 34.31 | 0.35 | 110 | | | | | | | |
| 569 | 5.79 | 34.36 | 0.26 | 98 | | | | | | | |

a) The use of this value results in an unusual density structure, but nevertheless value was accepted in drawing property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| PAOLINA-T; July 5, 1958; 1142 GCT; 33°10'N, 120°00.5'W; sounding, 675 fm; wind, 290°, force 4; weather, overcast; sea, rough; wire angle, 13°. | | | | | | | | | | | | 87.55 |
| 1 | 14.98 | 33.62 | 5.86 | 303 | 0 | (15.01) | (33.61) | (5.86) | (24.92) | (304) | (0.00) | |
| 11 | 14.64 | 33.67 | 5.73 | 292 | 10 | 14.65 | 33.67 | 5.74 | 25.04 | 293 | 0.03 | |
| 30 | 11.79 | 33.67 | 3.94 | 238 | 20 | 14.50 | 33.67 | 5.62 | 25.08 | 289 | 0.06 | |
| 60 | 9.61 | 33.79 | 2.95 | 193 | 30 | 11.79 | 33.67 | 3.94 | 25.62 | 238 | 0.08 | |
| 71 | 9.42 | 33.83 | 2.72 | 186 | 50 | 10.18 | 33.75 | 3.20 | 25.97 | 205 | 0.13 | |
| 79 | 9.33 | 33.84 | 2.61 | 184 | 75 | 9.40 | 33.83 | 2.67 | 26.16 | 186 | 0.18 | |
| 94 | 9.06 | 33.93 | 2.28 | 174 | 100 | 9.04 | 33.93 | 2.23 | 26.30 | 174 | 0.22 | |
| 109 | 8.98 | 33.94 | 2.18 | 172 | 150 | 8.38 | 34.06 | 1.58 | 26.50 | 154 | 0.31 | |
| 124 | 8.70 | 33.95 | 2.08 | 167 | 200 | 7.83 | 34.17 | 1.11 | 26.67 | 138 | 0.38 | |
| 142 | 8.46 | 34.02 | 1.71 | 158 | 250 | 7.58 | 34.21 | 0.89 | 26.74 | 132 | 0.45 | |
| 162 | 8.24 | 34.10 | 1.45 | 149 | 300 | 7.32 | 34.26 | 0.69 | 26.82 | 124 | 0.52 | |
| 190 | 7.95 | 34.18 | 1.14 | 139 | 400 | 6.72 | 34.30 | 0.43 | 26.93 | 114 | 0.64 | |
| 214 | 7.70 | 34.16 | 1.08 | 137 | 500 | 6.20 | 34.32 | 0.31 | 27.01 | 106 | 0.75 | |
| 268 | 7.50 | 34.23 | 0.83 | 129 | 600 | (5.80) | (34.33) | (0.22) | (27.08) | (100) | (0.86) | |
| 350 | 7.00 | 34.28 | 0.55 | 119 | | | | | | | | |
| 457 | 6.35 | 34.31 | 0.34 | 108 | | | | | | | | |
| 596 | 5.81 | 34.33 | 0.22 | 100 | | | | | | | | |
| PAOLINA-T; July 5, 1958; 1930 GCT; 33°00'N, 120°21'W; sounding, 420 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 25°. | | | | | | | | | | | | 87.60 |
| 0 | 13.43 | 33.04 | 6.12 | 314 | 0 | 13.43 | 33.04 | 6.12 | 24.82 | 314 | 0.00 | |
| 9 | 13.11 | 33.13 | 5.86 | 302 | 10 | 13.10 | 33.13 | 5.85 | 24.94 | 302 | 0.03 | |
| 28 | 13.01 | 33.18 | 5.81 | 296 | 20 | 13.09 | 33.15 | 5.84 | 24.97 | 299 | 0.06 | |
| 50 | 12.56 | 33.27 | 5.43 | 281 | 30 | 13.00 | 33.19 | 5.79 | 25.01 | 296 | 0.09 | |
| 67 | 12.64 | 33.57 | 5.09 | 261 | 50 | 12.56 | 33.27 | 5.43 | 25.16 | 281 | 0.15 | |
| 76 | 12.59 | 33.58 | 5.03 | 259 | 75 | 12.65 | 33.60 | 4.97 | 25.39 | 260 | 0.22 | |
| 88 | 10.48 | 33.53 | 3.68 | 226 | 100 | 9.48 | 33.56 | 3.80 | 25.93 | 208 | 0.28 | |
| 100 | 9.48 | 33.56 | 3.80 | 208 | 150 | 8.68 | 33.87 | 2.68 | 26.31 | 172 | 0.37 | |
| 118 | 9.34 | 33.71 | 3.06 | 194 | 200 | 8.42 | 34.02 | 1.90 | 26.47 | 158 | 0.46 | |
| 132 | 9.01 | 33.72 | 3.17 | 189 | 250 | 7.79 | 34.06 | 1.35 | 26.59 | 146 | 0.53 | |
| 152 | 8.66 | 33.87 | 2.67 | 172 | 300 | 7.37 | 34.10 | 1.13 | 26.68 | 137 | 0.61 | |
| 172 | 8.52 | 34.06u | 2.18 | | 400 | 6.85 | 34.22 | 0.44 | 26.84 | 122 | 0.74 | |
| 212 | 8.36 | 34.04 | 1.48 | 155 | 500 | (5.97) | (34.28) | (0.26) | (27.01) | (106) | (0.86) | |
| 278 | 7.42 | 34.08 | 1.30 | 140 | | | | | | | | |
| 361 | 7.10 | 34.18 | 0.59 | 128 | | | | | | | | |
| 481 | 6.16 | 34.27 | 0.30 | 108 | | | | | | | | |
| PAOLINA-T; July 6, 1958; 0205 GCT; 32°30.5'N, 121°00'W; sounding, 2380 fm; wind, 300°, force 3; weather, overcast; sea, rough; wire angle, 10°. | | | | | | | | | | | | 87.70 |
| 0 | 18.04 | 33.17 | 5.31 | 403 | 0 | 18.04 | 33.17 | 5.31 | 23.88 | 403 | 0.00 | |
| 10 | 18.06 | - | 5.44 | | 10 | 18.06 | 33.17 | 5.44 | 23.89 | 403 | 0.04 | |
| 30 | 17.88 | 33.19 | 5.46 | 400 | 20 | 17.98 | 33.18 | 5.45 | 23.90 | 402 | 0.08 | |
| 45 | 15.92 | 33.17 | 5.83 | 355 | 30 | 17.88 | 33.19 | 5.46 | 23.92 | 400 | 0.12 | |
| 56 | 15.62 | 33.19 | 5.80 | 348 | 50 | 15.78 | 33.18 | 5.82 | 24.42 | 352 | 0.20 | |
| 65 | 15.20 | 33.19 | 5.76 | 339 | 75 | 14.61 | 33.18 | 5.88 | 24.68 | 328 | 0.28 | |
| 76 | 14.56 | 33.18 | 5.89 | 327 | 100 | 12.90 | 33.18 | 5.47 | 25.03 | 294 | 0.36 | |
| 96 | 13.04 | 33.17 | 5.55 | 298 | 150 | 9.62 | 33.48 | 4.03 | 25.85 | 216 | 0.49 | |
| 110 | 12.58 | 33.69u | 5.15 | | 200 | 8.89 | 33.89 | 2.54 | 26.29 | 174 | 0.59 | |
| 126 | 11.27 | 33.40 | 4.58 | 249 | 250 | 8.25 | 34.00 | 2.03 | 26.47 | 157 | 0.67 | |
| 149 | 9.65 | 33.48 | 4.07 | 216 | 300 | 7.61 | 34.06 | 1.60 | 26.62 | 143 | 0.75 | |
| 177 | 9.14 | 33.77 | 3.17 | 187 | 400 | 6.65 | 34.14 | 0.87 | 26.81 | 125 | 0.89 | |
| 216 | 8.72 | 33.95 | 2.27 | 167 | 500 | 6.00 | 34.18 | 0.44 | 26.92 | 114 | 1.02 | |
| 264 | 8.08 | 34.02 | 1.21 | 153 | 600 | (5.47) | (34.30) | | (27.09) | (98) | (1.13) | |
| 346 | 7.08 | 34.11 | 1.21 | 133 | | | | | | | | |
| 445 | 6.30 | 34.15 | 0.61 | 120 | | | | | | | | |
| 588 | 5.56 | 34.28 | 0.27 | 100 | | | | | | | | |

SIO

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **87.80** | PAOLINA-T; July 6, 1958; 0845 GCT; 32°10'N, 121°37.5'W; sounding, 2200 fm; wind, 300°, force 3; weather, overcast; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 0 | 18.24 | 33.30 | 5.30 | 398 | 0 | 18.24 | 33.30 | 5.30 | 23.93 | 398 | 0.00 |
| 10 | 18.24 | 33.31 | 5.35 | 398 | 10 | 18.24 | 33.31 | 5.35 | 23.94 | 398 | 0.04 |
| 31 | 18.08 | 33.29 | 5.53 | 396 | 20 | 18.18 | 33.30 | 5.43 | 23.94 | 397 | 0.08 |
| 46 | 16.50 | 33.46 | 5.81 | 347 | 30 | 18.09 | 33.29 | 5.52 | 23.96 | 396 | 0.12 |
| 56 | 15.79 | 33.44 | 5.73 | 333 | 50 | 16.20 | 33.45 | 5.79 | 24.54 | 341 | 0.19 |
| 67 | 15.06 | 33.42 | 5.68 | 320 | 75 | 14.41 | 33.40 | 5.57 | 24.89 | 307 | 0.27 |
| 77 | 14.34 | 33.40 | 5.54 | 306 | 100 | 12.82 | 33.43 | 4.90 | 25.23 | 275 | 0.35 |
| 97 | 13.09 | 33.42 | 5.02 | 280 | 150 | 9.58 | 33.63 | 3.60 | 25.98 | 204 | 0.47 |
| 113 | 11.80 | 33.45 | 4.56 | 254 | 200 | 8.80 | 33.88 | 2.85 | 26.30 | 174 | 0.57 |
| 128 | 11.00 | 33.46 | 4.39 | 240 | 250 | 8.20 | 34.07 | 1.83 | 26.54 | 150 | 0.65 |
| 152 | 9.53 | 33.64 | 3.55 | 202 | 300 | 7.47 | 34.15 | 1.49 | 26.73 | 133 | 0.72 |
| 181 | 8.82 | 33.79 | 2.92 | 181 | 400 | 6.67 | 34.22 | 0.86 | 26.87 | 119 | 0.85 |
| 218 | 8.73 | 33.96 | 2.17 | 166 | 500 | 6.16 | 34.29 | 0.40 | 27.00 | 107 | 0.97 |
| 270 | 7.90 | 34.11 | 1.71 | 144 | 600 | 5.51 | 34.31 | 0.33 | 27.09 | 98 | 1.08 |
| 352 | 6.98 | 34.16 | 1.19 | 128 | | | | | | | |
| 454 | 6.44 | 34.27 | 0.51 | 112 | | | | | | | |
| 600 | 5.51 | 34.31 | 0.33 | 98 | | | | | | | |
| **87.90** | PAOLINA-T; July 6, 1958; 1525 GCT; 31°49'N, 122°14.5'W; sounding, 2435 fm; wind, 290°, force 3; weather, cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 18.86 | 33.58 | 5.16 | 394 | 0 | 18.86 | 33.58 | 5.16 | 23.98 | 394 | 0.00 |
| 10 | 18.86 | 33.64 | 5.28 | 388 | 10 | 18.86 | 33.64 | 5.28 | 24.04 | 388 | 0.04 |
| 30 | 18.86 | 33.57 | 5.24 | 394 | 20 | 18.86 | 33.57 | 5.26 | 23.98 | 394 | 0.08 |
| 61 | 15.42 | 33.44 | 6.00 | 326 | 30 | 18.86 | 33.57 | 5.24 | 23.98 | 394 | 0.12 |
| 72 | 14.58 | 33.46 | 5.80 | 307 | 50 | 18.85 | 33.57 | 5.25 | 23.98 | 394 | 0.20 |
| 82 | 14.11 | 33.48 | 5.87 | 296 | 75 | 14.41 | 33.47 | 5.82 | 24.94 | 302 | 0.28 |
| 97 | 12.72 | 33.50 | 5.19 | 267 | 100 | 12.38 | 33.49 | 5.05 | 25.37 | 262 | 0.36 |
| 112 | 11.13 | 33.46 | 4.58 | 242 | 150 | 9.55 | 33.65 | 3.72 | 26.00 | 202 | 0.47 |
| 127 | 10.65 | 33.48 | 4.32 | 232 | 200 | 8.70 | 33.93 | 2.70 | 26.36 | 168 | 0.57 |
| 146 | 9.70 | 33.61 | 3.87 | 208 | 250 | 8.07 | 34.05 | 2.09 | 26.54 | 151 | 0.65 |
| 165 | 9.12 | 33.77 | 3.14 | 187 | 300 | 7.59 | 34.09 | 1.67 | 26.64 | 141 | 0.72 |
| 196 | 8.78 | 33.91 | 2.76 | 171 | 400 | 6.62 | 34.17 | 0.83 | 26.84 | 122 | 0.86 |
| 220 | 8.38 | 34.00 | 2.33 | 158 | 500 | 5.99 | 34.26 | 0.34 | 27.00 | 107 | 0.98 |
| 274 | 7.87 | 34.07 | 1.89 | 146 | 600 | 5.50 | 34.33 | 0.24 | 27.11 | 96 | 1.09 |
| 358 | 6.98 | 34.13 | 1.18 | 130 | | | | | | | |
| 468 | 6.10 | 34.24 | 0.39 | 110 | | | | | | | |
| 607 | 5.45 | 34.34 | 0.24 | 95 | | | | | | | |
| **90.28** | ORCA; July 3, 1958; 0555 GCT; 33°28.5'N, 117°47.5'W; sounding, 250 fm; wind, 290°, force 2; weather, partly cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 20.87 | 33.68 | 5.98 | 435 | 0 | 20.87 | 33.68 | 5.98 | 23.55 | 435 | 0.00 |
| 10 | 16.64 | 33.55 | 6.30 | 344 | 10 | 16.64 | 33.55 | 6.30 | 24.50 | 344 | 0.04 |
| 30 | 12.42 | 33.51 | 6.07 | 262 | 20 | 14.07 | 33.52 | 6.16 | 25.05 | 292 | 0.07 |
| 50 | 10.89 | 33.53 | 4.02 | 233 | 30 | 12.42 | 33.51 | 6.07 | 25.37 | 262 | 0.10 |
| 75 | 10.36 | 33.62 | 3.77 | 216 | 50 | 10.89 | 33.53 | 4.02 | 25.67 | 233 | 0.15 |
| 99 | 9.79 | 33.73 | 3.36 | 200 | 75 | 10.36 | 33.62 | 3.77 | 25.84 | 216 | 0.20 |
| 123 | 9.60 | 33.87 | 2.88 | 187 | 100 | 9.75 | 33.73 | 3.35 | 26.02 | 200 | 0.26 |
| 162 | 9.34 | 33.98 | 2.43 | 174 | 150 | 9.42 | 33.94 | 2.62 | 26.24 | 179 | 0.35 |
| 173p | 9.22 | 34.05 | 2.10 | 168 | 200 | 9.35 | 34.18 | 1.25 | 26.44 | 160 | 0.44 |
| 216p | 9.21 | 34.23 | 1.16 | 154 | 250 | 8.97 | 34.28 | 1.15 | 26.58 | 146 | 0.52 |
| 258p | 8.88 | 34.29 | 1.15 | 145 | | | | | | | |

ORCA; July 3, 1958; 0805 GCT; 33°24.5'N, 117°55.5'W; sounding, 340 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°. 90.30

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 0 | 20.68 | 33.66 | | 432 | 0 | 20.68 | 33.66 | | 23.58 | 432 | 0.00 |
| 10 | 20.56 | 33.68 | | 427 | 10 | 20.56 | 33.68 | | 23.63 | 427 | 0.04 |
| 30 | 12.82 | 33.53 | | 267 | 20 | 17.80 | 33.62 | | 24.28 | 365 | 0.08 |
| 40 | 11.54 | 33.71r | | | 30 | 12.82 | 33.58 | | 25.31 | 267 | 0.11 |
| 50 | 11.26 | 33.58 | | 235 | 50 | 11.26 | 33.58 | | 25.65 | 235 | 0.16 |
| 60 | 10.80 | 33.58 | | 228 | 75 | 10.28 | 33.65 | | 25.87 | 214 | 0.22 |
| 70 | 10.41 | 33.64 | | 217 | 100 | 9.83 | 33.78 | | 26.05 | 197 | 0.27 |
| 85 | 10.04 | 33.69 | | 207 | 150 | 8.98 | 33.99 | | 26.35 | 168 | 0.36 |
| 99 | 9.84 | 33.78 | | 197 | 200 | 8.48 | 34.11 | | 26.52 | 152 | 0.45 |
| 114 | 9.49 | 33.80 | | 190 | 250 | 8.45 | 34.25 | | 26.64 | 142 | 0.52 |
| 138 | 9.18 | 33.96 | | 173 | 300 | 8.30 | 34.33 | | 26.73 | 133 | 0.59 |
| 167 | 8.77 | 34.03 | | 162 | 400 | 7.30 | 34.33 | | 26.87 | 119 | 0.72 |
| 199 | 8.48 | 34.11 | | 152 | 500 | (6.30) | (34.34) | | (27.02) | (105) | (0.84) |
| 248 | 8.47 | 34.25 | | 142 | | | | | | | |
| 295 | 8.33 | 34.33 | | 133 | | | | | | | |
| 397 | 7.35 | 34.33 | | 120 | | | | | | | |
| 496 | 6.38 | 34.34 | | 106 | | | | | | | |

ORCA; July 3, 1958; 1252 GCT; 33°10.5'N, 118°23.5'W; sounding, 600 fm; wind, 270°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°. 90.37

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.58 | 33.67 | 5.98 | 404 | 0 | 19.58 | 33.67 | 5.98 | 23.88 | 404 | 0.00 |
| 10 | 19.13 | 33.60 | 5.92 | 398 | 10 | 19.13 | 33.60 | 5.92 | 23.94 | 398 | 0.04 |
| 29 | 11.32 | 33.53 | 4.17 | 240 | 20 | 13.60 | 33.55 | 4.63 | 25.17 | 281 | 0.07 |
| 39 | 10.74 | 33.60 | 3.89 | 225 | 30 | 11.29 | 33.53 | 4.16 | 25.60 | 239 | 0.10 |
| 48 | 10.36 | 33.68 | 3.56 | 212 | 50 | 10.28 | 33.68 | 3.46 | 25.90 | 211 | 0.14 |
| 58 | 10.14 | 33.71 | 3.33 | 207 | 75 | 9.93 | 33.82 | 3.25 | 26.07 | 195 | 0.20 |
| 67 | 10.00 | 33.78 | 3.34 | 200 | 100 | 9.60 | 33.89 | 2.90 | 26.17 | 186 | 0.24 |
| 82 | 9.82 | 33.86 | 3.02 | 191 | 150 | 9.40 | 34.21 | 1.70 | 26.46 | 158 | 0.33 |
| 96 | 9.62 | 33.88 | 3.01 | 186 | 200 | 8.62 | 34.22 | 1.42 | 26.59 | 146 | 0.41 |
| 109 | 9.58 | 33.96 | 2.52 | 180 | 250 | 8.08 | 34.24 | 1.25 | 26.69 | 136 | 0.48 |
| 133 | 9.46 | 34.10 | 2.17 | 168 | 300 | 7.86 | 34.31 | 0.90 | 26.78 | 127 | 0.55 |
| 161 | 9.28 | 34.28 | 1.46 | 151 | 400 | 6.70 | 34.33 | 0.51 | 26.95 | 111 | 0.67 |
| 194 | 8.69 | 34.22 | 1.44 | 147 | 500 | 6.12 | 34.35 | 0.38 | 27.05 | 102 | 0.78 |
| 241 | 8.16 | 34.23 | 1.29 | 138 | | | | | | | |
| 318 | 7.74 | 34.33 | 0.76 | 125 | | | | | | | |
| 411 | 6.60 | 34.33 | 0.49 | 110 | | | | | | | |
| 538 | 5.96 | 34.36 | 0.33 | 99 | | | | | | | |

ORCA; July 3, 1958; 2107 GCT; 32°55.5'N, 118°56.5'W; sounding, 950 fm; wind, 270°, force 4; weather, cloudy; sea, moderate; wire angle, 05°. 90.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.64 | 33.60 | 4.79 | 363 | 0 | 17.64 | 33.60 | 4.79 | 24.30 | 363 | 0.00 |
| 10 | 17.46 | 33.55 | 5.42 | 362 | 10 | 17.46 | 33.55 | 5.42 | 24.31 | 362 | 0.04 |
| 30 | 10.56 | 33.68 | 3.54 | 216 | 20 | 11.80 | 33.66 | 3.84 | 25.61 | 239 | 0.07 |
| 39 | 10.02 | 33.75 | 3.20 | 203 | 30 | 10.56 | 33.68 | 3.54 | 25.85 | 216 | 0.09 |
| 49 | 9.66 | 33.82 | 3.06 | 192 | 50 | 9.63 | 33.82 | 3.03 | 26.11 | 191 | 0.13 |
| 59 | 9.44 | 33.84 | 2.79 | 186 | 75 | 9.22 | 33.91 | 2.42 | 26.26 | 177 | 0.18 |
| 68 | 9.30 | 33.89 | 2.48 | 180 | 100 | 9.01 | 33.99 | 2.09 | 26.32 | 169 | 0.22 |
| 83 | 9.16 | 33.93 | 2.37 | 175 | 150 | 8.64 | 34.15 | 1.46 | 26.54 | 151 | 0.30 |
| 97 | 9.02 | 33.98 | 2.10 | 170 | 200 | 8.21 | 34.23 | 1.12 | 26.66 | 139 | 0.37 |
| 113 | 8.88 | 34.06 | 1.76 | 162 | 250 | 7.65 | 34.29 | 0.92 | 26.78 | 127 | 0.44 |
| 135 | 8.74 | 34.10 | 1.70 | 156 | 300 | 7.24 | 34.29 | 0.73 | 26.84 | 122 | 0.50 |
| 164 | 8.55 | 34.21 | 1.27 | 145 | 400 | 6.63 | 34.32 | 0.45 | 26.96 | 111 | 0.62 |
| 196 | 8.23 | 34.23 | 1.57u | 140 | 500 | 6.00 | 34.36 | 0.29 | 27.07 | 100 | 0.73 |
| 244 | 7.78 | 34.29 | 0.95 | 128 | | | | | | | |
| 322 | 7.10 | 34.29 | 0.67 | 120 | | | | | | | |
| 419 | 6.52 | 34.33 | 0.40 | 108 | | | | | | | |
| 548 | 5.70 | 34.38 | 0.24 | 95 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **90.50** | ORCA; July 4, 1958; 0035 GCT; 32°44.5'N, 119°15'W; sounding, 58 fm; wind, 290°, force 4; weather, cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 16.52 | 33.64 | | 334 | 0 | 16.52 | 33.64 | | 24.61 | 334 | 0.00 |
| 11 | 16.53 | 33.62 | | 336 | 10 | 16.53 | 33.62 | | 24.59 | 336 | 0.03 |
| 31 | 13.22 | 33.63 | | 267 | 20 | 16.25 | 33.62 | | 24.65 | 330 | 0.07 |
| 50 | 10.80 | 33.57 | | 228 | 30 | 13.85 | 33.63 | | 25.18 | 279 | 0.10 |
| 75 | 9.58 | 33.74 | | 196 | 50 | 10.80 | 33.57 | | 25.72 | 228 | 0.15 |
| | | | | | 75 | 9.58 | 33.74 | | 26.06 | 196 | 0.20 |
| **90.55** | ORCA; July 4, 1958; 0405, 0445 GCT; 32°34'N, 119°36.5'W; sounding, 600 fm; wind, 300°, force 4; weather, overcast; sea, rough; wire angle, 25°, 28°. | | | | | | | | | | |
| 0 | 14.87 | 33.64 | 6.30 | 300 | 0 | 14.87 | 33.64 | 6.30 | 24.97 | 300 | 0.00 |
| 9 | 14.90 | 33.59 | 6.33 | 304 | 10 | 14.89 | 33.59 | 6.32 | 24.93 | 304 | 0.03 |
| 27 | 14.54 | 33.61 | 5.87 | 294 | 20 | 14.70 | 33.60 | 6.07 | 24.98 | 299 | 0.06 |
| 41 | 12.89 | - | 5.36 | | 30 | 14.44 | 33.61 | 5.83 | 25.04 | 293 | 0.09 |
| 50 | 11.58 | 33.49 | 4.68 | 248 | 50 | 11.58 | 33.49 | 4.68 | 25.52 | 248 | 0.14 |
| 59 | 11.03 | 33.50 | 4.43 | 238 | 75 | 10.02 | 33.52 | 4.23 | 25.81 | 219 | 0.20 |
| 68 | 10.64 | 33.51 | 4.25 | 230 | 100 | 9.17 | 33.92 | 3.45 | 26.11 | 191 | 0.26 |
| 86 | 9.62 | 33.54 | 4.22 | 212 | 150 | 8.59 | 34.16 | 2.43 | 26.55 | 150 | 0.34 |
| | | | | | 200 | 8.39 | 34.20 | 1.75 | 26.60 | 144 | 0.42 |
| 93 | 9.22 | 33.69 | 3.70 | 194 | 250 | 8.00 | 34.20 | 1.50 | 26.67 | 138 | 0.49 |
| 108 | 9.05 | 33.78 | 3.15 | 185 | 300 | 7.32 | 34.20 | 1.31 | 26.76 | 129 | 0.56 |
| 126 | 8.83 | 33.91 | 2.80 | 172 | 400 | 6.58 | 34.26 | 0.60 | 26.92 | 115 | 0.68 |
| 152 | 8.58 | 34.16 | 2.42 | 150 | 500 | 6.00 | 34.32 | 0.26 | 27.04 | 103 | 0.80 |
| 184 | 8.41 | - | 2.03 | | | | | | | | |
| 230 | 8.24 | 34.20 | 1.53 | 144 | | | | | | | |
| 301 | 7.32 | 34.20 | 1.31 | 129 | | | | | | | |
| 391 | 6.61 | 34.43r | 0.63 | | | | | | | | |
| 523 | 5.91 | 34.34 | 0.21 | | | | | | | | |
| **90.60** | ORCA; July 4, 1958; 0840 GCT; 32°22.5'N, 119°57.5'W; sounding, 485 fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 24°. | | | | | | | | | | |
| 0 | 15.0 | 33.45 | 6.23 | 316 | 0 | 15.0 | 33.45 | 6.23 | 24.80 | 316 | 0.00 |
| 9 | 15.0 | 33.44 | 6.31 | 317 | 10 | 15.0 | 33.44 | 6.31 | 24.79 | 317 | 0.03 |
| 27 | 14.72 | 33.51 | 6.28 | 306 | 20 | 15.0 | 33.44 | 6.31 | 24.79 | 317 | 0.06 |
| 41 | 14.59 | 33.47 | 5.74 | 306 | 30 | 14.67 | 33.50 | 6.20 | 24.90 | 306 | 0.09 |
| 50 | 14.44 | 33.47 | 5.95 | 303 | 50 | 14.44 | 33.47 | 5.95 | 24.94 | 303 | 0.16 |
| 59 | 14.15 | 33.46 | 5.96 | 298 | 75 | 13.13 | 33.46 | 5.49 | 25.20 | 278 | 0.23 |
| 68 | 14.24 | 33.55 | 5.84 | 293 | 100 | 10.45 | 33.54 | 4.27 | 25.76 | 225 | 0.29 |
| 84 | 11.13 | 33.32 | 4.90 | 252 | 150 | 8.74 | 34.00 | 2.71 | 26.40 | 164 | 0.39 |
| 96 | 10.68 | 33.50 | 4.33 | 232 | 200 | 8.40 | 34.09 | 1.94 | 26.52 | 152 | 0.47 |
| 110 | 9.70 | 33.63 | 3.63 | 206 | 250 | 7.92 | 34.16 | 1.40 | 26.65 | 140 | 0.54 |
| 130 | 9.10 | 33.93 | 3.02 | 175 | 300 | 7.40 | 34.20 | 1.16 | 26.75 | 130 | 0.61 |
| 155 | 8.65 | 34.01 | 2.61 | 162 | 400 | 6.52 | 34.24 | 0.92 | 26.90 | 116 | 0.74 |
| 188 | 8.46 | 34.07 | 2.06 | 155 | 500 | 6.14 | 34.33 | 0.38 | 27.03 | 104 | 0.85 |
| 235 | 8.05 | 34.15 | 1.53 | 143 | | | | | | | |
| 305 | 7.36 | 34.20 | 1.12 | 129 | | | | | | | |
| 396 | 6.59 | 34.24 | 0.96 | 117 | | | | | | | |
| 529 | 6.03 | 34.36 | 0.24 | 101 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T_3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T_3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

ORCA; July 4, 1958; 1546 GCT; 31°57'N, 120°34'W; sounding, 2000+ fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 17°. 90.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.74 | 33.19 | 5.75 | 350 | 0 | 15.74 | 33.19 | 5.75 | 24.44 | 350 | 0.00 |
| 10 | 15.74 | - | 5.84 | | 10 | 15.74 | 33.19 | 5.84 | 24.44 | 350 | 0.04 |
| 28 | 15.60 | 33.19 | 5.82 | 347 | 20 | 15.67 | 33.19 | 5.83 | 24.45 | 349 | 0.07 |
| 42 | 15.46 | 33.19 | 5.86 | 345 | 30 | 15.57 | 33.19 | 5.83 | 24.47 | 347 | 0.10 |
| 52 | 14.99 | 33.33 | 5.88 | 324 | 50 | 15.08 | 33.30 | 5.88 | 24.66 | 329 | 0.17 |
| 61 | 14.24 | 33.27 | 5.76 | 314 | 75 | 12.69 | 33.18 | 5.70 | 25.07 | 290 | 0.25 |
| 70 | 12.86 | 33.15 | 5.85 | 296 | 100 | 11.18 | 33.48 | 4.65 | 25.58 | 242 | 0.32 |
| 88 | 12.21 | 33.30 | 5.26 | 273 | 150 | 9.48 | 33.72 | 3.21 | 26.06 | 196 | 0.43 |
| 101 | 11.12 | 33.49 | 4.60 | 240 | 200 | 8.74 | 33.95 | 2.29 | 26.36 | 167 | 0.52 |
| 115 | 10.46 | 33.57 | 4.23 | 223 | 250 | 8.15 | 34.10 | 1.97 | 26.57 | 148 | 0.60 |
| 137 | 9.72 | 33.65 | 3.43 | 205 | 300 | 7.68 | 34.14 | 1.58 | 26.67 | 138 | 0.68 |
| 163 | 9.26 | 33.80 | 3.00 | 187 | 400 | 6.75 | 34.20 | 0.86 | 26.85 | 121 | 0.81 |
| 200 | 8.74 | 33.95 | 2.29 | 167 | 500 | 6.00 | 34.28 | 0.40 | 27.00 | 106 | 0.93 |
| 249 | 8.17 | 34.10 | 1.99 | 148 | | | | | | | |
| 326 | 7.45 | 34.16 | 1.41 | 134 | | | | | | | |
| 424 | 6.50 | 34.22 | 0.70 | 116 | | | | | | | |
| 563 | 5.65 | 34.32 | 0.22 | 99 | | | | | | | |

ORCA; July 4, 1958; 2331 GCT; 31°38.5'N, 121°20'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 14°. 90.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.10 | 33.31 | 5.76 | 394 | 0 | 18.10 | 33.31 | 5.76 | 23.98 | 394 | 0.00 |
| 9 | 17.96 | 33.26 | 5.34 | 394 | 10 | 17.95 | 33.26 | 5.34 | 23.98 | 394 | 0.04 |
| 28 | 17.78 | 33.25 | 5.35 | 391 | 20 | 17.83 | 33.25 | 5.33 | 24.00 | 392 | 0.08 |
| 44 | 17.64 | 33.30 | 5.52 | 385 | 30 | 17.76 | 33.25 | 5.37 | 24.01 | 391 | 0.12 |
| 53 | 16.58 | 33.51 | 5.90 | 345 | 50 | 17.56 | 33.44 | 5.57 | 24.44 | 350 | 0.19 |
| 62 | 15.58 | 33.37 | 5.94 | 334 | 75 | 15.25 | 33.46 | 6.05 | 24.75 | 321 | 0.28 |
| 72 | 15.45 | 33.45 | 6.06 | 325 | 100 | 12.57 | 33.44 | 5.09 | 25.29 | 269 | 0.35 |
| 91 | 13.89 | 33.47 | 5.90 | 292 | 150 | 9.58 | 33.60 | 3.92 | 25.94 | 207 | 0.47 |
| 104 | 11.96 | 33.42 | 5.13 | 260 | 200 | 8.63 | 33.85 | 3.03 | 26.30 | 173 | 0.57 |
| 119 | 10.68 | 33.46 | 4.73 | 234 | 250 | 7.86 | 34.02 | 2.48 | 26.55 | 150 | 0.65 |
| 142 | 9.80 | 33.56 | 4.11 | 213 | 300 | 7.28 | 34.09 | 1.80 | 26.68 | 137 | 0.72 |
| 171 | 9.05 | 33.71 | 3.47 | 190 | 400 | 6.50 | 34.25 | 1.06 | 26.92 | 114 | 0.85 |
| 207 | 8.54 | 33.89 | 2.93 | 169 | 500 | 5.87 | 34.33 | 0.70 | 27.06 | 101 | 0.97 |
| 258 | 7.75 | 34.04 | 2.37 | 147 | | | | | | | |
| 338 | 6.99 | 34.12 | 1.38 | 130 | | | | | | | |
| 438 | 6.20 | 34.32 | 0.89 | 106 | | | | | | | |
| 578 | 5.40 | 34.33 | 0.39 | | | | | | | | |

ORCA; July 5, 1958; 0725 GCT; 31°25'N, 122°00'W; sounding, 2200 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 15°. 90.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.56 | 33.51 | 5.49 | 390 | 0 | 18.56 | 33.51 | 5.49 | 24.02 | 390 | 0.00 |
| 10 | 18.56 | 33.54 | 5.54 | 388 | 10 | 18.56 | 33.54 | 5.54 | 24.04 | 388 | 0.04 |
| 29 | 18.40 | 33.51 | 5.60 | 386 | 20 | 18.48 | 33.52 | 5.58 | 24.03 | 389 | 0.08 |
| 43 | 16.05 | 33.42 | 6.14 | 340 | 30 | 18.38 | 33.51 | 5.61 | 24.06 | 386 | 0.12 |
| 53 | 15.81 | 33.46 | 6.19 | 332 | 50 | 15.92 | 33.44 | 6.17 | 24.59 | 336 | 0.19 |
| 62 | 15.70 | 33.47 | 6.28 | 329 | 75 | 15.52 | 33.54 | 6.29 | 24.76 | 320 | 0.27 |
| 71 | 15.58 | 33.53 | 6.29 | 322 | 100 | 12.95 | 33.44 | 5.60 | 25.21 | 277 | 0.35 |
| 89 | 14.44 | 33.45 | 6.03 | 304 | 150 | 9.66 | 33.62 | 4.18 | 25.95 | 206 | 0.47 |
| 104 | 12.42 | 33.43 | 5.47 | 268 | 200 | 8.78 | 33.91 | 2.80 | 26.32 | 171 | 0.56 |
| 117 | 11.04 | 33.44 | 5.04 | 242 | 250 | 7.95 | 34.06 | 2.17 | 26.57 | 147 | 0.64 |
| 140 | 9.97 | 33.56 | 4.46 | 215 | 300 | 7.35 | 34.12 | 1.70 | 26.70 | 135 | 0.72 |
| 167 | 9.28 | 33.73 | 3.68 | 192 | 400 | 6.48 | 34.24 | 0.95 | 26.91 | 116 | 0.85 |
| 204 | 8.68 | 33.93 | 2.71 | 168 | 500 | 5.80 | 34.32 | 0.57 | 27.06 | 101 | 0.96 |
| 255 | 7.89 | 34.07 | 2.15 | 146 | | | | | | | |
| 332 | 7.06 | 34.15 | 1.47 | 130 | | | | | | | |
| 432 | 6.20 | 34.27 | 0.73 | 109 | | | | | | | |
| 572 | 5.51 | 34.34 | 0.48 | 96 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

93.27 ORCA; July 7, 1958; 0845 GCT; 32°56.5'N, 117°20'W; sounding, 100 fm; wind, direction missing, force 1; weather, overcast; sea, smooth; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.05 | 33.70 | 6.35 | 439 | 0 | 21.05 | 33.70 | 6.35 | 23.50 | 439 | 0.00 |
| 10 | 15.45 | 33.58 | 7.01 | 316 | 10 | 15.45 | 33.58 | 7.01 | 24.80 | 316 | 0.04 |
| 30 | 10.72 | 33.62 | 3.66 | 223 | 20 | 12.00 | 33.61 | 4.50 | 25.53 | 246 | 0.07 |
| 50 | 10.34 | 33.67 | 3.42 | 213 | 30 | 10.72 | 33.62 | 3.66 | 25.78 | 223 | 0.09 |
| 75 | 10.04 | 33.77 | 2.96 | 202 | 50 | 10.34 | 33.67 | 3.42 | 25.88 | 213 | 0.13 |
| 100 | 9.90 | 33.87 | 2.78 | 191 | 75 | 10.04 | 33.77 | 2.96 | 26.00 | 202 | 0.18 |
| | | | | | 100 | 9.90 | 33.87 | 2.78 | 26.11 | 191 | 0.24 |

93.30 ORCA; July 2, 1958; 2329 GCT;[a] 32°47.5'N, 117°30.5'W; sounding, 500 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 08°.

| | | | | |
|---|---|---|---|---|
| 415 | 7.61 | 34.33 | 0.56 | 124 |
| 424 | 7.42 | 34.33 | 0.39 | 121 |
| 434 | 7.28 | 34.33 | 0.43 | 119 |
| 444 | 7.24 | 34.34 | 0.41 | 117 |
| 454 | 7.12 | 34.34 | 0.44 | 116 |
| 464 | 7.04 | 34.34 | 0.45 | 115 |
| 474 | 7.00 | 34.34 | 0.39 | 114 |
| 483 | 6.86 | 34.36u | 0.35 | |
| 493 | 6.79 | 34.33 | 0.37 | 112 |
| 503 | 6.61 | 34.34 | 0.31 | 109 |
| 513 | 6.60 | 34.34 | 0.41 | 109 |
| 523 | 6.47 | 34.33 | 0.40 | 108 |
| 533 | 6.39 | 34.34 | 0.32 | 106 |
| 543 | 6.29 | 34.34 | 0.28 | 104 |
| 553 | 6.19 | 34.33 | 0.28 | 104 |
| 563 | 6.11 | 34.34 | 0.33 | 103 |
| 573 | 6.04 | 34.34 | 0.29 | 102 |

93.30 ORCA; July 7, 1958; 0559 GCT; 32°50'N, 117°32.5'W; sounding, 400 fm; wind, 280°, force 1; weather, overcast; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.78 | 33.69 | 5.83 | 432 | 0 | 20.78 | 33.69 | 5.83 | 23.58 | 432 | 0.00 |
| 10 | 17.68 | 33.58 | 6.49 | 365 | 10 | 17.68 | 33.58 | 6.49 | 24.28 | 365 | 0.04 |
| 30 | 11.28 | 33.53 | 4.41 | 240 | 20 | 13.20 | 33.54 | 4.97 | 25.25 | 273 | 0.07 |
| 45 | 10.56 | 33.63 | 3.88 | 220 | 30 | 11.28 | 33.53 | 4.41 | 25.60 | 240 | 0.10 |
| 55 | 10.20 | 33.64 | 3.78 | 233 | 50 | 10.35 | 33.63 | 3.84 | 25.85 | 216 | 0.14 |
| 65 | 10.10 | 33.69 | 3.65 | 208 | 75 | 9.99 | 33.79 | 3.26 | 26.04 | 198 | 0.20 |
| 75 | 9.99 | 33.79 | 3.26 | 198 | 100 | 9.82 | 33.87 | 2.95 | 26.12 | 190 | 0.24 |
| 95 | 9.86 | 33.86 | 3.02 | 191 | 150 | 9.67 | 34.03 | 2.26 | 26.27 | 176 | 0.34 |
| 109 | 9.78 | 33.90 | 2.82 | 187 | 200 | 9.48 | 34.13 | 2.00 | 26.38 | 166 | 0.42 |
| 123 | 9.78 | 33.96 | 2.55 | 183 | 250 | 9.20 | 34.24 | 1.50 | 26.51 | 153 | 0.50 |
| 147 | 9.71 | 34.00 | 2.31 | 179 | 300 | 8.52 | 34.28 | 1.09 | 26.66 | 139 | 0.58 |
| 175 | 9.56 | 34.09 | 2.09 | 170 | 400 | 7.56 | 34.34 | 0.67 | 26.84 | 122 | 0.72 |
| 213 | 9.42 | 34.16 | 1.85 | 162 | 500 | 6.82 | 34.35 | 0.46 | 26.95 | 111 | 0.84 |
| 265 | 9.03 | 34.26 | 1.29 | 149 | 600 | (5.80) | (34.33) | | (27.07) | (100) | (0.95) |
| 346 | 7.86 | 34.31 | 0.90 | 128 | | | | | | | |
| 447 | 7.30 | 34.35 | 0.50 | 118 | | | | | | | |
| 589 | 5.92 | 34.33 | 0.45 | 101 | | | | | | | |

a) Test cast.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_{T_3}^{-5}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_{T_3}^{-5}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

PAOLINA-T; July 4, 1958; 0722, 0809 GCT;[a] 32°37.5'N, 117°34'W; sounding, 650 fm; wind, 240°, force 1; weather, cloudy; sea, slight; wire angle, 00°, 05°. 93.31

| | | | | |
|---|---|---|---|---|
| 436 | 7.06 | 34.39 | 0.30 | 111 |
| 446 | 6.85 | 34.39 | 0.28 | 108 |
| 455 | 6.76 | 34.36 | 0.27 | 109 |
| 466 | 6.70 | 34.37 | 0.25 | 108 |
| 476 | 6.61 | 34.35 | 0.22 | 109 |
| 486 | 6.51 | 34.61r | 0.22 | |
| 496 | 6.54 | 34.38 | 0.17 | 105 |
| 506 | 6.50 | 34.41 | 0.20 | 103 |
| 515 | 6.43 | 34.39 | 0.15 | 103 |
| 526 | 6.34 | 34.40 | 0.22 | 101 |
| 536 | 6.18 | 34.40 | 0.16 | 99 |
| 548 | 6.12 | 34.38 | 0.16 | 100 |
| 558 | 6.05 | 34.34 | 0.14 | 102 |
| 568 | 5.98 | 34.36 | 0.16 | 100 |
| 578 | 5.90 | 34.38 | 0.13 | 98 |
| 588 | 5.86 | 34.38 | 0.16 | 97 |
| 597 | 5.77 | 34.38 | 0.15 | 96 |

ORCA; July 6, 1958; 2326, 2343 GCT; 32°29.5'N, 118°10.5'W; sounding, 930 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°, 16°. 93.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.88 | 33.64 | 5.53 | 365 | 0 | 17.88 | 33.64 | 5.53 | 24.28 | 365 | 0.00 |
| 10 | 17.14 | 33.56 | 5.63 | 354 | 10 | 17.14 | 33.56 | 5.63 | 24.40 | 354 | 0.04 |
| | | | | | 20 | 14.77 | 33.51 | 5.03 | 24.89 | 307 | 0.07 |
| 28 | 12.40 | 33.47 | 4.67 | 264 | 30 | 12.30 | 33.48 | 4.64 | 25.37 | 261 | 0.10 |
| 42 | 10.76 | 33.57 | 3.94 | 228 | 50 | 10.30 | 33.60 | 3.75 | 25.83 | 218 | 0.15 |
| 52 | 10.20 | 33.61 | 3.71 | 215 | 75 | 9.84 | 33.75 | 3.39 | 26.03 | 199 | 0.20 |
| 63 | 10.02 | 33.66 | 3.61 | 209 | 100 | 9.19 | 33.88 | 2.85 | 26.23 | 180 | 0.25 |
| 71 | 9.94 | 33.73 | 3.44 | 202 | 150 | 8.62 | 34.03 | 2.36 | 26.45 | 159 | 0.33 |
| 91 | 9.36 | 33.81 | 3.20 | 187 | 200 | 8.12 | 34.16 | 1.95 | 26.62 | 143 | 0.41 |
| 104 | 9.17 | 33.89 | 2.74 | 178 | 250 | 8.05 | 34.29 | 1.26 | 26.72 | 133 | 0.48 |
| 118 | 9.12 | 33.96 | 2.50 | 173 | 300 | 7.39 | 34.32 | 0.89 | 26.85 | 121 | 0.54 |
| 141 | 8.70 | 34.01 | 2.46 | 162 | 400 | 6.61 | 34.35 | 0.54 | 26.98 | 108 | 0.66 |
| 168 | 8.40 | 34.09 | 2.06 | 152 | | | | | | | |
| 205 | 8.08 | 34.16 | 1.93 | 143 | | | | | | | |
| 221p | 7.96 | 34.19 | 1.66 | 138 | | | | | | | |
| 254 | 8.06 | 34.29 | 1.11 | 133 | | | | | | | |
| 309p | 7.28 | 34.32 | 0.86 | 120 | | | | | | | |
| 429p | 6.40 | 34.36 | 0.44 | 105 | | | | | | | |

ORCA; July 6, 1958; 1630 GCT; 32°01.5'N, 118°44'W; sounding, 700 fm; wind, 300°, force 2; weather, cloudy; sea, moderate; wire angle, 07°. 93.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.30 | 33.60 | - | 333 | 0 | 16.30 | 33.60 | | 24.62 | 333 | 0.00 |
| 10 | 16.30 | 33.55 | 6.17 | 336 | 10 | 16.30 | 33.55 | 6.17 | 24.59 | 336 | 0.03 |
| 30 | 15.32 | 33.53 | 5.99 | 316 | 20 | 16.18 | 33.54 | 6.15 | 24.61 | 334 | 0.07 |
| 44 | 13.34 | 33.42 | 5.64 | 285 | 30 | 15.32 | 33.53 | 5.99 | 24.80 | 316 | 0.10 |
| 54 | 12.46 | 33.41 | 5.39 | 269 | 50 | 12.79 | 33.41 | 5.48 | 25.23 | 275 | 0.16 |
| 64 | 11.94 | 33.46 | 5.22 | 256 | 75 | 10.37 | 33.49 | 4.28 | 25.74 | 226 | 0.22 |
| 74 | 10.40 | 33.49 | 4.70 | 227 | 100 | 9.38 | 33.63 | 4.21 | 26.02 | 200 | 0.28 |
| 85p | 9.84 | 33.58 | 4.38 | 212 | 150 | 8.74 | 34.02 | 2.33 | 26.42 | 162 | 0.37 |
| 97p | 9.44 | 33.60 | 4.30 | 204 | 200 | 8.20 | 34.16 | 1.99 | 26.61 | 144 | 0.44 |
| 116p | 9.10 | 33.80 | 3.45 | 184 | 250 | 7.66 | 34.19 | 2.00 | 26.71 | 134 | 0.52 |
| 140p | 8.84 | 33.94 | 2.70 | 170 | 300 | 7.41 | 34.26 | 1.07 | 26.81 | 125 | 0.58 |
| 172p | 8.48 | 34.13 | 1.92 | 150 | 400 | 6.71 | 34.32 | 0.64 | 26.94 | 112 | 0.70 |
| 216p | 7.76 | 34.16 | 2.15 | 138 | 500 | 6.05 | 34.33 | 0.41 | 27.04 | 103 | 0.82 |
| 286p | 7.52 | 34.25 | 1.20 | 128 | | | | | | | |
| 375p | 6.83 | 34.31 | 0.69 | 114 | | | | | | | |
| 501p | 6.04 | 34.33 | 0.40 | 103 | | | | | | | |

a) Test cast.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **93.60** | ORCA; July 6, 1958; 0944, 1007 GCT; 31°43.5'N, 119°32'W; sounding, 1220 fm; wind, 290°, force 2; weather, cloudy; sea, moderate; wire angle, 23°, 23°. | | | | | | | | | | |
| 0 | 15.82 | 33.40 | 6.30 | 337 | 0 | 15.82 | 33.40 | 6.30 | 24.58 | 337 | 0.00 |
| 9 | 15.74 | 33.39 | 6.27 | 335 | 10 | 15.73 | 33.39 | 6.27 | 24.60 | 335 | 0.03 |
| | | | | | 20 | 15.44 | 33.45 | 6.27 | 24.70 | 325 | 0.07 |
| 27 | 15.41 | 33.46 | 6.27 | 324 | 30 | 15.39 | 33.46 | 6.26 | 24.72 | 323 | 0.10 |
| 41 | 15.25 | 33.55 | 6.15 | 314 | 50 | 14.04 | 33.39 | 6.06 | 24.96 | 301 | 0.16 |
| 50 | 14.04 | 33.39 | 6.06 | 301 | 75 | 11.52 | 33.45 | 5.14 | 25.49 | 250 | 0.23 |
| 58 | 13.51 | 33.46 | 5.88 | 285 | 100 | 9.90 | 33.62 | 4.12 | 25.92 | 210 | 0.29 |
| 68 | 12.64 | 33.39 | 5.64 | 274 | 150 | 8.84 | 33.94 | 2.85 | 26.34 | 170 | 0.38 |
| 86 | 10.60 | 33.49 | 4.77 | 231 | 200 | 8.42 | 34.07 | 2.30 | 26.50 | 154 | 0.47 |
| 99 | 9.97 | 33.60 | 4.20 | 212 | 250 | 7.88 | 34.16 | 1.77 | 26.66 | 140 | 0.54 |
| 111 | 9.58 | 33.84 | 3.49 | 189 | 300 | 7.28 | 34.20 | 1.34 | 26.77 | 129 | 0.61 |
| 130 | 9.15 | 33.89 | 3.13 | 178 | 400 | 6.62 | 34.25 | 0.86 | 26.90 | 116 | 0.74 |
| 158 | 8.78 | 33.96 | 2.76 | 167 | 500 | 5.92 | 34.32 | 0.37 | 27.05 | 102 | 0.85 |
| 188 | 8.54 | 34.05 | 2.43 | 157 | | | | | | | |
| 233 | 8.12 | 34.14 | 1.92 | 144 | | | | | | | |
| 305 | 7.24 | 34.20 | 1.30 | 128 | | | | | | | |
| 396 | 6.66 | 34.25 | 0.90 | 117 | | | | | | | |
| 528 | 5.69 | 34.34 | 0.22 | 98 | | | | | | | |
| **93.70** | ORCA; July 6, 1958; 0243, 0302 GCT; 31°27.5'N, 120°14.5'W; sounding, 2000+ fm; wind, 330°, force 4; weather, cloudy; sea, moderate; wire angle, 23°, 23°. | | | | | | | | | | |
| 0 | 17.76 | 33.20 | 5.88 | 394 | 0 | 17.76 | 33.20 | 5.88 | 23.98 | 394 | 0.00 |
| 9 | 17.74 | 33.22 | 5.94 | 392 | 10 | 17.73 | 33.22 | 5.94 | 24.00 | 392 | 0.04 |
| | | | | | 20 | 17.38 | 33.20 | 5.95 | 24.06 | 386 | 0.08 |
| 18 | 17.42 | 33.20 | 5.94 | 387 | 30 | 17.12 | 33.22 | 5.98 | 24.13 | 379 | 0.12 |
| 32 | 17.08 | 33.22 | 5.99 | 378 | 50 | 16.40 | 33.56 | 6.26 | 24.34 | 360 | 0.19 |
| 40 | 16.86 | 33.22 | 6.11 | 372 | 75 | 14.70 | 33.39 | 6.33 | 24.82 | 314 | 0.27 |
| 49 | 16.46 | 33.25 | 6.23 | 362 | 100 | 12.35 | 33.46 | 5.44 | 25.35 | 264 | 0.35 |
| 57 | 15.86 | 33.30 | 6.34 | 345 | 150 | 9.50 | 33.64 | 4.10 | 26.00 | 202 | 0.46 |
| 74 | 14.71 | 33.39 | 6.33 | 314 | 200 | 8.48 | 33.88 | 3.14 | 26.35 | 168 | 0.56 |
| 86 | 14.00 | 33.35 | 6.28 | 303 | 250 | 7.79 | 34.02 | 2.32 | 26.56 | 148 | 0.64 |
| 98 | 12.60 | 33.46 | 5.54 | 268 | 300 | 7.10 | 34.10 | 1.73 | 26.70 | 135 | 0.71 |
| 116 | 10.92 | 33.50 | 4.73 | 235 | 400 | 6.58 | 34.19 | 1.27 | 26.86 | 120 | 0.85 |
| 139 | 9.87 | 33.57a) | 4.31 | 214 | 500 | 5.96 | 34.28 | 0.60 | 27.01 | 106 | 0.96 |
| 170 | 8.94 | 33.75 | 3.65 | 185 | | | | | | | |
| 215 | 8.21 | 33.96 | 2.75 | 159 | | | | | | | |
| 284 | 7.38 | 34.07 | 1.90 | 139 | | | | | | | |
| 375 | 6.72 | 34.17 | 1.42 | 123 | | | | | | | |
| 507 | 5.88 | 34.28 | 0.54 | 105 | | | | | | | |
| **93.80** | ORCA; July 5, 1958; 2007 GCT; 31°14'N, 120°56'W; sounding, 2000+ fm; wind, 330°, force 2; weather, cloudy; sea, moderate; wire angle, 11°. | | | | | | | | | | |
| 0 | 18.34 | 33.44 | 5.49 | 390 | 0 | 18.34 | 33.44 | 5.49 | 24.02 | 390 | 0.00 |
| 10 | 18.32 | 33.39 | 5.32 | 393 | 10 | 18.32 | 33.39 | 5.32 | 23.99 | 393 | 0.04 |
| 29 | 18.26 | 33.40 | 5.32 | 391 | 20 | 18.30 | 33.39 | 5.32 | 23.99 | 393 | 0.08 |
| 44 | 17.05 | 33.39 | 5.70 | 364 | 30 | 18.25 | 33.40 | 5.32 | 24.01 | 391 | 0.12 |
| 53 | 16.04 | 33.42 | 5.79 | 340 | 50 | 16.37 | 33.41 | 5.77 | 24.46 | 348 | 0.19 |
| 64 | 15.40 | 33.33 | 5.83 | 333 | 75 | 15.28 | 33.38 | 5.71 | 24.68 | 327 | 0.28 |
| 72 | 15.28 | 33.37 | 5.72 | 328 | 100 | 14.80 | 33.50 | 5.67 | 24.88 | 308 | 0.36 |
| 91 | 15.30 | 33.51 | 5.69 | 318 | 150 | 9.95 | 33.50 | 4.63 | 25.81 | 219 | 0.49 |
| 105 | 13.56 | 33.46 | 5.66 | 286 | 200 | 8.64 | 33.88 | 3.02 | 26.34 | 169 | 0.59 |
| 120 | 12.54 | 33.52 | 5.50 | 262 | 250 | 7.88 | 34.02 | 2.36 | 26.55 | 150 | 0.67 |
| 143 | 10.20 | 33.49 | 4.87 | 224 | 300 | 7.26 | 34.08 | 1.80 | 26.68 | 137 | 0.74 |
| 171 | 9.27 | 33.62 | 3.72 | 200 | 400 | 6.45 | 34.17 | 1.20 | 26.86 | 120 | 0.88 |
| 208 | 8.44 | 33.88 | 2.82 | 169 | 500 | 5.90 | 34.26 | 0.44 | 27.01 | 106 | 1.00 |
| 261 | 7.73 | 34.05 | 2.22 | 146 | 600 | (5.28) | (34.34) | | (27.14) | (93) | (1.10) |
| 340 | 6.83 | 34.11 | 1.42 | 129 | | | | | | | |
| 441 | 6.22 | 34.21 | 0.60 | 114 | | | | | | | |
| 584 | 5.40 | 34.33 | 0.29 | 95 | | | | | | | |

a) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

ORCA; July 5, 1958; 0507 GCT; 30°51.5'N, 121°38'W; sounding, 2000+ fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 06°. 93.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.72 | 33.46 | 5.59 | 398 | 0 | 18.72 | 33.46 | 5.59 | 23.94 | 398 | 0.00 |
| 10 | 18.76 | 33.42 | 5.47 | 402 | 10 | 18.76 | 33.42 | 5.47 | 23.90 | 402 | 0.04 |
| 30 | 18.70 | 33.45 | 5.46 | 398 | 20 | 18.74 | 33.43 | 5.46 | 23.90 | 401 | 0.08 |
| 44 | 18.18 | 33.46 | 5.42 | 385 | 30 | 18.70 | 33.45 | 5.46 | 23.93 | 398 | 0.12 |
| 55 | 15.64 | 33.31 | 6.07 | 340 | 50 | 15.85 | 33.31 | 6.02 | 24.50 | 344 | 0.19 |
| 64 | 15.32 | 33.30 | 5.97 | 333 | 75 | 15.02 | 33.30 | 5.98 | 24.68 | 327 | 0.28 |
| 74 | 15.04 | 33.30 | 5.98 | 328 | 100 | 13.81 | 33.42 | 5.70 | 25.04 | 293 | 0.36 |
| 92 | 14.24 | 33.31 | 5.96 | 300 | 150 | 10.02 | 33.56 | 4.20 | 25.85 | 216 | 0.49 |
| 107 | 13.46 | 33.50 | 5.51 | 282 | 200 | 8.63 | 33.94 | 2.83 | 26.36 | 167 | 0.59 |
| 121 | 12.77 | 33.46 | 5.51 | 271 | 250 | 7.83 | 34.06 | 2.13 | 26.58 | 147 | 0.67 |
| 144 | 10.32 | 33.49 | 4.42 | 226 | 300 | 7.25 | 34.11 | 1.60 | 26.70 | 135 | 0.74 |
| 172 | 9.20 | 33.77 | 3.41 | 188 | 400 | 6.35 | 34.08 | 0.98 | 26.99 | 117 | 0.87 |
| 210 | 8.41 | 33.98 | 2.59 | 160 | 500 | 5.84 | 34.26 | 0.76 | 27.01 | 106 | 0.99 |
| 263 | 7.66 | 34.08 | 2.01 | 143 | 600 | (5.46) | (34.34) | | (27.12) | (95) | (1.10) |
| 344 | 6.80 | 34.14 | 1.17 | 126 | | | | | | | |
| 445 | 6.03 | 34.22 | 0.86 | 111 | | | | | | | |
| 588 | 5.50 | 34.33 | 0.30 | 96 | | | | | | | |

STRANGER; June 30, 1958; 2200, 2235 GCT;[a] 32°39'N, 117°30.5'W; sounding, 650 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 10°, 15°. 94.31

| | | | |
|---|---|---|---|
| 405 | 7.63 | 34.39[b] | 0.58 |
| 413 | 7.52 | 34.38 | 0.41 |
| 424 | 7.46 | 34.46 | 0.46 |
| 432 | 7.40 | 34.42 | 0.52 |
| 442 | 7.21 | 34.35 | 0.41 |
| 451 | 7.16 | 34.36 | 0.42 |
| 459 | 7.07 | 34.40 | 0.44 |
| 469 | 6.94 | 34.38 | 0.41 |
| 478 | 6.86 | 34.35 | 0.41 |
| 487 | 6.82 | 34.36 | 0.42 |
| 495 | 6.77 | 34.36 | 0.40 |
| 505 | 6.69 | 34.38 | 0.41 |
| 514 | 6.59 | 34.37 | 0.39 |
| 523 | 6.50 | 34.37 | 0.28 |
| 532 | 6.46 | 34.34 | 0.28 |
| 541 | 6.38 | 34.41 | 0.33 |
| 551 | 6.27 | 34.36 | 0.31 |

ORCA; July 8, 1958; 0700 GCT; 32°15.5'N, 117°09'W; sounding, 39 fm; wind, 330°, force 2; weather, overcast; sea, smooth; wire angle, 05°. 97.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.52 | 33.58 | 5.97 | 384 | 0 | 18.52 | 33.58 | 5.97 | 24.08 | 384 | 0.00 |
| 10 | 16.69 | 33.61 | 6.10 | 340 | 10 | 16.69 | 33.61 | 6.10 | 24.54 | 340 | 0.04 |
| 29 | 11.22 | 33.48 | 4.32 | 242 | 20 | 12.50 | 33.51 | 4.69 | 25.36 | 263 | 0.07 |
| 49 | 10.30 | 33.58 | 3.60 | 219 | 30 | 11.15 | 33.48 | 4.30 | 25.59 | 241 | 0.09 |

a) Test cast.
b) Owing to mechanical difficulties, the salinity values on this cast varied excessively.

SIO

CCOFI 5807

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

97.32 ORCA; July 8, 1958; 0840 GCT; 32°11.5'N, 117°16'W; sounding, 600+ fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.69 | 33.60 | 5.90 | 412 | 0 | 19.69 | 33.60 | 5.90 | 23.79 | 412 | 0.00 |
| 10 | 19.44 | 33.60 | 5.90 | 405 | 10 | 19.44 | 33.60 | 5.90 | 23.86 | 405 | 0.04 |
| 28 | 14.00 | 33.48 | 5.98 | 293 | 20 | 16.26 | 33.53 | 5.94 | 24.58 | 437 | 0.08 |
| 44 | 12.38 | 33.44 | 5.15 | 266 | 30 | 13.85 | 33.48 | 5.95 | 25.06 | 291 | 0.11 |
| 52 | 11.50 | 33.44 | 4.71 | 250 | 50 | 11.66 | 33.44 | 4.78 | 25.46 | 253 | 0.16 |
| 61 | 11.16 | 33.44 | 4.50 | 244 | 75 | 10.35 | 33.54 | 4.07 | 25.77 | 223 | 0.22 |
| 70 | 10.61 | 33.51 | 4.18 | 230 | 100 | 9.42 | 33.70 | 3.44 | 26.06 | 196 | 0.28 |
| 88 | 9.78 | 33.60 | 3.86 | 210 | 150 | 8.98 | 33.91 | 2.84 | 26.29 | 174 | 0.37 |
| 102 | 9.40 | 33.72 | 3.40 | 194 | 200 | 8.82 | 34.11 | 2.11 | 26.47 | 157 | 0.45 |
| 115 | 9.30 | - | 3.37 | | 250 | 8.41 | 34.18 | 1.60 | 26.59 | 146 | 0.53 |
| 136 | 9.08 | 33.85 | 3.05 | 180 | 300 | 7.93 | 34.23 | 1.18 | 26.70 | 134 | 0.60 |
| 164 | 8.88 | 33.98 | 2.65 | 168 | 400 | 7.43 | 34.30 | 0.68 | 26.83 | 123 | 0.74 |
| 200 | 8.82 | 34.11 | 2.11 | 157 | 500 | 6.72 | 34.37 | 0.45 | 26.98 | 108 | 0.86 |
| 250 | 8.41 | 34.18 | 1.60 | 146 | | | | | | | |
| 329 | 7.68 | 34.25 | 1.01 | 130 | | | | | | | |
| 427 | 7.30 | 34.33 | 0.58 | 119 | | | | | | | |
| 568 | 6.14 | 34.40 | 0.38 | 99 | | | | | | | |

97.40 ORCA; July 8, 1958; 1422 GCT; 31°56'N, 117°50'W; sounding, 300 fm; wind, 320°, force 3; weather, cloudy; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.08 | 33.54 | 5.12 | 354 | 0 | 17.08 | 33.54 | 5.12 | 24.39 | 354 | 0.00 |
| 10 | 16.95 | 33.53 | 5.34 | 351 | 10 | 16.95 | 33.53 | 5.34 | 24.43 | 351 | 0.04 |
| 30 | 16.45 | 33.56 | 5.27 | 339 | 20 | 16.80 | 33.54 | 5.34 | 24.46 | 348 | 0.07 |
| 39 | 14.11 | 33.34 | 5.81 | 306 | 30 | 16.45 | 33.56 | 5.27 | 24.56 | 339 | 0.10 |
| 49 | 13.11 | 33.40 | 4.67 | 282 | 50 | 13.01 | 33.40 | 4.64 | 25.18 | 280 | 0.17 |
| 59 | 12.08 | 33.42 | 4.53 | 262 | 75 | 10.97 | 33.51 | 4.21 | 25.64 | 236 | 0.23 |
| 69 | 11.52 | 33.49 | 4.26 | 246 | 100 | 9.43 | 33.61 | 3.73 | 25.98 | 203 | 0.29 |
| 82 | 10.32 | 33.53 | 4.19 | 223 | 150 | 8.80 | 33.90 | 3.00 | 26.31 | 172 | 0.38 |
| 96 | 9.52 | 33.59 | 3.68 | 206 | 200 | 8.35 | 34.04 | 2.84 | 26.49 | 155 | 0.46 |
| 112 | 9.21 | 33.68 | 3.92 | 195 | 250 | 8.04 | 34.19 | 2.48 | 26.66 | 140 | 0.54 |
| 134 | 8.91 | 33.80 | 3.20 | 181 | 300 | 7.52 | 34.21 | 1.35 | 26.74 | 131 | 0.61 |
| 162 | 8.72 | 33.97 | 2.71 | 166 | 400 | 6.64 | 34.28 | 0.96 | 26.92 | 114 | 0.74 |
| 195 | 8.38 | 34.04 | 2.88 | 156 | 500 | (5.95) | (34.34) | (0.76) | (27.06) | (102) | (0.85) |
| 242 | 8.11 | 34.19 | 2.52 | 140 | | | | | | | |
| 291 | 7.60 | 34.20 | 1.43 | 133 | | | | | | | |
| 392 | 6.68 | 34.28 | 0.97 | 115 | | | | | | | |
| 491 | 6.00 | 34.33 | 0.77 | 103 | | | | | | | |

97.50 ORCA; July 8, 1958; 2131, 2156 GCT; 31°36'N, 118°30.5'W; sounding, 1300 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 25°, 32°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.44 | 33.55 | 5.91 | 362 | 0 | 17.44 | 33.55 | 5.91 | 24.31 | 362 | 0.00 |
| 8 | 17.40 | 33.54 | 5.86 | 361 | 10 | 17.40 | 33.54 | 5.86 | 24.32 | 361 | 0.04 |
| 28 | 16.60 | 33.55 | 6.23 | 343 | 20 | 17.40 | 33.54 | 5.86 | 24.32 | 361 | 0.07 |
| 41 | 14.80 | 33.46 | 6.80 | 311 | 30 | 16.56 | 33.55 | 6.24 | 24.53 | 342 | 0.11 |
| 50 | 13.22 | 33.45 | 6.12 | 281 | 50 | 13.22 | 33.45 | 6.12 | 25.17 | 281 | 0.17 |
| 59 | 12.28 | 33.48 | 5.08 | 261 | 75 | 10.85 | 33.52 | 4.61 | 25.67 | 233 | 0.23 |
| 67 | 11.42 | 33.49 | 4.91 | 245 | 100 | 9.62 | 33.72 | 3.88 | 26.02 | 198 | 0.29 |
| 82 | 10.40 | 33.55 | 4.35 | 223 | 150 | 8.91 | 33.98 | 2.91 | 26.36 | 168 | 0.38 |
| 94 | 9.83 | 33.73 | 4.10 | 201 | 200 | 8.14 | 34.08 | 2.40 | 26.55 | 150 | 0.46 |
| 106 | 9.46 | 33.71 | 3.58 | 196 | 250 | 7.65 | 34.14 | 1.84 | 26.67 | 138 | 0.53 |
| 127 | 9.12 | 33.93 | 2.89 | 175 | 300 | 7.16 | 34.23 | 1.35 | 26.81 | 125 | 0.60 |
| 151 | 8.88 | 33.98 | 2.92 | 168 | 400 | 6.48 | 34.27 | 0.72 | 26.94 | 113 | 0.72 |
| 184 | 8.26 | 34.05 | 2.64 | 153 | 500 | 6.06 | 34.32 | 0.57 | 27.03 | 104 | 0.84 |
| 230 | 7.86 | 34.11 | 2.04 | 143 | | | | | | | |
| 298p | 7.18 | 34.23 | 1.37 | 125 | | | | | | | |
| 396p | 6.50 | 34.27 | 0.73 | 113 | | | | | | | |
| 536p | 5.90 | 34.34 | 0.50 | 100 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| ORCA; July 9, 1958; 1214 GCT; 31°14'N, 119°08.5'W; sounding, 1900 fm; wind, 310°, force 4; weather, overcast; sea, rough; wire angle, 14°. | | | | | | | | | | | 97.60 |
| 0 | 17.02 | 33.30 | 5.59 | 370 | 0 | 17.02 | 33.30 | 5.59 | 24.23 | 370 | 0.00 |
| 8 | 17.02 | 33.30 | 5.62 | 370 | 10 | 17.02 | 33.30 | 5.62 | 24.23 | 370 | 0.04 |
| 27 | 15.68 | 33.26 | 5.82 | 344 | 20 | 17.02 | 33.30 | 5.62 | 24.23 | 370 | 0.07 |
| 40 | 14.68 | 33.25 | 5.94 | 324 | 30 | 15.41 | 33.26 | 5.86 | 24.56 | 338 | 0.11 |
| 49 | 14.02 | 33.24 | 5.81 | 312 | 50 | 14.00 | 33.25 | 5.79 | 24.86 | 310 | 0.17 |
| 58 | 13.71 | 33.44 | 5.43 | 290 | 75 | 11.65 | 33.46 | 4.54 | 25.47 | 252 | 0.24 |
| 66 | 12.74 | 33.44 | 5.04 | 272 | 100 | 10.56 | 33.57 | 3.96 | 25.76 | 225 | 0.31 |
| 83 | 11.32 | 33.51 | 4.39 | 242 | 150 | 9.28 | 33.88 | 2.78 | 26.21 | 181 | 0.41 |
| 96 | 10.75 | 33.55 | 4.09 | 229 | 200 | 8.59 | 34.02 | 2.18 | 26.44 | 160 | 0.50 |
| 108 | 10.13 | 33.62 | 3.68 | 214 | 250 | 8.00 | 34.11 | 1.80 | 26.60 | 145 | 0.57 |
| 129 | 9.83 | 33.68 | 3.65 | 205 | 300 | 7.12 | 34.20 | 1.36 | 26.80 | 126 | 0.64 |
| 152 | 9.23 | 33.89 | 2.74 | 180 | 400 | 6.60 | 34.24 | 0.68 | 26.90 | 117 | 0.77 |
| 184 | 8.78 | 33.99 | 2.36 | 165 | 500 | 5.88 | 34.28 | 0.51 | 27.02 | 104 | 0.88 |
| 228 | 8.31 | 34.07 | 1.96 | 152 | | | | | | | |
| 298 | 7.18 | 34.20 | 1.40 | 127 | | | | | | | |
| 388 | 6.68 | 34.23 | 0.71 | 118 | | | | | | | |
| 519 | 5.74 | 34.29 | 0.48 | 102 | | | | | | | |
| ORCA; July 9, 1958; 0450 GCT; 30°47.5'N, 119°47.5'W; sounding, 1900 fm; wind, 300°, force 4; weather, partly cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | | 97.70 |
| 0 | 17.39 | 33.32 | 5.63 | 377 | 0 | 17.39 | 33.32 | 5.63 | 24.15 | 377 | 0.00 |
| 10 | 17.40 | 33.31 | 5.61 | 378 | 10 | 17.40 | 33.31 | 5.61 | 24.14 | 378 | 0.04 |
| 29 | 17.24 | 33.33 | 5.59 | 373 | 20 | 17.35 | 33.31 | 5.60 | 24.16 | 377 | 0.08 |
| 43 | 16.60 | 33.33 | 5.73 | 359 | 30 | 17.24 | 33.33 | 5.59 | 24.20 | 373 | 0.11 |
| 54 | 16.40 | 33.33 | 5.86 | 354 | 50 | 16.38 | 33.33 | 5.74 | 24.36 | 357 | 0.19 |
| 62 | 15.92 | 33.37 | 5.81 | 341 | 75 | 14.75 | 33.44 | 5.77 | 24.86 | 310 | 0.27 |
| 71 | 15.44 | 33.46 | 5.80 | 324 | 100 | 12.35 | 33.45 | 5.27 | 25.34 | 265 | 0.34 |
| 89 | 13.46 | 33.42 | 5.58 | 287 | 150 | 9.50 | 33.76 | 3.53 | 26.09 | 193 | 0.46 |
| 103 | 11.95 | 33.46 | 5.12 | 256 | 200 | 8.60 | 33.94 | 2.72 | 26.38 | 166 | 0.55 |
| 116 | 11.04 | 33.47 | 4.73 | 240 | 250 | 7.99 | 33.97 | 2.46 | 26.49 | 155 | 0.63 |
| 140 | 9.80 | 33.71 | 3.78 | 202 | 300 | 7.32 | 34.01 | 1.92 | 26.62 | 143 | 0.71 |
| 167 | 9.14 | 33.83 | 3.19 | 182 | 400 | 6.42 | 34.13 | 1.10 | 26.84 | 122 | 0.85 |
| 203 | 8.58 | 33.95 | 2.70 | 165 | 500 | 5.81 | 34.22 | 0.73 | 26.99 | 108 | 0.97 |
| 253 | 7.92 | 33.97 | 2.42 | 154 | | | | | | | |
| 335 | 6.92 | 34.05 | - | 135 | | | | | | | |
| 433 | 6.24 | 34.16 | 0.96 | 118 | | | | | | | |
| 572 | 5.37 | 34.29 | 0.48 | 98 | | | | | | | |
| ORCA; July 9, 1958; 1945 GCT; 30°21'N, 120°32'W; sounding, 2000 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | | 97.80 |
| 0 | 19.24 | 33.61 | 5.39 | 400 | 0 | 19.24 | 33.61 | 5.39 | 23.92 | 400 | 0.00 |
| 10 | 19.21 | 33.56 | 5.38 | 402 | 10 | 19.21 | 33.56 | 5.38 | 23.89 | 402 | 0.04 |
| 30 | 19.12 | 33.60 | 5.47 | 397 | 20 | 19.18 | 33.57 | 5.40 | 23.90 | 401 | 0.08 |
| 44 | 16.30 | 33.37 | 5.90 | 349 | 30 | 19.12 | 33.60 | 5.47 | 23.95 | 397 | 0.12 |
| 53 | 15.96 | 33.37 | 5.87 | 342 | 50 | 16.05 | 33.37 | 5.88 | 24.50 | 344 | 0.19 |
| 62 | 15.78 | 33.44u | 5.96 | | 75 | 15.46 | 33.37 | 5.70 | 24.63 | 332 | 0.28 |
| 70 | 15.58 | 33.36 | 5.69 | 334 | 100 | 14.90 | 33.44 | 5.79 | 24.81 | 315 | 0.36 |
| 89 | 15.31 | 33.40 | 5.75 | 326 | 150 | 9.78 | 33.50 | 4.68 | 25.84 | 217 | 0.49 |
| 102 | 14.73 | 33.44 | 5.81 | 311 | 200 | 8.76 | 33.78 | 3.33 | 26.21 | 180 | 0.59 |
| 115 | 12.55 | 33.40 | 5.46 | 272 | 250 | 8.01 | 33.98 | 2.46 | 26.49 | 155 | 0.68 |
| 138 | 10.42 | 33.44 | 4.85 | 232 | 300 | 7.32 | 34.05 | 1.91 | 26.65 | 140 | 0.76 |
| 165 | 9.38 | 33.57 | 4.58 | 205 | 400 | 6.27 | 34.17 | 1.10 | 26.88 | 118 | 0.89 |
| 201 | 8.76 | 33.78 | 3.33 | 180 | 500 | 5.64 | 34.25 | 0.67 | 27.03 | 104 | 1.01 |
| 251 | 8.01 | 33.98 | 2.46 | 155 | | | | | | | |
| 329 | 6.96 | 34.09 | 1.65 | 132 | | | | | | | |
| 429 | 6.01 | 34.20 | 0.89 | 112 | | | | | | | |
| 569 | 5.26 | 34.29 | 0.46 | 97 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **97.90** | ORCA; July 10, 1958; 0200 GCT; 30°15.5'N, 121°10'W; sounding, 2000+ fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 05°. | | | | | | | | | | |
| 0 | 19.16 | 33.55 | 5.43 | 402 | 0 | 19.16 | 33.55 | 5.43 | 23.89 | 402 | 0.00 |
| 10 | 19.13 | 33.53 | 5.22 | 402 | 10 | 19.13 | 33.53 | 5.22 | 23.89 | 402 | 0.04 |
| 30 | 18.98 | 33.53 | 5.49 | 399 | 20 | 19.08 | 33.53 | 5.30 | 23.90 | 402 | 0.08 |
| 45 | 16.14 | 33.39 | 5.91 | 344 | 30 | 18.98 | 33.53 | 5.49 | 23.93 | 399 | 0.12 |
| 54 | 15.66 | 33.27 | 5.85 | 343 | 50 | 16.02 | 33.36 | 5.90 | 24.50 | 344 | 0.19 |
| 63 | 15.44 | 33.30 | 5.82 | 336 | 75 | 15.04 | 33.30 | 5.72 | 24.67 | 328 | 0.28 |
| 74 | 15.06 | 33.30 | 5.73 | 328 | 100 | 14.03 | 33.32 | 5.40 | 24.90 | 306 | 0.36 |
| 92 | 14.44 | 33.31 | 5.49 | 314 | 150 | 9.88 | 33.56 | 4.36 | 25.87 | 214 | 0.49 |
| 106 | 12.75 | 33.33 | 5.20 | 280 | 200 | 8.79 | 33.83 | 3.58 | 26.26 | 177 | 0.59 |
| 120 | 11.64 | 33.37 | 4.98 | 258 | 250 | 8.03 | 34.00 | 2.85 | 26.51 | 153 | 0.67 |
| 144 | 10.08 | 33.53 | 4.49 | 220 | | | | | | | |
| 171 | 9.38 | 33.68 | 3.92 | 197 | | | | | | | |
| 209 | 8.62 | 33.87 | 3.46 | 172 | | | | | | | |
| 261 | 7.81 | 34.04 | 2.56 | 147 | | | | | | | |
| **98.31** | BLACK DOUGLAS; July 8, 1958; 0430 GCT;[a] 31°56'N, 117°01.5'W; sounding, 400 fm; wind, 310°, force 3; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 400 | 8.00 | 34.29 | 0.78[b] | | | | | | | | |
| 408 | 7.96 | 34.27 | 0.78 | | | | | | | | |
| 417 | - | 34.29 | 0.68 | | | | | | | | |
| 425 | 7.78 | 34.25 | 0.75 | | | | | | | | |
| 434 | 7.71 | 34.27 | 0.66 | | | | | | | | |
| 443 | 7.66 | 34.54r | 0.61 | | | | | | | | |
| 451 | 7.54 | 34.25 | 0.59 | | | | | | | | |
| 460 | 7.48 | 34.30 | 0.61 | | | | | | | | |
| 469 | 7.36 | 34.32 | 0.52 | | | | | | | | |
| 477 | 7.30 | 34.32 | 0.49 | | | | | | | | |
| 485 | 7.21 | 34.34 | 0.57 | | | | | | | | |
| 495 | 7.11 | 34.35 | 0.61 | | | | | | | | |
| 503 | 7.02 | 34.33 | 0.59 | | | | | | | | |
| 512 | 6.93 | 34.34 | 0.52 | | | | | | | | |
| 521 | 6.84 | 34.36 | 0.46 | | | | | | | | |
| 528 | 6.70 | 34.34 | 0.48 | | | | | | | | |
| 538 | 6.58 | 34.34 | 0.44 | | | | | | | | |
| **100.30** | ORCA; July 13, 1958; 0535 GCT; 31°41'N, 116°46.5'W; sounding, 200 fm; wind, 200°, force 1; weather, cloudy; sea, calm; wire angle, 00°. | | | | | | | | | | |
| 0 | 19.17 | 33.62 | 5.78 | 397 | 0 | 19.17 | 33.62 | 5.78 | 23.95 | 397 | 0.00 |
| 10 | 18.70 | 33.58 | 5.53 | 389 | 10 | 18.70 | 33.58 | 5.53 | 24.03 | 389 | 0.04 |
| 30 | 13.75 | 33.46 | 6.23 | 290 | 20 | 18.01 | 33.56 | 5.64 | 24.19 | 374 | 0.08 |
| 50 | 11.38 | 33.48 | 4.61 | 245 | 30 | 13.75 | 33.46 | 6.23 | 25.07 | 290 | 0.11 |
| 74 | 10.40 | 33.52 | 4.46 | 226 | 50 | 11.38 | 33.48 | 4.61 | 25.54 | 245 | 0.16 |
| 98 | 9.92 | 33.75 | 3.53 | 201 | 75 | 10.38 | 33.52 | 4.45 | 25.75 | 225 | 0.22 |
| 122 | 10.03 | 33.73r | 2.88 | | 100 | 9.95 | 33.76 | 3.25 | 26.02 | 200 | 0.28 |
| 161 | 9.76 | 33.93 | 2.33 | 184 | 150 | 9.83 | 33.92 | 2.43 | 26.15 | 187 | 0.37 |
| 200 | 9.43 | 34.04 | 2.08 | 172 | 200 | 9.43 | 34.04 | 2.08 | 26.32 | 172 | 0.47 |
| 248 | 9.07 | 34.26 | 1.49 | 150 | 250 | 9.06 | 34.26 | 1.47 | 26.55 | 150 | 0.55 |
| 297 | 8.82 | 34.29 | 1.33 | 144 | 300 | (8.83) | (34.29) | (1.33) | (26.61) | (144) | (0.62) |

a) Test cast.
b) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m | |

ORCA; July 13, 1958; 1222 GCT; 31°21'N, 117°27'W; sounding, 1045 fm; wind, calm; weather, cloudy; sea, smooth; wire angle, 00°. 100.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.94 | 33.62 | 5.45 | 392 | 0 | 18.94 | 33.62 | 5.45 | 24.00 | 392 | 0.00 | |
| 10 | 18.73 | 33.58 | 5.50 | 390 | 10 | 18.73 | 33.58 | 5.50 | 24.02 | 390 | 0.04 | |
| 30 | 18.54 | 33.59 | 5.61 | 384 | 20 | 18.62 | 33.59 | 5.57 | 24.06 | 386 | 0.08 | |
| 39 | 17.09 | 33.48 | 5.76 | 359 | 30 | 18.54 | 33.59 | 5.61 | 24.08 | 384 | 0.12 | |
| 50 | 15.31 | 33.39 | 6.23 | 327 | 50 | 15.31 | 33.39 | 6.23 | 24.68 | 327 | 0.19 | |
| 58 | 14.31 | 33.31 | 5.98 | 312 | 75 | 12.57 | 33.42 | 5.29 | 25.27 | 271 | 0.26 | |
| 69 | 13.17 | 33.39 | 5.57 | 284 | 100 | 10.62 | 33.54 | 4.31 | 25.72 | 228 | 0.33 | |
| 83 | 11.83 | 33.46 | 4.95 | 254 | 150 | 9.02 | 33.89 | 2.96 | 26.26 | 176 | 0.43 | |
| 97 | 10.73 | 33.53 | 4.38 | 230 | 200 | 8.27 | 34.01 | 2.76 | 26.48 | 156 | 0.51 | |
| 111 | 10.25 | 33.58 | 4.08 | 219 | 250 | 7.53 | 34.09 | 2.18 | 26.65 | 140 | 0.59 | |
| 134 | 9.46 | 33.78 | 3.38 | 191 | 300 | 7.11 | 34.14 | 1.77 | 26.75 | 130 | 0.66 | |
| 161 | 8.80 | 33.95 | 2.85 | 168 | 400 | 6.55 | 34.22 | 1.20 | 26.88 | 118 | 0.79 | |
| 196 | 8.36 | 34.00 | 2.77 | 158 | 500 | 6.15 | 34.30 | 0.67 | 27.00 | 106 | 0.90 | |
| 243 | 7.60 | 34.08 | 2.22 | 142 | | | | | | | | |
| 321 | 6.97 | 34.16 | 1.63 | 127 | | | | | | | | |
| 419 | 6.44 | 34.23 | 1.09 | 116 | | | | | | | | |
| 548 | 5.98 | 34.34 | 0.46 | 101 | | | | | | | | |

ORCA; July 11, 1958; 1343 GCT; 31°03'N, 117°57'W; sounding, 950 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 07°. 100.50

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.88 | 33.42 | 5.29 | 382 | 0 | 17.88 | 33.42 | 5.29 | 24.11 | 381 | 0.00 | |
| 10 | 17.88 | 33.41 | 5.43 | 382 | 10 | 17.88 | 33.41 | 5.43 | 24.10 | 382 | 0.04 | |
| 30 | 16.96 | 33.40 | 5.68 | 362 | 20 | 17.87 | 33.41 | 5.44 | 24.11 | 382 | 0.08 | |
| 44 | 16.54 | 33.40 | 5.72 | 352 | 30 | 16.96 | 33.40 | 5.68 | 24.32 | 362 | 0.11 | |
| 55 | 16.45 | 33.35u | 5.85u | | 50 | 16.49 | 33.40 | 5.75 | 24.43 | 351 | 0.18 | |
| 63 | 14.77 | 33.40 | 5.90 | 314 | 75 | 13.32 | 33.46 | 5.30 | 25.17 | 281 | 0.26 | |
| 73 | 13.89 | 33.43 | 5.70 | 295 | 100 | 11.25 | 33.51 | 4.54 | 25.59 | 241 | 0.33 | |
| 91 | 12.32 | 33.56 | 4.66 | 256 | 150 | 9.05 | 33.70 | 3.34 | 26.11 | 191 | 0.44 | |
| 107 | 10.62 | 33.48 | 4.48 | 232 | 200 | 8.18 | 33.92 | 2.70 | 26.43 | 161 | 0.53 | |
| 120 | 10.01 | 33.58 | 4.03 | 215 | 250 | 7.99 | 34.14 | 1.83 | 26.63 | 142 | 0.61 | |
| 144 | 9.26 | 33.68 | 3.63 | 196 | 300 | 7.43 | 34.22 | 1.16 | 26.76 | 130 | 0.68 | |
| 172 | 8.80 | 33.87 | 3.07 | 174 | 400 | 6.61 | 34.24 | 0.73 | 26.90 | 117 | 0.80 | |
| 210 | 8.12 | 33.96 | 2.61 | 158 | 500 | 6.00 | 34.27 | 0.53 | 27.00 | 107 | 0.92 | |
| 262 | 7.90 | 34.18 | 1.52 | 138 | 600 | (5.43) | (34.36) | | (27.14) | (94) | (1.03) | |
| 344 | 7.01 | 34.23 | 0.91 | 123 | | | | | | | | |
| 444 | 6.29 | 34.25 | 0.62 | 112 | | | | | | | | |
| 586 | 5.56 | 34.34 | 0.40 | 96 | | | | | | | | |

ORCA; July 11, 1958; 0602, 0630 GCT; 30°41'N, 118°41'W; sounding, 1500 fm; wind, 280°, force 1; weather, cloudy; sea, slight; wire angle, 10°, 15°. 100.60

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.86 | 33.62 | 5.18 | 390 | 0 | 18.86 | 33.62 | 5.18 | 24.02 | 390 | 0.00 | |
| 10 | 18.88 | 33.58 | 5.27 | 393 | 10 | 18.88 | 33.58 | 5.27 | 23.99 | 393 | 0.04 | |
| 29 | 18.74 | 33.58 | 5.17 | 390 | 20 | 18.80 | 33.58 | 5.21 | 24.00 | 392 | 0.08 | |
| 44 | 17.42 | 33.70 | 5.39 | 350 | 30 | 18.75 | 33.58 | 5.17 | 24.02 | 390 | 0.12 | |
| 53 | 17.12 | 33.70 | 5.56 | 344 | 50 | 17.21 | 33.70 | 5.50 | 24.49 | 345 | 0.19 | |
| 63 | 16.56 | 33.61 | 5.60 | 337 | 75 | 15.78 | 33.50 | 5.62 | 24.67 | 328 | 0.28 | |
| 73 | 15.85 | 33.49 | 5.63 | 331 | 100 | 14.18 | 33.53 | 5.62 | 25.04 | 293 | 0.36 | |
| 93 | 14.78 | 33.53 | 5.65 | 305 | 150 | 10.09 | 33.47 | 4.76 | 25.76 | 224 | 0.48 | |
| 107 | 13.61 | 33.53 | 5.60 | 282 | 200 | 9.02 | 33.84 | 3.10 | 26.23 | 180 | 0.59 | |
| 122 | 12.36 | 33.51 | 5.39 | 260 | 250 | 8.42 | 34.09 | 2.11 | 26.52 | 152 | 0.67 | |
| 145 | 10.35 | 33.46 | 4.87 | 229 | 300 | 7.62 | 34.16 | 1.73 | 26.69 | 136 | 0.75 | |
| 173 | 9.26 | 33.64 | 3.98 | 198 | | | | | | | | |
| 210 | 8.94 | 33.93 | 2.69 | 172 | | | | | | | | |
| 260 | 8.28 | 34.11 | 2.02 | 149 | | | | | | | | |
| 338 | 7.10 | 34.18 | 1.52 | 128 | | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| 100.70 | ORCA; July 10, 1958; 2204, 2232 GCT; 30°20.5'N, 119°26'W; sounding, 2000+ fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°, 23°. | | | | | | | | | | |
| 0 | 19.49 | 33.73 | 5.42 | 397 | 0 | 19.49 | 33.73 | 5.42 | 23.95 | 397 | 0.00 |
| 9 | 19.36 | 33.75 | 5.40 | 392 | 10 | 19.34 | 33.75 | 5.39 | 24.00 | 392 | 0.04 |
| 29 | 19.21 | 33.71 | 5.32 | 392 | 20 | 19.26 | 33.72 | 5.34 | 24.00 | 392 | 0.08 |
| 43 | 17.49 | 33.77 | 5.52 | 347 | 30 | 19.22 | 33.71 | 5.32 | 24.01 | 391 | 0.12 |
| 54 | 17.44 | 33.84 | 5.70 | 341 | 50 | 17.47 | 33.82 | 5.68 | 24.52 | 342 | 0.19 |
| 63 | 17.06 | 33.77 | 5.68 | 337 | 75 | 16.07 | 33.57 | 5.65 | 24.65 | 330 | 0.28 |
| 72 | 16.20 | 33.58 | 5.64 | 332 | 100 | 15.08 | 33.55 | 5.75 | 24.85 | 311 | 0.36 |
| 90 | 15.58 | 33.54 | 5.76 | 321 | 150 | 10.61 | 33.53 | 4.99 | 25.72 | 228 | 0.49 |
| 104 | 14.86 | 33.55 | 5.75 | 306 | 200 | 9.00 | 33.73 | 3.63 | 26.14 | 188 | 0.60 |
| 117 | 13.25 | 33.50 | 5.59 | 278 | 250 | 8.19 | 33.94 | 2.73 | 26.44 | 160 | 0.69 |
| 139 | 11.26 | 33.52 | 5.15 | 240 | 300 | 7.43 | 34.04 | 2.11 | 26.62 | 143 | 0.76 |
| 167 | 9.82 | 33.55 | 4.60 | 214 | 400 | 6.58 | 34.12 | 1.11 | 26.81 | 125 | 0.90 |
| 203 | 8.98 | 33.74 | 3.60 | 186 | 500 | 5.92 | 34.20 | 0.66 | 26.96 | 111 | 1.03 |
| 252 | 8.12 | 33.95 | 2.66 | 159 | | | | | | | |
| 333 | 7.08 | 34.07 | 1.84 | 136 | | | | | | | |
| 434 | 6.30 | 34.15 | 0.84 | 120 | | | | | | | |
| 574 | 5.47 | 34.28 | 0.43 | 100 | | | | | | | |
| 100.80 | ORCA; July 10, 1958; 1437 GCT; 30°00'N, 120°08'W; sounding, 1900 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 19.35 | 33.51 | 5.38 | 409 | 0 | 19.35 | 33.51 | 5.38 | 23.82 | 409 | 0.00 |
| 10 | 19.34 | 33.48 | 5.50 | 411 | 10 | 19.34 | 33.48 | 5.50 | 23.80 | 411 | 0.04 |
| 29 | 18.16 | 33.82 | 5.73 | 359 | 20 | 19.34 | 33.49 | 5.50 | 23.81 | 400 | 0.08 |
| 44 | 17.48 | 33.85 | 5.81 | 341 | 30 | 18.08 | 33.83 | 5.74 | 24.37 | 356 | 0.12 |
| 54 | 17.31 | 33.84 | 5.76 | 337 | 50 | 17.39 | 33.84 | 5.78 | 24.55 | 339 | 0.19 |
| 64 | 17.18 | 33.84 | 5.78 | 334 | 75 | 16.62 | 33.81 | 5.63 | 24.72 | 324 | 0.27 |
| 73 | 16.76 | 33.82 | 5.61 | 327 | 100 | 15.20 | 33.70 | 5.80 | 24.95 | 301 | 0.35 |
| 93 | 15.78 | 33.77 | 5.79 | 308 | 150 | 10.48 | 33.50 | 5.10 | 25.72 | 228 | 0.48 |
| 107 | 14.40 | 33.61 | 5.75 | 292 | 200 | 8.70 | 33.81 | 3.45 | 26.25 | 178 | 0.59 |
| 122 | 12.25 | 33.48 | 5.44 | 260 | 250 | 7.94 | 33.96 | 2.78 | 26.48 | 156 | 0.67 |
| 146 | 10.70 | 33.49 | 5.19 | 233 | 300 | 7.23 | 34.04 | 2.12 | 26.65 | 140 | 0.75 |
| 174 | 9.33 | 33.60 | 4.27 | 202 | 400 | 6.30 | 34.12 | 1.18 | 26.84 | 122 | 0.89 |
| 211 | 8.52 | 33.87 | 3.19 | 170 | 500 | 5.74 | 34.18 | 0.71 | 26.96 | 110 | 1.01 |
| 263 | 7.79 | 33.98 | 2.66 | 152 | 600 | (5.19) | (34.32) | | (27.14) | (94) | (1.12) |
| 342 | 6.74 | 34.09 | 1.65 | 129 | | | | | | | |
| 443 | 6.01 | 34.14 | 0.89 | 117 | | | | | | | |
| 584 | 5.26 | 34.29 | 0.42 | 97 | | | | | | | |
| 100.90 | ORCA; July 10, 1958; 0751 GCT; 29°42.5'N, 120°48'W; sounding, 2000+ fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 19.70 | 33.59 | 5.25 | 412 | 0 | 19.70 | 33.59 | 5.25 | 23.79 | 412 | 0.00 |
| 10 | 19.70 | 33.57 | 5.27 | 414 | 10 | 19.70 | 33.57 | 5.27 | 23.77 | 414 | 0.04 |
| 28 | 19.74 | 33.64 | 5.19 | 410 | 20 | 19.72 | 33.62 | 5.22 | 23.80 | 411 | 0.08 |
| 43 | 19.67 | 33.81 | 5.24 | 395 | 30 | 19.74 | 33.65 | 5.19 | 23.82 | 409 | 0.12 |
| 52 | 18.40 | 33.84 | 5.60 | 363 | 50 | 18.95 | 33.83 | 5.45 | 24.15 | 377 | 0.20 |
| 63 | 17.65 | 33.85 | 5.58 | 345 | 75 | 17.62 | 33.91 | 5.48 | 24.54 | 340 | 0.29 |
| 72 | 17.63 | 33.89 | 5.50 | 342 | 100 | 17.26 | 34.03 | 5.46 | 24.73 | 323 | 0.38 |
| 90 | 17.61 | 34.05 | 5.40 | 329 | 150 | 11.78 | 33.60 | 5.05 | 25.57 | 242 | 0.52 |
| 104 | 16.91 | 34.00 | 5.55 | 317 | 200 | 9.34 | 33.76 | 3.96 | 26.11 | 191 | 0.63 |
| 118 | 14.62 | 33.82 | 5.44 | 281 | 250 | 8.47 | 33.92 | 3.10 | 26.38 | 165 | 0.72 |
| 139 | 12.84 | 33.68 | 5.20 | 256 | 300 | 7.72 | 34.01 | 2.38 | 26.56 | 148 | 0.80 |
| 166 | 10.36 | 33.54 | 4.89 | 223 | 400 | 6.68 | 34.12 | 1.46 | 26.82 | 124 | 0.94 |
| 202 | 9.27 | 33.78 | 3.92 | 188 | 500 | 5.80 | 34.24 | 0.77 | 27.00 | 106 | 1.07 |
| 252 | 8.41 | 33.93 | 3.04 | 164 | | | | | | | |
| 329 | 7.33 | 34.05 | 2.02 | 140 | | | | | | | |
| 428 | 6.22 | 34.14 | 0.98 | 120 | | | | | | | |
| 566 | 5.43 | 34.36 | 0.46 | 94 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |

ORCA; July 13, 1958; 1950 GCT; 31°05'N, 116°25'W; sounding, 30 fm; wind, calm; weather, cloudy; sea, smooth; wire angle, 00°. 103.30

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.64 | 33.58 | 6.04 | 320 | 0 | 15.64 | 33.58 | 6.04 | 24.76 | 320 | 0.00 | |
| 10 | 13.16 | 33.55 | 5.61 | 272 | 10 | 13.16 | 33.55 | 5.61 | 25.26 | 272 | 0.03 | |
| 30 | 11.36 | - | - | | 20 | 11.98 | | | | | | |
| 40 | 10.99 | - | - | | 30 | 11.36 | | | | | | |

ORCA; July 13, 1958; 2306 GCT; 30°55.5'N, 116°45.5'W; sounding, 600 fm; wind, 300°, force 1; weather, cloudy; sea, moderate; wire angle, 22°. 103.35

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.56 | 33.60 | 5.35 | 408 | 0 | 19.56 | 33.60 | 5.35 | 23.83 | 408 | 0.00 | |
| 10 | 17.94 | 33.55 | 5.39 | 373 | 10 | 17.94 | 33.55 | 5.39 | 24.20 | 373 | 0.04 | |
| 28 | 14.30 | 33.52 | 5.65 | 297 | 20 | 15.00 | 33.53 | 5.60 | 24.86 | 310 | 0.07 | |
| 37 | 13.29 | 33.48 | 4.94 | 280 | 30 | 14.18 | 33.52 | 5.63 | 25.02 | 294 | 0.10 | |
| 46 | 12.76 | 33.47 | 4.99 | 270 | 50 | 12.43 | 33.48 | 4.82 | 25.35 | 264 | 0.16 | |
| 55 | 12.05 | 33.51 | 4.55 | 254 | 75 | 11.20 | 33.52 | 4.38 | 25.62 | 238 | 0.22 | |
| 64 | 11.73 | 33.62 | 4.61 | 241 | 100 | 9.79 | 33.66 | 3.58 | 25.97 | 205 | 0.28 | |
| 76 | 11.14 | 33.52 | 4.35 | 238 | 150 | 9.00 | 33.89 | 3.02 | 26.27 | 176 | 0.37 | |
| 89 | 10.16 | 33.58 | 4.12 | 217 | 200 | 8.52 | 34.04 | 2.33 | 26.47 | 157 | 0.46 | |
| 101 | 9.78 | 33.66 | 3.57 | 205 | 250 | 8.10 | 34.15 | 1.72 | 26.62 | 143 | 0.53 | |
| 121 | 9.29 | 33.78 | 3.35 | 189 | 300 | 7.80 | 34.23 | 1.25 | 26.72 | 133 | 0.60 | |
| 145 | 9.06 | 33.86 | 3.12 | 179 | 400 | 7.12 | 34.32 | 0.67 | 26.90 | 116 | 0.74 | |
| 174 | 8.72 | 33.98 | 2.65 | 165 | 500 | (6.22) | (34.39) | (0.51) | (27.06) | (101) | (0.85) | |
| 215 | 8.40 | 34.07 | 2.19 | 154 | | | | | | | | |
| 283 | 7.88 | 34.21 | 1.39 | 136 | | | | | | | | |
| 369 | 7.38 | 34.30 | 0.76 | 122 | | | | | | | | |
| 487 | 6.35 | 34.28 | 0.53 | 103 | | | | | | | | |

ORCA; July 14, 1958; 0216 GCT; 30°45'N, 117°05.5'W; sounding, 1040 fm; wind, 300°, force 2; weather, cloudy; sea, slight; wire angle, 06°. 103.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.50 | 33.43 | 5.52 | 395 | 0 | 18.50 | 33.43 | 5.52 | 23.97 | 395 | 0.00 | |
| 10 | 18.16 | 33.39 | 5.57 | 390 | 10 | 18.16 | 33.39 | 5.57 | 24.02 | 390 | 0.04 | |
| 30 | 17.68 | 33.47 | 5.58 | 373 | 20 | 17.93 | 33.44 | 5.57 | 24.12 | 380 | 0.08 | |
| 40 | 17.30 | 33.41 | 5.67 | 369 | 30 | 17.68 | 33.47 | 5.58 | 24.20 | 373 | 0.12 | |
| 49 | 15.91 | 33.34 | 5.91 | 343 | 50 | 15.78 | 33.34 | 5.92 | 24.54 | 340 | 0.19 | |
| 60 | 14.82 | 33.35 | 5.97 | 320 | 75 | 13.12 | 33.43 | 5.60 | 25.17 | 281 | 0.26 | |
| 68 | 13.95 | 33.42 | 5.78 | 297 | 100 | 10.78 | 33.45 | 4.73 | 25.63 | 237 | 0.33 | |
| 83 | 12.24 | 33.44 | 5.42 | 263 | 150 | 9.19 | 33.82 | 3.33 | 26.19 | 184 | 0.44 | |
| 97 | 10.84 | 33.44 | 4.85 | 239 | 200 | 8.30 | 33.89 | 2.85 | 26.38 | 166 | 0.53 | |
| 112 | 10.45 | 33.51 | 4.21 | 227 | 250 | 7.60 | 34.05 | 1.92 | 26.61 | 144 | 0.60 | |
| 135 | 9.68 | 33.70 | 3.61 | 200 | 300 | 7.11 | 34.13 | 1.57 | 26.74 | 132 | 0.68 | |
| 163 | 8.80 | 33.89 | 3.10 | 173 | 400 | 6.60 | 34.22 | 0.97 | 26.89 | 117 | 0.81 | |
| 196 | 8.35 | 33.89 | 2.89 | 166 | 500 | 6.00 | 34.32 | 0.63 | 27.03 | 104 | 0.92 | |
| 243 | 7.68 | 34.04 | 2.03 | 146 | | | | | | | | |
| 319 | 6.98 | 34.16 | 1.46 | 127 | | | | | | | | |
| 416 | 6.50 | 34.25 | 0.84 | 115 | | | | | | | | |
| 544 | 5.75 | 34.34 | 0.56 | 99 | | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

103.50 ORCA; July 14, 1958; 0802 GCT; 30°24'N, 117°43'W; sounding, 1450 fm; wind, calm; weather, cloudy; sea, smooth; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.98 | 33.53 | 5.61 | 399 | 0 | 18.98 | 33.53 | 5.61 | 23.93 | 399 | 0.00 |
| 10 | 18.95 | 33.55 | 5.40 | 397 | 10 | 18.95 | 33.55 | 5.40 | 23.95 | 397 | 0.04 |
| 29 | 18.78 | 33.56 | 5.50 | 392 | 20 | 18.82 | 33.56 | 5.45 | 23.99 | 393 | 0.08 |
| 39 | 18.89 | 33.66 | 5.50 | 388 | 30 | 18.78 | 33.56 | 5.50 | 24.00 | 392 | 0.12 |
| 49 | 17.90 | 33.64 | 5.75 | 366 | 50 | 17.78 | 33.64 | 5.78 | 24.30 | 363 | 0.19 |
| 58 | 17.02 | 33.61 | 5.93 | 348 | 75 | 16.39 | 33.58 | 5.91 | 24.59 | 336 | 0.28 |
| 68 | 16.66 | 33.61 | 5.90 | 340 | 100 | 15.35 | 33.58 | 5.89 | 24.82 | 314 | 0.36 |
| 83 | 16.09 | 33.55 | 5.94 | 332 | 150 | 10.46 | 33.54 | 4.81 | 25.76 | 225 | 0.50 |
| 97 | 15.53 | 33.58 | 5.89 | 317 | 200 | 8.66 | 33.89 | 3.28 | 26.32 | 171 | 0.60 |
| 112 | 13.60 | 33.55 | 5.87 | 280 | 250 | 8.30 | 34.06 | 2.49 | 26.51 | 153 | 0.68 |
| 135 | 10.82 | 33.46 | 4.99 | 237 | 300 | 8.08 | 34.19 | 1.57 | 26.65 | 140 | 0.76 |
| 163 | 9.38 | 33.61 | 4.07 | 202 | 400 | 7.00 | 34.23 | 0.91 | 26.83 | 123 | 0.89 |
| 196 | 8.70 | 33.87 | 3.35 | 173 | 500 | 6.28 | 34.28 | 0.66 | 26.97 | 110 | 1.02 |
| 242 | 8.33 | 34.04 | 2.51 | 155 | | | | | | | |
| 317 | 8.00 | 34.22 | 1.31 | 137 | | | | | | | |
| 414 | 6.84 | 34.23 | 0.87 | 120 | | | | | | | |
| 539 | 6.02 | 34.31 | 0.57 | 104 | | | | | | | |

103.60 ORCA; July 14, 1958; 1546 GCT; 29°57'N, 118°23.5'W; sounding, 1800 fm; wind, 300°, force 1; weather, cloudy; sea, slight; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.16 | 33.55 | 5.23 | 402 | 0 | 19.16 | 33.55 | 5.23 | 23.90 | 402 | 0.00 |
| 10 | 19.12 | 33.60 | 5.38 | 397 | 10 | 19.12 | 33.60 | 5.38 | 23.95 | 397 | 0.04 |
| 30 | 18.99 | 33.66 | 5.39 | 390 | 20 | 19.03 | 33.65 | 5.39 | 24.00 | 392 | 0.08 |
| 40 | 18.92 | 33.63 | 5.30 | 390 | 30 | 18.99 | 33.66 | 5.39 | 24.02 | 390 | 0.12 |
| 49 | 18.82 | 33.59 | 5.31 | 391 | 50 | 18.81 | 33.59 | 5.32 | 24.02 | 390 | 0.20 |
| 59 | 18.28 | 33.66 | 5.51 | 373 | 75 | 15.60 | 33.53 | 5.80 | 24.73 | 323 | 0.29 |
| 68 | 16.44 | 33.56 | 5.72 | 339 | 100 | 13.08 | 33.49 | 5.02 | 25.23 | 275 | 0.36 |
| 82 | 14.86 | 33.51 | 5.82 | 309 | 150 | 10.28 | 33.83 | 3.00 | 26.02 | 200 | 0.48 |
| 97 | 13.34 | 33.48 | 5.18 | 280 | 200 | 10.04 | 34.21 | 1.69 | 26.36 | 168 | 0.57 |
| 111 | 12.01 | 33.58 | 4.42 | 249 | 250 | 9.13 | 34.25 | 1.56 | 26.54 | 151 | 0.66 |
| 134 | 11.05 | 33.73 | 3.39 | 221 | 300 | 8.41 | 34.23 | 1.50 | 26.64 | 141 | 0.73 |
| 162 | 10.39 | 33.94 | 2.63 | 194 | 400 | 7.20 | 34.24 | 0.84 | 26.82 | 124 | 0.87 |
| 196 | 10.14 | 34.21 | 1.73 | 170 | 500 | 6.45 | 34.30 | 0.61 | 26.96 | 111 | 0.99 |
| 243 | 9.20 | 34.25 | 1.58 | 152 | | | | | | | |
| 319 | 8.12 | 34.23 | 1.46 | 138 | | | | | | | |
| 416 | 7.02 | 34.24 | 0.77 | 122 | | | | | | | |
| 543 | 6.17 | 34.34 | 0.55 | 104 | | | | | | | |

103.70 ORCA; July 14, 1958; 2202 GCT; 29°39.5'N, 119°04'W; sounding, 1800 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.48 | 33.57 | 5.14 | 408 | 0 | 19.48 | 33.57 | 5.14 | 23.82 | 408 | 0.00 |
| 10 | 19.28 | 33.62 | 5.32 | 400 | 10 | 19.28 | 33.62 | 5.32 | 23.92 | 400 | 0.04 |
| 29 | 18.88 | 33.55 | 5.33 | 395 | 20 | 19.06 | 33.59 | 5.33 | 23.94 | 398 | 0.08 |
| 58 | 17.72 | 33.57 | 5.49 | 366 | 30 | 18.86 | 33.55 | 5.33 | 23.97 | 395 | 0.12 |
| 67 | 16.50 | 33.53 | 5.76 | 342 | 50 | 18.50 | 33.56 | 5.37 | 24.06 | 386 | 0.20 |
| 77 | 16.04 | 33.53 | 5.72 | 332 | 75 | 16.15 | 33.53 | 5.73 | 24.61 | 334 | 0.29 |
| 91 | 14.27 | 33.48 | 4.72 | 299 | 100 | 13.19 | 33.48 | 4.78 | 25.22 | 276 | 0.37 |
| 105 | 12.74 | 33.51 | 4.80 | 267 | 150 | 10.63 | 33.74 | 3.25 | 25.87 | 214 | 0.49 |
| 119 | 11.62 | 33.52 | 4.32 | 246 | 200 | 9.60 | 34.02 | 2.47 | 26.28 | 175 | 0.59 |
| 137 | 11.00 | 33.62 | 3.87 | 228 | 250 | 9.37 | 34.24 | 1.50 | 26.48 | 156 | 0.67 |
| 155 | 10.56 | 33.79 | 3.12 | 208 | 300 | 8.66 | 34.27 | 1.11 | 26.62 | 143 | 0.75 |
| 182 | 10.06 | 34.00 | 2.43 | 185 | 400 | 7.25 | 34.26 | 0.77 | 26.82 | 124 | 0.89 |
| 204 | 9.50 | 34.03 | 2.47 | 173 | 500 | 6.34 | 34.28 | 0.48 | 26.97 | 110 | 1.01 |
| 255 | 9.33 | 34.25 | 1.25 | 154 | | | | | | | |
| 333 | 8.18 | 34.27 | 1.03 | 136 | | | | | | | |
| 437 | 6.84 | 34.26 | 0.65 | 118 | | | | | | | |
| 572 | 5.78 | 34.31 | 0.33 | 101 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

ORCA; July 15, 1958; 0425 GCT; 29°25.5'N, 119°46.0'W; sounding, 1900+ fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 10°. 103.80

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.98 | 33.72 | 5.02 | 409 | 0 | 19.98 | 33.72 | 5.02 | 23.81 | 410 | 0.00 | |
| 10 | 19.96 | 33.74 | 5.25 | 408 | 10 | 19.96 | 33.74 | 5.25 | 23.83 | 408 | 0.04 | |
| 30 | 19.88 | 33.72 | 5.11 | 407 | 20 | 19.92 | 33.73 | 5.15 | 23.84 | 408 | 0.08 | |
| 44 | 18.26 | 33.76 | 5.56 | 365 | 30 | 19.88 | 33.72 | 5.11 | 23.84 | 407 | 0.12 | |
| 54 | 17.67 | 33.77 | 5.67 | 351 | 50 | 17.92 | 33.77 | 5.62 | 24.37 | 356 | 0.20 | |
| 63 | 17.13 | 33.72 | 5.64 | 343 | 75 | 16.88 | 33.70 | 5.61 | 24.57 | 338 | 0.29 | |
| 73 | 16.91 | 33.70 | 5.61 | 339 | 100 | 15.80 | 33.69 | 5.60 | 24.80 | 316 | 0.37 | |
| 91 | 16.47 | 33.71 | 5.60 | 328 | 150 | 11.80 | 33.50 | 5.02 | 25.48 | 251 | 0.51 | |
| 105 | 15.42 | 33.68 | 5.61 | 308 | 200 | 9.12 | 33.71 | 3.89 | 26.11 | 191 | 0.62 | |
| 119 | 14.16 | 33.59 | 5.60 | 288 | 250 | 8.20 | 33.93 | 2.80 | 26.43 | 161 | 0.72 | |
| 143 | 12.44 | 33.51 | 5.18 | 262 | 300 | 7.48 | 34.00 | 2.11 | 26.58 | 146 | 0.80 | |
| 171 | 10.12 | 33.48 | 4.63 | 224 | 400 | 6.52 | 34.12 | 1.09 | 26.82 | 124 | 0.94 | |
| 209 | 8.86 | 33.78 | 3.62 | 182 | 500 | 5.88 | 34.26 | 0.60 | 27.00 | 106 | 1.06 | |
| 261 | 8.02 | 33.96 | 2.60 | 157 | 600 | (5.29) | (34.34) | | (27.14) | (93) | (1.16) | |
| 342 | 6.98 | 34.04 | 1.64 | 136 | | | | | | | | |
| 443 | 6.21 | 34.20 | 0.74 | 114 | | | | | | | | |
| 586 | 5.38 | 34.33 | 0.42 | 95 | | | | | | | | |

ORCA; July 15, 1958; 1116 GCT; 29°04'N, 120°31'W; sounding, 2000 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°. 103.90

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.00 | 33.61 | 5.30 | 418 | 0 | 20.00 | 33.61 | 5.30 | 23.72 | 418 | 0.00 | |
| 10 | 19.98 | 33.64 | 5.31 | 416 | 10 | 19.98 | 33.64 | 5.31 | 23.75 | 416 | 0.04 | |
| 29 | 19.58 | 33.70 | 5.42 | 402 | 20 | 19.77 | 33.68 | 5.37 | 23.83 | 408 | 0.08 | |
| 44 | 17.86 | 33.75 | 5.88 | 356 | 30 | 19.56 | 33.70 | 5.44 | 23.91 | 401 | 0.12 | |
| 54 | 17.46 | 33.73 | 5.74 | 349 | 50 | 17.58 | 33.74 | 5.76 | 24.42 | 352 | 0.20 | |
| 63 | 17.29 | 33.75 | 5.81 | 344 | 75 | 17.14 | 33.76 | 5.80 | 24.55 | 339 | 0.29 | |
| 74 | 17.16 | 33.76 | 5.80 | 340 | 100 | 16.00 | 33.63 | 5.84 | 24.72 | 324 | 0.37 | |
| 93 | 16.26 | 33.61 | 5.85 | 331 | 150 | 12.50 | 33.59 | 5.27 | 25.40 | 258 | 0.52 | |
| 107 | 15.91 | 33.64 | 5.84 | 321 | 200 | 9.69 | 33.60 | 4.39 | 25.93 | 208 | 0.64 | |
| 123 | 15.30 | 33.63 | 5.70 | 309 | 250 | 8.50 | 33.89 | 3.13 | 26.34 | 169 | 0.74 | |
| 147 | 12.87 | 33.60 | 5.35 | 263 | 300 | 7.90 | 34.05 | 2.30 | 26.57 | 148 | 0.82 | |
| 175 | 10.62 | 33.51 | 4.85 | 230 | 400 | 6.85 | 34.18 | 1.20 | 26.82 | 124 | 0.96 | |
| 213 | 9.34 | 33.64 | 4.10 | 200 | 500 | 5.99 | 34.24 | 0.70 | 26.98 | 109 | 1.08 | |
| 265 | 8.25 | 33.96 | 2.82 | 160 | 600 | (5.43) | (34.31) | | (27.10) | (97) | (1.19) | |
| 345 | 7.50 | 34.14 | 1.77 | 136 | | | | | | | | |
| 447 | 6.36 | 34.20 | 0.90 | 116 | | | | | | | | |
| 587 | 5.52 | 34.30 | 0.47 | 99 | | | | | | | | |

ORCA; July 18, 1958; 1335 GCT; 30°25'N, 116°12'W; sounding, 100+ fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 10°. 107.32

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.28 | 33.52 | 6.34 | 338 | 0 | 16.28 | 33.52 | 6.34 | 24.57 | 338 | 0.00 | |
| 10 | 15.94 | 33.51 | 6.38 | 331 | 10 | 15.94 | 33.51 | 6.38 | 24.64 | 331 | 0.03 | |
| 30 | 13.00 | 33.62 | 5.30 | 264 | 20 | 13.90 | 33.57 | 5.78 | 25.13 | 284 | 0.06 | |
| 49 | 11.30 | 33.58a) | 4.29 | 236 | 30 | 13.00 | 33.62 | 5.30 | 25.35 | 264 | 0.09 | |
| 75 | 10.66 | 33.76 | 3.68 | 212 | 50 | 11.25 | 33.58 | 4.25 | 25.65 | 235 | 0.14 | |
| 99 | 10.62 | 33.96 | 2.73 | 197 | 75 | 10.66 | 33.76 | 3.68 | 25.89 | 212 | 0.20 | |
| 123 | 10.52 | 34.02 | 2.07 | 190 | 100 | 10.62 | 33.97 | 2.70 | 26.06 | 196 | 0.25 | |
| 151 | 10.46 | - | - | | 150 | 10.46 | | | | | | |

a) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

S10

CCOFI
5807

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **107.35** | ORCA; July 18, 1958; 1115 GCT; 30°20'N, 116°23'W; sounding, 1000 fm; wind, 300°, force 3; weather, cloudy; sea, slight; wire angle, 27°. | | | | | | | | | | |
| 0 | 18.34 | 33.55 | 5.87 | 382 | 0 | 18.34 | 33.55 | 5.87 | 24.10 | 382 | 0.00 |
| 8 | 18.24 | 33.54 | 5.90 | 381 | 10 | 18.22 | 33.54 | 5.91 | 24.12 | 380 | 0.04 |
| 27 | 17.28 | 33.48 | 6.27 | 363 | 20 | 18.00 | 33.53 | 5.99 | 24.16 | 377 | 0.08 |
| 36 | 16.99 | 33.46 | 6.17 | 358 | 30 | 17.18 | 33.47 | 6.21 | 24.32 | 361 | 0.11 |
| 44 | 16.14 | 33.42 | 6.45 | 342 | 50 | 15.50 | 33.42 | 6.48 | 24.66 | 328 | 0.18 |
| 53 | 15.20 | 33.42 | 6.50 | 322 | 75 | 12.42 | 33.49 | 5.40 | 25.35 | 264 | 0.26 |
| 62 | 14.31 | 33.45 | 6.66 | 302 | 100 | 10.46 | 33.49 | 4.84 | 25.71 | 229 | 0.32 |
| 74 | 12.58 | 33.49 | 5.47 | 265 | 150 | 9.22 | 33.77 | 3.59 | 26.14 | 188 | 0.42 |
| 87 | 11.58 | 33.48 | 5.02 | 248 | 200 | 8.65 | 33.96 | 2.62 | 26.38 | 166 | 0.51 |
| 100 | 10.46 | 33.49 | 4.84 | 229 | 250 | 8.84 | 34.16 | 1.83 | 26.51 | 154 | 0.60 |
| 119 | 9.90 | 33.58 | 4.34 | 213 | 300 | 8.30 | 34.22 | 1.56 | 26.64 | 142 | 0.67 |
| 141 | 9.48 | 33.74 | 3.78 | 194 | 400 | 6.83 | 34.23 | 1.12 | 26.85 | 121 | 0.81 |
| 168 | 8.80 | 33.84 | 3.40 | 177 | 500 | (6.40) | (34.34) | (0.46) | (27.00 | (106) | (0.93) |
| 209 | 8.98 | - | 2.04 | | | | | | | | |
| 276 | 8.72 | 34.22 | 1.65 | 148 | | | | | | | |
| 365 | 7.13 | 34.19 | 1.40 | 127 | | | | | | | |
| 490 | 6.44 | 34.33 | 0.57 | 108 | | | | | | | |
| **107.40** | ORCA; July 18, 1958; 0726 GCT; 30°10'N, 116°43'W; sounding, 1500 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 18.46 | 33.48 | 5.50 | 390 | 0 | 18.46 | 33.48 | 5.50 | 24.02 | 390 | 0.00 |
| 10 | 18.44 | 33.49 | 5.57 | 390 | 10 | 18.44 | 33.49 | 5.57 | 24.02 | 390 | 0.04 |
| 34 | 16.53 | 33.46 | 6.02 | 348 | 20 | 18.43 | 33.49 | 5.58 | 24.03 | 389 | 0.08 |
| 43 | 15.60 | 33.48 | 6.16 | 326 | 30 | 17.30 | 33.47 | 5.88 | 24.29 | 364 | 0.12 |
| 58 | 14.77 | 33.40 | 6.12 | 315 | 50 | 15.10 | 33.44 | 6.17 | 24.76 | 319 | 0.18 |
| 67 | 14.62 | 33.44 | 6.01 | 309 | 75 | 14.40 | 33.46 | 5.90 | 24.94 | 303 | 0.26 |
| 76 | 14.32 | 33.46 | 5.86 | 301 | 100 | 12.05 | 33.48 | 5.35 | 25.41 | 258 | 0.33 |
| 94 | 12.55 | 33.47 | 5.43 | 266 | 150 | 9.53 | 33.60 | 4.12 | 25.96 | 206 | 0.45 |
| 113 | 11.20 | 33.57a) | 5.17 | | 200 | 8.46 | 33.86 | 3.15 | 26.33 | 170 | 0.54 |
| 126 | 10.40 | 33.51 | 4.95 | 226 | 250 | 8.00 | 34.02 | 2.50 | 26.52 | 152 | 0.63 |
| 149 | 9.58 | 33.60 | 4.16 | 206 | 300 | 7.66 | 34.11 | 1.71 | 26.64 | 141 | 0.70 |
| 186 | 8.73 | 33.79 | 3.36 | 179 | 400 | 6.95 | 34.24 | 0.95 | 26.86 | 120 | 0.84 |
| 223 | 8.18 | 33.96 | 2.80 | 158 | 500 | 6.35 | 34.34 | 0.40 | 27.02 | 105 | 0.96 |
| 279 | 7.84 | 34.08 | 1.96 | 145 | 600 | 5.68 | 34.35 | 0.30 | 27.10 | 97 | 1.06 |
| 363 | 7.18 | 34.19 | 1.20 | 128 | | | | | | | |
| 473 | 6.50 | 34.34 | 0.45 | 108 | | | | | | | |
| 620 | 5.58 | 34.35 | 0.30 | 96 | | | | | | | |
| **107.50** | ORCA; July 18, 1958; 0044 GCT; 29°49.5'N, 117°20.5'W; sounding, 1450 fm; wind, 310°, force 5; weather, cloudy; sea, rough; wire angle, 25°. | | | | | | | | | | |
| 0 | 19.30 | 33.63 | 5.56 | 400 | 0 | 19.30 | 33.63 | 5.56 | 23.92 | 400 | 0.00 |
| 9 | 19.29 | 33.65 | 5.49 | 398 | 10 | 19.29 | 33.65 | 5.49 | 23.94 | 398 | 0.04 |
| 32 | 19.26 | 33.63 | 5.50 | 398 | 20 | 19.29 | 33.64 | 5.49 | 23.94 | 398 | 0.08 |
| 42 | 18.36 | 33.57 | 5.69 | 381 | 30 | 19.27 | 33.63 | 5.50 | 23.94 | 398 | 0.12 |
| 55 | 16.37 | 33.45 | 5.65 | 345 | 50 | 17.00 | 33.48 | 5.66 | 24.38 | 356 | 0.19 |
| 64 | 16.02 | 33.42 | 5.87 | 340 | 75 | 15.62 | 33.44 | 5.95 | 24.66 | 329 | 0.28 |
| 74 | 15.64 | 33.44 | 5.95 | 330 | 100 | 13.25 | 33.51 | 5.57 | 25.22 | 276 | 0.36 |
| 91 | 14.33 | 33.56 | 5.82 | 294 | 150 | 10.13 | 33.67 | 4.32 | 25.91 | 210 | 0.48 |
| 110 | 12.11 | 33.48 | 5.29 | 258 | 200 | 9.66 | 34.00 | 2.62 | 26.25 | 178 | 0.58 |
| 123 | 11.26 | 33.57 | 4.98 | 236 | 250 | 9.12 | 34.18 | 1.82 | 26.48 | 156 | 0.66 |
| 144 | 10.28 | 33.66 | 4.42 | 213 | 300 | 8.23 | 34.22 | 1.49 | 26.64 | 140 | 0.74 |
| 180 | 9.46 | 33.76 | 3.74 | 193 | 400 | 7.42 | 34.30 | 0.73 | 26.84 | 122 | 0.88 |
| 215 | 9.84 | 34.13 | 2.13 | 171 | 500 | 6.82 | 34.40 | 0.32 | 26.98 | 108 | 1.00 |
| 268 | 8.72 | 34.19 | 1.71 | 150 | 600 | (6.14) | (34.42) | (0.27) | (27.10) | (97) | (1.11) |
| 350 | 7.67 | 34.26 | 1.07 | 129 | | | | | | | |
| 454 | 7.14 | 34.38 | 0.36 | 114 | | | | | | | |
| 597 | 6.18 | 34.42 | 0.27 | 98 | | | | | | | |

a) Loose bottle cap; value does not fall on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| ORCA; July 16, 1958; 1821 GCT; 29°33.5'N, 118°01'W; sounding, 1900+ fm; wind, 330°, force 5; weather, cloudy; sea, rough; wire angle, 25°. | | | | | | | | | | | | 107.60 |
| 0 | 19.97 | 33.71 | 5.61 | 410 | 0 | 19.97 | 33.71 | 5.61 | 23.81 | 410 | 0.00 | |
| 9 | 19.96 | - | 5.46 | | 10 | 19.96 | 33.70 | 5.46 | 23.81 | 410 | 0.04 | |
| 32 | 19.90 | 33.68 | 5.59 | 410 | 20 | 19.95 | 33.69 | 5.52 | 23.81 | 410 | 0.08 | |
| 40 | 19.76 | 33.65 | 5.57 | 409 | 30 | 19.92 | 33.68 | 5.57 | 23.81 | 410 | 0.12 | |
| 54 | 18.31 | 33.60 | 5.88 | 378 | 50 | 18.95 | 33.62 | 5.71 | 24.00 | 392 | 0.20 | |
| 62 | 17.26 | 33.57 | 6.40 | 356 | 75 | 15.74 | 33.57 | 6.01 | 24.73 | 323 | 0.29 | |
| 71 | 16.20 | 33.58 | 6.13 | 332 | 100 | 12.87 | 33.51 | 5.33 | 25.28 | 270 | 0.37 | |
| 89 | 14.38 | 33.84a) | 5.71 | | 150 | 10.18 | 33.67 | 4.15 | 25.91 | 210 | 0.49 | |
| 107 | 12.00 | 33.49 | 5.10 | 255 | 200 | 9.39 | 33.92 | 2.96 | 26.24 | 179 | 0.59 | |
| 120 | 11.18 | 33.51 | 4.75 | 239 | 250 | 8.69 | 34.08 | 2.13 | 26.46 | 158 | 0.67 | |
| 142 | 10.38 | 33.61 | 4.40 | 218 | 300 | 7.90 | 34.15 | 1.64 | 26.64 | 140 | 0.75 | |
| 178 | 9.70 | 33.85 | 3.27 | 190 | 400 | (6.75) | | (1.08) | | | | |
| 214 | 9.04 | 33.98 | 2.74 | 170 | | | | | | | | |
| 269 | 8.46 | 34.14 | 1.85 | 150 | | | | | | | | |
| 352 | 6.94 | 34.16 | 1.30 | 127 | | | | | | | | |
| 395p | 6.78 | - | 1.10 | | | | | | | | | |
| ORCA; July 16, 1958; 0918 GCT; 29°10'N, 118°44'W; sounding, 2000+ fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 35°. | | | | | | | | | | | | 107.70 |
| 0 | 19.89 | 33.84 | 5.31 | 399 | 0 | 19.89 | 33.84 | 5.31 | 23.93 | 399 | 0.00 | |
| 8 | 19.88 | 33.73 | 5.43 | 407 | 10 | 19.87 | 33.73 | 5.43 | 23.84 | 407 | 0.04 | |
| 24 | 19.70 | 33.73 | 5.35 | 402 | 20 | 19.77 | 33.73 | 5.37 | 23.88 | 404 | 0.08 | |
| 37 | 19.16 | 33.69 | 5.43 | 392 | 30 | 19.53 | 33.72 | 5.37 | 23.93 | 399 | 0.12 | |
| 45 | 17.88 | 33.66 | 5.63 | 364 | 50 | 17.49 | 33.65 | 5.78 | 24.38 | 355 | 0.20 | |
| 53 | 17.28 | 33.64 | 5.83 | 352 | 75 | 14.40 | 33.58 | 5.35 | 25.03 | 294 | 0.28 | |
| 62 | 16.23 | 33.57 | 5.84 | 333 | 100 | 12.03 | 33.67 | 4.05 | 25.58 | 242 | 0.35 | |
| 78 | 14.06 | 33.58 | 5.30 | 288 | 150 | 10.09 | 33.92 | 2.70 | 26.11 | 191 | 0.45 | |
| 90 | 12.80 | 33.52 | 5.21 | 267 | 200 | 10.13 | 34.28 | 1.35 | 26.39 | 165 | 0.54 | |
| 101 | 11.96 | 33.69 | 3.89 | 240 | 250 | 8.87 | 34.27 | 1.66 | 26.58 | 146 | 0.62 | |
| 119 | 11.29 | 33.86 | 3.02 | 216 | 300 | 7.95 | 34.22 | 1.59 | 26.70 | 136 | 0.70 | |
| 138 | 10.66 | 33.89 | 2.73 | 202 | 400 | 7.04 | 34.27 | 0.94 | 26.86 | 120 | 0.83 | |
| 164 | 9.76 | 33.95 | 2.65 | 183 | | | | | | | | |
| 202 | 10.12 | 34.29 | 1.30 | 164 | | | | | | | | |
| 264 | 8.30 | 34.23 | 1.85 | 140 | | | | | | | | |
| 343 | 7.57 | 34.22 | 1.31 | 130 | | | | | | | | |
| 465 | 6.42 | 34.47b) | 0.59 | 98 | | | | | | | | |
| ORCA; July 16, 1958; 0215 GCT; 28°51'N, 119°19'W; sounding, 2000+ fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 23°. | | | | | | | | | | | | 107.80 |
| 0 | 19.68 | 33.63 | 5.42 | 409 | 0 | 19.68 | 33.63 | 5.42 | 23.82 | 409 | 0.00 | |
| 9 | 19.66 | 33.62 | 5.43 | 409 | 10 | 19.63 | 33.62 | 5.44 | 23.82 | 409 | 0.04 | |
| 28 | 19.36 | 33.70 | 5.36 | 396 | 20 | 19.47 | 33.67 | 5.37 | 23.90 | 401 | 0.08 | |
| 42 | 19.22 | 33.70 | 5.36 | 392 | 30 | 19.34 | 33.70 | 5.36 | 23.96 | 396 | 0.12 | |
| 51 | 19.16 | 33.72 | 5.41 | 390 | 50 | 19.17 | 33.72 | 5.40 | 24.02 | 390 | 0.20 | |
| 60 | 18.17 | 33.66 | 5.59 | 370 | 75 | 16.73 | 33.56 | 5.74 | 24.49 | 345 | 0.29 | |
| 69 | 17.20 | 33.58 | 5.75 | 354 | 100 | 14.70 | 33.55 | 5.48 | 24.94 | 302 | 0.38 | |
| 85 | 15.94 | 33.52 | 5.73 | 330 | 150 | 10.57 | 33.74 | 3.49 | 25.90 | 212 | 0.50 | |
| 96 | 15.06 | 33.55 | 5.56 | 310 | 200 | 9.85 | 34.04 | 2.16 | 26.24 | 179 | 0.60 | |
| 109 | 13.72 | 33.55 | 5.32 | 282 | 250 | 8.88 | 34.16 | 2.00 | 26.50 | 154 | 0.69 | |
| 127 | 11.42 | 33.61 | 4.19 | 236 | 300 | 8.10 | 34.21 | 1.45 | 26.66 | 139 | 0.76 | |
| 151 | 10.50 | 33.75 | 3.48 | 210 | 400 | 7.62 | 34.35 | 0.56 | 26.84 | 122 | 0.90 | |
| 183 | 9.54 | 33.86 | 2.26 | 186 | 500 | 6.39 | 34.32 | 0.42 | 26.98 | 108 | 1.02 | |
| 229 | 9.23 | 34.14 | 2.13 | 161 | | | | | | | | |
| 298 | 8.10 | 34.21 | 1.47 | 139 | | | | | | | | |
| 389 | 7.75 | 34.35 | 0.59 | 124 | | | | | | | | |
| 518 | 6.12 | 34.31 | 0.39 | 105 | | | | | | | | |

a) Loose bottle cap; value does not fall on property curve.
b) Loose bottle cap; value falls on property curve.

SIO

CCOFI 5807

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

107.90 ORCA; July 15, 1958; 1716, 1755 GCT; 28°26'N, 120°08'W; sounding, 2000 fm; wind, 320°, force 2; weather, cloudy; sea, moderate; wire angle, 15°, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.16 | 33.68 | 5.17 | 417 | 0 | 20.16 | 33.68 | 5.17 | 23.74 | 417 | 0.00 |
| 10 | 19.96 | 33.66 | 5.27 | 414 | 10 | 19.96 | 33.66 | 5.27 | 23.77 | 414 | 0.04 |
| 28 | 19.68 | 33.71 | 5.22 | 403 | 20 | 19.80 | 33.69 | 5.22 | 23.84 | 407 | 0.08 |
| 43 | 17.96 | 33.71 | 5.82 | 362 | 30 | 19.54 | 33.71 | 5.27 | 23.93 | 399 | 0.12 |
| 52 | 17.48 | 33.78 | 5.65 | 346 | 50 | 17.50 | 33.78 | 5.66 | 24.47 | 347 | 0.20 |
| 62 | 17.34 | 33.78 | 5.61 | 343 | 75 | 17.07 | 33.79 | 5.43 | 24.58 | 337 | 0.28 |
| 71 | 17.12 | 33.78 | 5.46 | 338 | 100 | 16.66 | 33.82 | 5.52 | 24.70 | 325 | 0.37 |
| 89 | 16.99 | 33.82 | 5.37 | 332 | 150 | 10.98 | 33.48 | 4.78 | 25.62 | 238 | 0.51 |
| 102 | 16.60 | 33.82 | 5.57 | 323 | 200 | 9.64 | 33.89 | 3.10 | 26.17 | 186 | 0.61 |
| 116 | 14.22 | 33.58 | 5.51 | 290 | 250 | 8.80 | 34.09 | 2.41 | 26.46 | 158 | 0.70 |
| 138 | 11.48 | 33.47 | 4.95 | 247 | 300 | 8.31 | 34.19 | 1.87 | 26.61 | 144 | 0.78 |
| | | | | | 400 | 7.98 | 34.33 | 0.95 | 26.78 | 128 | 0.92 |
| 164 | 10.52 | 33.51 | 4.49 | 228 | 500 | 7.00 | 34.32 | 0.55 | 26.90 | 116 | 1.05 |
| 199 | 9.64 | 33.89 | 3.10 | 186 | | | | | | | |
| 249 | 8.80 | 34.09 | 2.41 | 158 | | | | | | | |
| 326 | 8.14 | 34.22 | 1.64 | 139 | | | | | | | |
| 423 | 7.94 | 34.36a) | 0.83 | 125 | | | | | | | |
| 562 | 6.14 | 34.27a) | 0.34 | 108 | | | | | | | |

110.33 ORCA; July 18, 1958; 1812 GCT; 29°50'N, 115°52'W; sounding, 50+ fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.66 | 33.58 | 6.50 | 280 | 0 | 13.66 | 33.58 | 6.50 | 25.18 | 280 | 0.00 |
| 10 | 12.97 | 33.58 | 5.95 | 266 | 10 | 12.97 | 33.58 | 5.95 | 25.32 | 266 | 0.03 |
| 30 | 11.46 | 33.64 | 4.44 | 235 | 20 | 12.12 | 33.61 | 5.04 | 25.51 | 248 | 0.05 |
| 50 | 10.92 | 33.71 | 3.56 | 220 | 30 | 11.46 | 33.64 | 4.44 | 25.65 | 235 | 0.08 |
| 75 | 10.64 | 33.84 | 2.33 | 206 | 50 | 10.92 | 33.71 | 3.56 | 25.80 | 220 | 0.12 |
| | | | | | 75 | 10.64 | 33.84 | 2.33 | 25.96 | 206 | 0.18 |

110.35 ORCA; July 18, 1958; 1946 GCT; 29°47'N, 116°00'W; sounding, 800 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.23 | 33.57 | 6.50 | 312 | 0 | 15.23 | 33.57 | 6.50 | 24.84 | 312 | 0.00 |
| 11 | 14.00 | 33.58 | 6.51 | 286 | 10 | 14.10 | 33.58 | 6.50 | 25.10 | 288 | 0.03 |
| 31 | 12.84 | 33.57 | 5.45 | 264 | 20 | 12.90 | 33.53 | 5.77 | 25.29 | 269 | 0.06 |
| 41 | 11.84 | 33.48 | 4.85 | 253 | 30 | 12.86 | 33.57 | 5.47 | 25.34 | 264 | 0.08 |
| 50 | 11.62 | 33.61 | 4.35 | 240 | 50 | 11.62 | 33.61 | 4.35 | 25.60 | 240 | 0.13 |
| 60 | 11.30 | 33.68 | 3.95 | 229 | 75 | 10.86 | 33.72 | 3.59 | 25.81 | 219 | 0.19 |
| 70 | 11.05 | 33.64u | 3.71 | | 100 | 10.42 | 33.78 | 3.18 | 25.95 | 206 | 0.25 |
| 84 | 10.58 | 33.73 | 3.40 | 213 | 150 | 9.64 | 34.00 | 2.50 | 26.25 | 178 | 0.34 |
| 99 | 10.42 | 33.78 | 3.18 | 206 | 200 | 9.38 | 34.21 | 1.74 | 26.46 | 158 | 0.43 |
| 114 | 10.16 | 33.86 | 2.95 | 196 | 250 | 8.94 | 34.27 | 1.24 | 26.58 | 147 | 0.51 |
| 137 | 9.82 | 33.96 | 2.60 | 184 | 300 | 8.73 | 34.33 | 0.93 | 26.66 | 139 | 0.58 |
| 166 | 9.40 | 34.04 | 2.34 | 171 | 400 | 7.92 | 34.34 | 0.66 | 26.80 | 126 | 0.72 |
| 199 | 9.38 | 34.21 | 1.74 | 158 | 500 | 6.72 | 34.32 | 0.50 | 26.95 | 112 | 0.84 |
| 247 | 8.98 | 34.27 | 1.29 | 147 | | | | | | | |
| 323 | 8.60 | 34.36 | 0.78 | 135 | | | | | | | |
| 419 | 7.68 | 34.34 | 0.63 | 124 | | | | | | | |
| 548 | 6.04 | 34.31 | 0.42 | 104 | | | | | | | |

a) Salinity samples at 423 and 562 meters appear to have been reversed; they are assumed to be listed in correct order.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |

ORCA; July 18, 1958; 2310 GCT; 29°35'N, 116°19'W; sounding, 1174 fm; wind, 300°, force 4; weather, partly cloudy; sea, moderate; wire angle, 24°. 110.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.18 | 33.54 | 5.51 | 403 | 0 | 19.18 | 33.54 | 5.51 | 23.89 | 403 | 0.00 |
| 9 | 18.98 | 33.57 | 5.57 | 396 | 10 | 18.96 | 33.57 | 5.57 | 23.96 | 396 | 0.04 |
| 28 | 18.66 | 33.51 | 5.55 | 393 | 20 | 18.78 | 33.54 | 5.55 | 23.98 | 394 | 0.08 |
| 40 | 16.19 | 33.45 | 6.08 | 341 | 30 | 18.35 | 33.50 | 5.61 | 24.06 | 386 | 0.12 |
| 49 | 15.82 | 33.44 | 6.13 | 334 | 50 | 15.80 | 33.44 | 6.12 | 24.62 | 333 | 0.19 |
| 58 | 15.51 | 33.47 | 6.06 | 325 | 75 | 13.97 | 33.47 | 5.68 | 25.04 | 294 | 0.27 |
| 67 | 14.86 | 33.49 | 5.90 | 310 | 100 | 11.40 | 33.49 | 4.68 | 25.55 | 244 | 0.34 |
| 83 | 12.80 | 33.44 | 5.42 | 273 | 150 | 10.54 | 33.77 | 4.48 | 26.09 | 193 | 0.45 |
| 96 | 11.59 | 33.48 | 4.79 | 248 | 200 | 8.76 | 34.03 | 2.80 | 26.42 | 162 | 0.54 |
| 108 | 11.14 | 33.51 | 4.57 | 238 | 250 | 9.36 | 34.36 | 1.19 | 26.58 | 146 | 0.62 |
| 127 | 9.87 | 33.57 | 4.57 | 213 | 300 | 8.92 | 34.40 | 1.02 | 26.68 | 137 | 0.69 |
| 151 | 9.50 | 33.77 | 3.44 | 192 | 400 | 7.55 | 34.34 | 0.48 | 26.84 | 122 | 0.82 |
| 182 | 8.76 | 33.89 | 3.00 | 172 | 500 | 6.67 | 34.36 | 0.43 | 26.98 | 109 | 0.94 |
| 228 | 9.50 | 34.33 | 1.32 | 151 | | | | | | | |
| 299 | 8.92 | 34.40 | 1.02 | 137 | | | | | | | |
| 388 | 7.68 | 34.34 | 0.49 | 123 | | | | | | | |
| 522 | 6.46 | 34.36 | 0.42 | 106 | | | | | | | |

ORCA; July 19, 1958; 0600 GCT; 29°12'N, 116°58'W; sounding, 1900 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 05°. 110.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.16 | 33.58 | 5.67 | 400 | 0 | 19.16 | 33.58 | 5.67 | 23.92 | 400 | 0.00 |
| 10 | 19.14 | 33.58 | 5.59 | 400 | 10 | 19.14 | 33.58 | 5.59 | 23.92 | 400 | 0.04 |
| 30 | 19.06 | 33.64 | 5.67 | 393 | 20 | 19.10 | 33.61 | 5.62 | 23.96 | 396 | 0.08 |
| 45 | 19.06 | 33.62 | 5.74 | 395 | 30 | 19.06 | 33.64 | 5.67 | 23.98 | 393 | 0.12 |
| 55 | 16.84 | 33.54 | 6.32 | 349 | 50 | 19.02 | 33.62 | 5.76 | 23.98 | 394 | 0.20 |
| 65 | 16.23 | 33.52 | 6.05 | 337 | 75 | 15.52 | 33.48 | 6.23 | 24.71 | 325 | 0.29 |
| 75 | 15.52 | 33.48 | 6.23 | 325 | 100 | 13.13 | 33.53 | 5.43 | 25.25 | 273 | 0.36 |
| 95 | 13.52 | 33.55 | 5.64 | 279 | 150 | 10.73 | 33.86 | 3.10 | 25.96 | 205 | 0.48 |
| 109 | 12.43 | 33.50 | 5.11 | 262 | 200 | 10.08 | 34.14 | 1.99 | 26.28 | 175 | 0.58 |
| 124 | 11.40 | 33.62 | 4.41 | 235 | 250 | 9.39 | 34.22 | 1.71 | 26.46 | 158 | 0.67 |
| 148 | 10.72 | 33.86 | 3.05 | 206 | 300 | 8.98 | 34.23 | 1.19 | 26.54 | 150 | 0.75 |
| 176 | 10.55 | 34.12 | 2.15 | 184 | 400 | 8.07 | 34.23 | 0.51 | 26.68 | 138 | 0.90 |
| 214 | 9.82 | 34.14 | 1.91 | 170 | 500 | 7.12 | 34.23 | 0.37 | 26.82 | 124 | 1.03 |
| 265 | 9.22 | 34.23 | 1.59 | 154 | 600 | (6.10) | (34.22) | | (26.94) | (112) | (1.16) |
| 344 | 8.61 | 34.22 | 0.75 | 146 | | | | | | | |
| 444 | 7.62 | 34.23 | 0.40 | 131 | | | | | | | |
| 584 | 6.24 | 34.22 | 0.32 | 114 | | | | | | | |

ORCA; July 19, 1958; 1247 GCT; 28°47.5'N, 117°41'W; sounding, 1900 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 10°. 110.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.41 | 33.58 | 5.42 | 406 | 0 | 19.41 | 33.58 | 5.42 | 23.86 | 406 | 0.00 |
| 10 | 19.40 | 33.58 | 5.49 | 406 | 10 | 19.40 | 33.58 | 5.49 | 23.86 | 406 | 0.04 |
| 29 | 19.34 | 33.57 | 5.54 | 405 | 20 | 19.38 | 33.58 | 5.51 | 23.86 | 405 | 0.08 |
| 44 | 17.88 | 33.53 | 5.88 | 373 | 30 | 19.33 | 33.57 | 5.56 | 23.87 | 404 | 0.12 |
| 54 | 17.20 | 33.50 | 5.98 | 360 | 50 | 17.45 | 33.51 | 5.93 | 24.28 | 365 | 0.20 |
| 64 | 16.29 | 33.51 | 6.00 | 338 | 75 | 15.60 | 33.50 | 5.94 | 24.70 | 326 | 0.28 |
| 74 | 15.64 | 33.48 | 5.96 | 327 | 100 | 13.10 | 33.52 | 5.69 | 25.24 | 274 | 0.36 |
| 93 | 13.97 | 33.55 | 5.83 | 288 | 150 | 10.23 | 33.79 | 3.03 | 25.98 | 204 | 0.48 |
| 107 | 12.20 | 33.48 | 5.40 | 260 | 200 | 9.85 | 34.00 | 2.56 | 26.21 | 182 | 0.58 |
| 122 | 11.04 | 33.52 | 4.60 | 236 | 250 | 8.70 | 34.18 | 1.70 | 26.54 | 150 | 0.66 |
| 145 | 10.38 | 33.75 | 3.30 | 208 | 300 | 8.23 | 34.23 | 1.29 | 26.66 | 139 | 0.74 |
| 172 | 9.98 | 33.94 | 2.57 | 187 | 400 | 6.92 | 34.25 | 0.78 | 26.86 | 120 | 0.88 |
| 210 | 8.82 | 33.98 | 2.55 | 167 | 500 | 6.19 | 34.30 | 0.50 | 27.00 | 107 | 0.99 |
| 262 | 8.61 | 34.20 | 1.62 | 147 | 600 | (5.80) | (34.38) | | (27.11) | (96) | (1.10) |
| 341 | 7.77 | 34.25 | 1.06 | 131 | | | | | | | |
| 443 | 6.48 | 34.25 | 0.68 | 114 | | | | | | | |
| 585 | 5.88 | 34.36 | 0.28 | 99 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

110.70 ORCA; July 19, 1958; 2029 GCT; 28°32'N, 118°17.5'W; sounding, 1700 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.80 | 33.75 | 5.07 | 428 | 0 | 20.80 | 33.75 | 5.07 | 23.62 | 428 | 0.00 |
| 10 | 20.44 | 33.86 | 5.12 | 411 | 10 | 20.44 | 33.86 | 5.12 | 23.80 | 411 | 0.04 |
| 30 | 19.10 | 33.68 | 5.47 | 391 | 20 | 20.21 | 33.83 | 5.18 | 23.84 | 408 | 0.08 |
| 45 | 16.62 | - | 5.70 | | 30 | 19.10 | 33.68 | 5.47 | 24.01 | 391 | 0.12 |
| 55 | 15.62 | 33.58 | 5.78 | 320 | 50 | 16.06 | 33.59 | 5.73 | 24.67 | 328 | 0.19 |
| 65 | 14.58 | 33.57 | 5.66 | 298 | 75 | 13.47 | 33.55 | 4.98 | 25.20 | 278 | 0.27 |
| 75 | 13.47 | 33.55 | 4.98 | 278 | 100 | 11.60 | 33.64 | 3.90 | 25.64 | 236 | 0.34 |
| 95 | 11.98 | 33.62 | 4.01 | 245 | 150 | 9.62 | 33.83 | 3.05 | 26.12 | 190 | 0.44 |
| 109 | 11.02 | 33.68 | 3.71 | 224 | 200 | 8.92 | 34.01 | 2.24 | 26.38 | 166 | 0.53 |
| 124 | 10.46 | 33.74 | 3.32 | 210 | 250 | 8.30 | 34.12 | 1.75 | 26.56 | 149 | 0.62 |
| 147 | 9.68 | 33.82 | 3.10 | 192 | 300 | 7.78 | 34.17 | 1.39 | 26.68 | 137 | 0.69 |
| 175 | 9.20 | 33.90 | 2.71 | 178 | 400 | 6.85 | 34.27 | 0.62 | 26.88 | 118 | 0.82 |
| 213 | 8.79 | 34.06 | 2.03 | 160 | 500 | 6.18 | 34.33 | 0.36 | 27.03 | 104 | 0.94 |
| 267 | 8.06 | 34.14 | 1.62 | 144 | 600 | (6.40) | (34.36) | (0.22) | (27.15) | (93) | (1.04) |
| 347 | 7.32 | 34.22 | 0.96 | 128 | | | | | | | |
| 449 | 6.54 | 34.31 | 0.44 | 110 | | | | | | | |
| 593 | 5.45 | 34.36 | 0.22 | 94 | | | | | | | |

110.80 ORCA; July 20, 1958; 0130 GCT; 28°17'N, 118°56'W; sounding, 2000+ fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.30 | 33.74 | 5.18 | 416 | 0 | 20.30 | 33.74 | 5.18 | 23.74 | 416 | 0.00 |
| 10 | 20.06 | 33.73 | 5.23 | 412 | 10 | 20.06 | 33.73 | 5.23 | 23.79 | 412 | 0.04 |
| 29 | 19.86 | 33.73 | 5.25 | 406 | 20 | 19.97 | 33.73 | 5.24 | 23.82 | 409 | 0.08 |
| 43 | 19.58 | 33.69 | 5.26 | 402 | 30 | 19.84 | 33.73 | 5.25 | 23.86 | 406 | 0.12 |
| 54 | 19.46 | 33.73 | 5.25 | 397 | 50 | 19.48 | 33.73 | 5.25 | 23.94 | 398 | 0.20 |
| 62 | 19.44 | 33.70 | 5.31 | 398 | 75 | 18.38 | 33.67 | 5.48 | 24.18 | 374 | 0.30 |
| 72 | 19.02 | 33.69 | 5.42 | 389 | 100 | 14.38 | 33.60 | 5.14 | 25.05 | 292 | 0.38 |
| 90 | 15.48 | 33.59 | 5.48 | 316 | 150 | 10.38 | 33.84 | 2.57 | 26.01 | 201 | 0.50 |
| 104 | 13.72 | 33.61 | 4.84 | 278 | 200 | 9.49 | 33.88 | 1.92 | 26.18 | 184 | 0.60 |
| 117 | 11.84 | 33.71 | 3.54 | 236 | 250 | 8.99 | 34.10 | 1.33 | 26.44 | 160 | 0.69 |
| 140 | 10.58 | 33.80 | 2.79 | 207 | 300 | 8.17 | 34.17 | 1.23 | 26.62 | 143 | 0.77 |
| 167 | 10.02 | 33.91a) | 2.00 | 190 | 400 | 6.99 | 34.25 | 0.88 | 26.85 | 121 | 0.91 |
| 203 | 9.54 | 33.89a) | 1.66 | 184 | 500 | 6.10 | 34.28 | 0.57 | 26.99 | 108 | 1.03 |
| 252 | 8.97 | 34.11 | 3.16r | 159 | | | | | | | |
| 332 | 7.68 | 34.20a) | 1.17 | 134 | | | | | | | |
| 430 | 6.76 | 34.26a) | 0.78 | 117 | | | | | | | |
| 569 | 5.42 | 34.29a) | 0.38 | 99 | | | | | | | |

113.30 BLACK DOUGLAS; July 21, 1958; 2152 GCT; 29°22.5'N, 115°17.5'W; sounding, 30 fm; wind, 290°, force 4; weather, clear; sea, rough; wire angle, 01°

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.08 | 33.59 | 7.54b) | 328 | 0 | 16.08 | 33.59 | 7.54 | 24.66 | 329 | 0.00 |
| 9 | 14.16 | 33.58 | 6.75 | 289 | 10 | 13.98 | 33.58 | 6.66 | 25.12 | 285 | 0.03 |
| 28 | 11.52 | 33.60 | 4.70 | 238 | 20 | 12.30 | 33.59 | 5.39 | 25.46 | 253 | 0.06 |
| 37 | 11.06 | 33.68 | 4.03 | 225 | 30 | 11.39 | 33.61 | 4.53 | 25.64 | 236 | 0.08 |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

b) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

BLACK DOUGLAS; July 21, 1958; 1909 GCT; 29°15.5'N, 115°37.5'W; sounding, 480 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 15°. 113.35

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 14.96 | 33.53 | 7.45a) | 309 | 0 | 15.0 | (33.53) | (7.45) | (24.86) | (310) | (0.00) | |
| 17 | 14.81 | 33.48 | 7.62 | 310 | 10 | 14.90 | 33.52 | 7.50 | 24.87 | 309 | 0.03 | |
| 35 | 14.29 | 33.49 | 7.08 | 298 | 20 | 14.77 | 33.48 | 7.61 | 24.87 | 309 | 0.06 | |
| 48 | 13.37 | 33.48 | 6.54 | 281 | 30 | 14.55 | 33.49 | 7.37 | 24.94 | 303 | 0.09 | |
| 57 | 12.48 | 33.56 | 5.73 | 259 | 50 | 13.25 | 33.48 | 6.45 | 25.18 | 279 | 0.15 | |
| 66 | 11.54 | 33.60 | 5.03 | 238 | 75 | 11.14 | 33.62 | 4.59 | 25.70 | 230 | 0.21 | |
| 75 | 11.14 | 33.62 | 4.59 | 230 | 100 | 10.75 | 33.84 | 3.60 | 25.93 | 208 | 0.27 | |
| 93 | 10.96 | 33.76 | 3.90 | 217 | 150 | 10.65 | 34.21 | 2.13 | 26.24 | 179 | 0.37 | |
| 105 | 10.58 | 33.90 | 3.25 | 200 | 200 | 10.23 | 34.23 | 1.56 | 26.33 | 170 | 0.45 | |
| 118 | 10.60 | 34.02 | 2.66 | 192 | 250 | 9.90 | 34.33 | 1.52 | 26.47 | 157 | 0.54 | |
| 140 | 10.78 | 34.20 | - | 182 | 300 | 9.27 | 34.33 | 1.15 | 26.57 | 148 | 0.62 | |
| 165 | 10.42 | 34.22 | 2.03 | 174 | 400 | 8.35 | 34.35 | 0.84 | 26.74 | 132 | 0.76 | |
| 199 | 10.24 | 34.23 | 1.57 | 170 | 500 | 6.98 | 34.38 | 0.53 | 26.95 | 111 | 0.89 | |
| 247 | 9.92 | 34.33 | 1.54 | 157 | | | | | | | | |
| 322 | 9.01 | 34.33 | 1.05 | 144 | | | | | | | | |
| 416 | 8.18 | 34.36 | 0.80 | 129 | | | | | | | | |
| 552 | 6.15 | 34.38 | 0.40 | 100 | | | | | | | | |

BLACK DOUGLAS; July 21, 1958; 1511 GCT; 29°02'N, 115°59.5'W; sounding, 975 fm; wind, 320°, force 4; weather, overcast; sea, rough; wire angle, 13°. 113.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 18.43 | 33.62 | 6.78a) | 380 | 0 | 18.5 | (33.62) | (6.78) | (24.11) | (381) | (0.00) | |
| 19 | 18.08 | 33.58 | 6.93 | 374 | 10 | 18.43 | 33.62 | 6.78 | 24.12 | 380 | 0.04 | |
| 37 | 14.60 | 33.54 | 7.27 | 301 | 20 | 18.03 | 33.58 | 6.93 | 24.19 | 374 | 0.08 | |
| 51 | 12.92 | 33.50 | 6.46 | 271 | 30 | 16.00 | 33.55 | 7.19 | 24.66 | 329 | 0.11 | |
| 59 | 11.90 | 33.55b) | 5.49 | 249 | 50 | 13.07 | 33.50 | 6.59 | 25.24 | 274 | 0.17 | |
| 68 | 11.68 | 33.58 | 5.16 | 243 | 75 | 11.48 | 33.59 | 5.03 | 25.61 | 239 | 0.24 | |
| 76 | 11.45 | 33.59 | 5.00 | 238 | 100 | 10.95 | 33.82 | 3.57 | 25.89 | 212 | 0.29 | |
| 93 | 11.06 | 33.70 | 4.09 | 223 | | | | | | | | |
| 104 | 10.88 | 33.87 | 3.33 | 208 | | | | | | | | |
| 250c) | 9.44 | 33.47 | 0.56 | | | | | | | | | |
| 330 | 8.18 | 34.39 | 0.71 | | | | | | | | | |
| 448 | 7.31 | 34.38 | 0.39 | | | | | | | | | |

BLACK DOUGLAS; July 21, 1958; 0732 GCT; 28°40'N, 116°37.5'W; sounding, 1700 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 36°. 113.50

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 18.81 | 33.53 | 6.60a) | 395 | 0 | 18.8 | (33.53) | (6.60) | (23.97) | (395) | (0.00) | |
| 13 | 18.82 | 33.49 | 6.50 | 398 | 10 | 18.81 | 33.53 | 6.55 | 23.96 | 396 | 0.04 | |
| 28 | 18.80 | 32.51 | 6.50 | 396 | 20 | 18.81 | 33.50 | 6.50 | 23.94 | 398 | 0.08 | |
| 40 | 17.28 | 33.49 | 6.85 | 362 | 30 | 18.78 | 33.51 | 6.50 | 23.96 | 396 | 0.12 | |
| 46 | 16.04 | 33.44 | 7.08 | 338 | 50 | 15.90 | 33.45 | 7.08 | 24.60 | 335 | 0.19 | |
| 54 | 15.76 | 33.46 | 7.10 | 330 | 75 | 14.25 | 33.44 | 7.27 | 24.96 | 301 | 0.27 | |
| 62 | 15.26 | 33.42 | 7.19 | 323 | 100 | 12.27 | 33.61 | 5.73 | 25.47 | 252 | 0.34 | |
| 76 | 14.22 | 33.44 | 7.27 | 301 | 150 | 10.16 | 33.93 | 3.42 | 26.11 | 191 | 0.45 | |
| 86 | 12.97 | 33.53 | 6.47 | 270 | 200 | 8.98 | 34.09 | 3.00 | 26.43 | 161 | 0.54 | |
| 97 | 12.58 | 33.60 | 6.03 | 257 | 250 | 9.18 | 34.36 | 1.52 | 26.61 | 144 | 0.62 | |
| 111 | 11.12 | 33.64 | 4.82 | 228 | 300 | 8.85 | 34.41 | 0.95 | 26.71 | 135 | 0.69 | |
| 127 | 10.52 | 33.78 | 3.90 | 208 | 400 | 7.32 | 34.32 | 0.93 | 26.83 | 123 | 0.83 | |
| 150 | 10.16 | 33.93 | 3.42 | 191 | | | | | | | | |
| 180 | 8.80 | 33.92 | 3.69 | 170 | | | | | | | | |
| 233 | 9.20 | 34.30 | 1.57 | 149 | | | | | | | | |
| 305 | 8.80 | 34.41 | 0.94 | 134 | | | | | | | | |
| 414 | 7.07 | 34.28 | 0.93 | 120 | | | | | | | | |

a) All oxygen values appear to be 20 per cent high.
b) Loose bottle cap; value falls on property curve.
c) Pretrip; depth too uncertain for interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

113.60 BLACK DOUGLAS; July 21, 1958; 0040 GCT; 28°22'N, 112°16.5'W; sounding, 2000 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 19.40 | 33.52 | 6.51a) | 410 | 0 | 19.4 | (33.52) | (6.51) | (23.81) | (410) | (0.00) |
| 17 | 19.23 | 33.49 | 6.57 | 408 | 10 | 19.38 | 33.52 | 6.52 | 23.81 | 410 | 0.04 |
| 36 | 18.88 | 33.48 | 6.51 | 401 | 20 | 19.18 | 33.49 | 6.56 | 23.84 | 407 | 0.08 |
| 62 | 16.37 | 33.55 | 7.14 | 337 | 30 | 19.00 | 33.48 | 6.53 | 23.88 | 403 | 0.12 |
| 71 | 16.04 | 33.53 | 7.00 | 332 | 50 | 18.07 | 33.50 | 6.70 | 24.14 | 379 | 0.20 |
| 80 | 15.80 | 33.49 | 7.05 | 330 | 75 | 15.93 | 33.51 | 7.02 | 24.64 | 331 | 0.29 |
| 93 | 14.58 | 33.49 | 7.04 | 304 | 100 | 13.80 | 33.53 | 6.83 | 25.12 | 286 | 0.37 |
| 106 | 13.04 | 33.57 | 6.57 | 268 | 150 | 9.98 | 33.51 | 5.41 | 25.81 | 219 | 0.49 |
| 119 | 11.58 | 33.48 | 6.27 | 248 | 200 | 9.69 | 33.96 | 3.07 | 26.22 | 181 | 0.59 |
| 136 | 10.36 | 33.49 | 5.74 | 226 | 250 | 10.00 | 34.37 | 1.28 | 26.48 | 156 | 0.68 |
| 152 | 9.94 | 33.51 | 5.39 | 218 | 300 | 9.18 | 34.40 | 1.08 | 26.64 | 141 | 0.76 |
| 177 | 10.00 | 33.88 | 3.43 | 192 | 400 | 8.15 | 34.41 | 0.51 | 26.82 | 124 | 0.90 |
| 198b) | 9.66 | 33.96 | 3.14 | 181 | 500 | 7.12 | 34.45 | 0.37 | 26.99 | 108 | 1.02 |
| 244 | 10.05 | 34.36 | 1.31 | 158 | | | | | | | |
| 318 | 8.91 | 34.40 | 1.00 | 137 | | | | | | | |
| 412 | 8.09 | 34.41 | 0.47 | 124 | | | | | | | |
| 544 | 6.60 | 34.47 | 0.34 | 99 | | | | | | | |

113.70 BLACK DOUGLAS; July 20, 1958; 1817 GCT; 28°03'N, 117°55'W; sounding, 1500 fm; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 20.03 | 33.69 | 6.25a) | 413 | 0 | 20.1 | (33.69) | (6.25) | (23.76) | (415) | (0.00) |
| 19 | 19.95 | 33.69 | 6.04 | 411 | 10 | 20.03 | 33.69 | 6.25 | 23.78 | 413 | 0.04 |
| 37 | 19.70 | 33.68 | 6.50 | 406 | 20 | 19.95 | 33.69 | 6.05 | 23.80 | 411 | 0.08 |
| 51 | 19.30 | 33.64 | 6.58 | 399 | 30 | 19.80 | 33.69 | 6.30 | 23.83 | 408 | 0.12 |
| 60 | 18.32 | 33.63 | 6.20 | 376 | 50 | 19.32 | 33.64 | 6.58 | 23.93 | 399 | 0.20 |
| 69 | 17.20 | 33.54 | 6.90 | 356 | 75 | 16.98 | 33.58 | 6.76 | 24.45 | 349 | 0.30 |
| 78 | 16.89 | 33.59 | 6.71 | 346 | 100 | 15.80 | 33.58 | 6.70 | 24.72 | 323 | 0.38 |
| 96 | 16.14 | 33.58 | - | 330 | 150 | 10.62 | 33.54 | 4.82 | 25.72 | 228 | 0.52 |
| 109 | 14.96 | 33.57 | 6.71 | 306 | 200 | 9.35 | 33.92 | 3.19 | 26.24 | 178 | 0.62 |
| 123 | 13.35 | 33.60 | 6.41 | 272 | 250 | 8.35 | 34.04 | 2.56 | 26.49 | 155 | 0.71 |
| 144 | 11.18 | 33.53 | 4.67 | 237 | 300 | 7.91 | 34.20 | 1.62 | 26.68 | 137 | 0.79 |
| 168 | 9.68 | 33.57 | 5.07 | 210 | 400 | 7.10 | 34.28 | 0.75 | 26.86 | 120 | 0.92 |
| 202 | 9.30 | 33.93 | 3.12 | 178 | 500 | 6.25 | 34.32 | 0.41 | 27.00 | 106 | 1.04 |
| 249 | 8.37 | 34.04 | 2.58 | 155 | | | | | | | |
| 322 | 7.79 | 34.23 | 1.32 | 133 | | | | | | | |
| 415 | 6.94 | 34.29 | 0.69 | 117 | | | | | | | |
| 547 | 5.92 | 34.34 | 0.34 | 100 | | | | | | | |

113.80 BLACK DOUGLAS; July 20, 1958; 1158 GCT; 27°41'N, 118°36'W; sounding, 2000 fm; wind, 020°, force 2; weather, partly cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 20.05 | 33.73 | 6.47a) | 411 | 0 | 20.0 | (33.73) | (6.47) | (23.80) | (411) | (0.00) |
| 18 | 20.07 | 33.70 | 6.60 | 413 | 10 | 20.05 | 33.73 | 6.47 | 23.80 | 411 | 0.04 |
| 36 | 19.95 | 33.66 | 6.65 | 413 | 20 | 20.07 | 33.70 | 6.60 | 23.77 | 414 | 0.08 |
| 50 | 18.58 | 33.59 | 6.76 | 385 | 30 | 20.03 | 33.67 | 6.63 | 23.77 | 414 | 0.12 |
| 59 | 17.63 | 33.58 | 6.98 | 364 | 50 | 18.58 | 33.59 | 6.76 | 24.07 | 385 | 0.20 |
| 68 | 17.24 | 33.56 | 7.19 | 356 | 75 | 17.05 | 33.64 | 6.99 | 24.48 | 346 | 0.29 |
| 76 | 17.04 | 33.64 | 6.98 | 346 | 100 | 16.52 | 33.66 | 6.80 | 24.62 | 333 | 0.38 |
| 94 | 16.66 | 33.66 | 6.78 | 336 | 150 | 10.66 | 33.61 | 4.77 | 25.78 | 223 | 0.52 |
| 108 | 15.88 | 33.63 | 6.97 | 322 | 200 | 9.88 | 33.93 | 3.23 | 26.16 | 187 | 0.62 |
| 116 | 13.92 | 33.55 | 6.73 | 287 | 250 | 9.68 | 34.20 | 2.01 | 26.40 | 164 | 0.71 |
| 142 | 11.09 | 33.57 | 5.09 | 233 | 300 | 9.27 | 34.30 | 1.42 | 26.54 | 150 | 0.80 |
| 168 | 10.18 | 33.70 | 4.28 | 208 | 400 | 7.88 | 34.31 | 0.87 | 26.77 | 129 | 0.94 |
| 203 | 9.88 | 33.93 | 3.23 | 187 | 500 | 6.65 | 34.32 | 0.62 | 26.96 | 111 | 1.07 |
| 252 | 9.66 | 34.20 | 1.96 | 164 | | | | | | | |
| 327 | 9.00 | 34.33 | 1.16 | 143 | | | | | | | |
| 427 | 7.56 | 34.30 | 0.82 | 125 | | | | | | | |
| 558 | 6.04 | 34.34 | 0.44 | 102 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

b) The bathythermograph trace seems to indicate considerable mixing at various levels. Since these features may be transient, they have not been incorporated in the property curves used for determining the interpolated values.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| BLACK DOUGLAS; July 18, 1958; 1130 GCT; 28°56'N, 114°41'W; sounding, 40 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 01°. | | | | | | | | | | | | 117.26 |
| 0 | 17.34 | 33.59 | 7.25a) | 356 | 0 | 17.34 | 33.59 | 7.25 | 24.38 | 356 | 0.00 | |
| 9 | 17.34 | 33.64 | 7.34 | 352 | 10 | 17.35 | 33.64 | 7.34 | 24.42 | 352 | 0.04 | |
| 28 | 14.08 | 33.56 | 6.96 | 289 | 20 | 15.72 | 33.60 | 7.15 | 24.76 | 320 | 0.07 | |
| 46 | 11.77 | 33.65 | - | 239 | 30 | 13.85 | 33.56 | | 25.12 | 285 | 0.10 | |
| BLACK DOUGLAS; July 18, 1958; 1348 GCT; 28°48'N, 114°56.5'W; sounding, 55 fm; wind, 280°, force 2; weather, fog; sea, moderate; wire angle, 10°. | | | | | | | | | | | | 117.30 |
| 4 | 17.13 | 33.56 | 7.24a) | 354 | 0 | 17.1 | (33.56) | (7.24) | (24.40) | (354) | (0.00) | |
| 13 | 17.14 | 33.60 | 7.19 | 351 | 10 | 17.15 | 33.59 | 7.19 | 24.42 | 352 | 0.04 | |
| 31 | 13.63 | 33.52 | 6.40 | 283 | 20 | 16.99 | 33.60 | 7.09 | 24.47 | 347 | 0.07 | |
| 49 | 12.47 | 33.60 | 5.20 | 256 | 30 | 13.75 | 33.52 | 6.43 | 25.12 | 286 | 0.10 | |
| 72 | 11.61 | 33.89 | 3.26 | 219 | 50 | 12.45 | 33.60 | 5.16 | 25.44 | 255 | 0.16 | |
| | | | | | 75 | (11.60) | (33.89) | (3.25) | (25.82) | (219) | (0.22) | |
| BLACK DOUGLAS; July 18, 1958; 1653 GCT; 28°38'N, 115°16'W; sounding, 100 fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | | | 117.35 |
| 8 | 16.60 | 33.53 | 7.25a) | 344 | 0 | 16.6 | (33.53) | (7.25) | (24.50) | (344) | (0.00) | |
| 16 | 16.54 | 33.58 | 7.27 | 339 | 10 | 16.60 | 33.54 | 7.25 | 24.51 | 343 | 0.03 | |
| 32 | 16.09 | 33.56 | 7.23 | 330 | 20 | 16.44 | 33.58 | 7.26 | 24.58 | 337 | 0.07 | |
| 48 | 15.04 | 33.58 | 6.81 | 308 | 30 | 16.13 | 33.56 | 7.25 | 24.63 | 332 | 0.10 | |
| 68 | 12.66 | 33.57 | 5.33 | 261 | 50 | 14.65 | 33.58 | 6.53 | 24.98 | 299 | 0.16 | |
| 108 | 10.94 | 33.87 | 3.26 | 208 | 75 | 12.03 | 33.58 | 5.01 | 25.50 | 249 | 0.23 | |
| 132 | 10.96 | 34.19 | 1.95 | 185 | 100 | 10.85 | 33.72 | 4.30 | 25.82 | 218 | 0.29 | |
| BLACK DOUGLAS; July 19, 1958; 0515 GCT; 28°28'N, 115°35.5'W; sounding, 400 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 16°. | | | | | | | | | | | | 117.40 |
| 0 | 19.98 | 33.75 | 6.92a) | 407 | 0 | 19.98 | 33.75 | 6.92 | 23.83 | 408 | 0.00 | |
| 9 | 19.99 | 33.77 | 7.19 | 406 | 10 | 19.99 | 33.77 | 7.19 | 23.85 | 406 | 0.04 | |
| 27 | 16.32 | 33.68 | 7.34 | 327 | 20 | 19.95 | 33.77 | 7.20 | 23.86 | 405 | 0.08 | |
| 41 | 13.40 | 33.62 | 5.58 | 271 | 30 | 16.05 | 33.68 | 7.25 | 24.74 | 322 | 0.12 | |
| 50 | 12.18 | 33.60 | 5.11 | 250 | 50 | 12.18 | 33.60 | 5.11 | 25.49 | 250 | 0.17 | |
| 59 | 11.72 | 33.62 | 4.92 | 240 | 75 | 10.97 | 33.70 | 4.36 | 25.80 | 221 | 0.23 | |
| 67 | 11.12 | 33.65 | 4.74 | 228 | 100 | 11.70 | 34.24 | 1.70 | 26.08 | 194 | 0.29 | |
| 85 | 10.87 | 33.83 | 3.60 | 210 | 150 | 11.70 | 34.33 | 1.06 | 26.14 | 188 | 0.38 | |
| 98 | 11.64 | 34.22 | 1.71 | 195 | 200 | 11.38 | 34.43 | 0.85 | 26.28 | 175 | 0.48 | |
| 111 | 11.82 | 34.29 | 1.68 | 193 | 250 | 11.02 | 34.51 | 0.80 | 26.41 | 163 | 0.56 | |
| 132 | 11.81 | 34.33 | 1.17 | 190 | 300 | 10.55 | 34.44 | 0.78 | 26.45 | 159 | 0.64 | |
| 158 | 11.64 | 34.33 | 1.03 | 187 | 400 | 8.32 | 34.39 | 0.52 | 26.77 | 128 | 0.79 | |
| 192 | 11.42 | 34.41 | 0.88 | 177 | 500 | 7.18 | 34.38 | 0.43 | 26.94 | 113 | 0.92 | |
| 240 | 11.12 | 34.51 | 0.83 | 164 | | | | | | | | |
| 314 | 10.38 | 34.43 | 0.75 | 157 | | | | | | | | |
| 407 | 8.18 | 34.39 | 0.52 | 126 | | | | | | | | |
| 540 | 6.81 | 34.38 | 0.42 | 109 | | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

SIO

CCOFI
5807

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **117.50** | BLACK DOUGLAS; July 19, 1958; 1148, 1202 GCT; 28°08'N, 116°15'W; sounding, 2100 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 16°, 16°. | | | | | | | | | | |
| 10 | 18.24 | 33.58 | 6.97a) | 378 | 0 | 18.2 | (33.58) | (6.97) | (24.14) | (378) | (0.00) |
| 19 | 18.27 | 33.59 | 6.78 | 378 | 10 | 18.24 | 33.58 | 6.97 | 24.14 | 378 | 0.04 |
| | | | | | 20 | 18.26 | 33.59 | 6.78 | 24.15 | 377 | 0.08 |
| 37 | 16.06 | 33.53 | 7.40 | 332 | 30 | 16.88 | 33.55 | 7.17 | 24.45 | 349 | 0.11 |
| 50 | 14.75 | 33.49 | 7.27 | 308 | 50 | 14.75 | 33.49 | 7.27 | 24.88 | 308 | 0.18 |
| 59 | 13.79 | 33.46 | 6.86 | 291 | 75 | 12.01 | 33.59 | 5.24 | 25.51 | 248 | 0.25 |
| 68 | 12.95 | 33.55 | 5.73 | 268 | 100 | 10.02 | 33.61 | 4.90 | 25.88 | 213 | 0.31 |
| 77 | 11.70 | 33.60 | 5.07 | 242 | 150 | 10.10 | 34.15 | 2.47 | 26.28 | 174 | 0.41 |
| 94 | 10.70 | 33.68 | 4.37 | 218 | 200 | 9.55 | 34.31 | 1.46 | 26.51 | 154 | 0.49 |
| 106 | 9.66 | 33.58 | 5.16 | 209 | 250 | 8.60 | 34.26 | 1.60 | 26.62 | 143 | 0.56 |
| 119 | 9.30 | 33.68 | 4.36 | 196 | 300 | 8.27 | 34.33 | 1.05 | 26.74 | 132 | 0.64 |
| 139 | 9.98 | 34.04 | 2.87 | 180 | 400 | 7.60 | 34.40 | 0.45 | 26.88 | 118 | 0.77 |
| 164 | 10.24 | 34.31 | 1.80 | 164 | 500 | 6.50 | 34.39 | 0.39 | 27.03 | 104 | 0.88 |
| 197 | 9.74 | 34.33 | 1.40 | 154 | | | | | | | |
| 243 | 8.66 | 34.25 | 1.66 | 144 | | | | | | | |
| 315 | 8.20 | 34.34 | 0.92 | 131 | | | | | | | |
| 407 | 7.54 | 34.40 | 0.43 | 117 | | | | | | | |
| 537 | 6.00 | 34.38 | 0.39 | 99 | | | | | | | |
| **117.60** | BLACK DOUGLAS; July 19, 1958; 1737 GCT; 27°47.5'N, 116°54'W; sounding, 2200 fm; wind, 360°, force 4; weather, partly cloudy; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 4 | 18.80 | 33.60 | 6.66a) | 390 | 0 | 18.8 | (33.60) | (6.66) | (24.02) | (390) | (0.00) |
| 12 | 18.78 | 33.58 | 6.75 | 390 | 10 | 18.80 | 33.59 | 6.72 | 24.02 | 390 | 0.04 |
| 30 | 17.42 | 33.54 | 7.24 | 362 | 20 | 18.55 | 33.57 | 6.87 | 24.06 | 386 | 0.08 |
| 43 | 16.13 | 33.49 | 7.20 | 336 | 30 | 17.42 | 33.54 | 7.24 | 24.32 | 362 | 0.12 |
| 52 | 15.88 | 33.52 | 7.58 | 329 | 50 | 15.97 | 33.50 | 7.46 | 24.63 | 332 | 0.18 |
| 60 | 15.19 | 33.51 | 7.35 | 315 | 75 | 14.27 | 33.51 | 7.13 | 25.00 | 296 | 0.26 |
| 69 | 14.58 | 33.52 | 7.20 | 302 | 100 | 11.62 | 33.48 | 5.99 | 25.50 | 249 | 0.33 |
| 86 | 12.90 | 33.48 | 6.85 | 272 | 150 | 11.01 | 34.05 | 2.43 | 26.06 | 196 | 0.44 |
| 100 | 11.62 | 33.48 | 5.99 | 249 | 200 | 10.98 | 34.47 | 0.93 | 26.38 | 165 | 0.54 |
| 112 | 10.36 | 33.48 | 5.78 | 228 | 250 | 10.02 | 34.46 | 0.80 | 26.55 | 150 | 0.62 |
| 132 | 10.72 | 33.89 | 3.49 | 203 | 300 | 9.45 | 34.42 | 0.59 | 26.62 | 143 | 0.69 |
| 156 | 11.06 | 34.17 | 2.15 | 195 | 400 | 8.22 | 34.46 | 0.50 | 26.84 | 122 | 0.83 |
| 188 | 11.06 | 34.43 | 1.13 | 169 | 500 | 7.01 | 34.41 | 0.32 | 26.97 | 110 | 0.95 |
| 233 | 10.24 | 34.47 | 0.88 | 152 | | | | | | | |
| 303 | 9.40 | 34.42 | 0.58 | 143 | | | | | | | |
| 391 | 8.35 | 34.46 | 0.51 | 124 | | | | | | | |
| 517 | 6.90 | 34.40 | 0.30 | 109 | | | | | | | |
| **117.70** | BLACK DOUGLAS; July 19, 1958; 2344 GCT; 27°27.5'N, 117°32.5'W; sounding, 2000 fm; wind, 030°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 8 | 20.88 | 33.75 | 6.29a) | 430 | 0 | 20.9 | (33.75) | (6.29) | (23.60) | (430) | (0.00) |
| 17 | 20.70 | 33.76 | 6.41 | 425 | 10 | 20.87 | 33.75 | 6.30 | 23.60 | 430 | 0.04 |
| 35 | 19.66 | 33.67 | 6.51 | 405 | 20 | 20.64 | 33.76 | 6.43 | 23.67 | 424 | 0.08 |
| 48 | 17.58 | 33.52 | 6.81 | 367 | 30 | 19.77 | 33.68 | 6.50 | 23.84 | 407 | 0.13 |
| 57 | 16.91 | 33.49 | 6.94 | 354 | 50 | 17.39 | 33.51 | 6.84 | 24.30 | 363 | 0.20 |
| 66 | 16.56 | 33.51 | 6.97 | 344 | 75 | 16.20 | 33.46 | 7.02 | 24.54 | 340 | 0.29 |
| 75 | 16.20 | 33.46 | 7.02 | 340 | 100 | 15.40 | 33.49 | 6.92 | 24.75 | 321 | 0.38 |
| 94 | 15.61 | 33.45 | 6.92 | 328 | 150 | 11.39 | 33.58 | 5.24 | 25.62 | 238 | 0.52 |
| 107 | 15.11 | 33.58 | 6.92 | 309 | 200 | 9.68 | 33.90 | 3.82 | 26.17 | 186 | 0.63 |
| 120 | 14.38 | 33.61 | 6.63 | 291 | 250 | 8.77 | 34.08 | 2.76 | 26.46 | 158 | 0.72 |
| 143 | 11.84 | 33.57 | 5.41 | 246 | 300 | 8.27 | 34.23 | 1.70 | 26.65 | 140 | 0.79 |
| 169 | 10.58 | 33.69 | 4.88 | 215 | 400 | 7.38 | 34.25 | 0.84 | 26.80 | 125 | 0.93 |
| 203 | 9.62 | 33.92 | 3.74 | 183 | 500 | 6.45 | 34.30 | 0.48 | 26.96 | 110 | 1.06 |
| 252 | 8.76 | 34.08 | 2.74 | 158 | | | | | | | |
| 327 | 8.06 | 34.27 | 1.32 | 134 | | | | | | | |
| 421 | 7.15 | 34.25 | 0.75 | 123 | | | | | | | |
| 553 | 6.08 | 34.33 | 0.36 | 103 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; July 20, 1958; 0608 GCT; 27°07.5'N, 118°11'W; sounding, 2100 fm; wind, 020°, force 4; weather, partly cloudy; sea, moderate; wire angle, 01°. 117.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 21.06 | 33.95 | 6.05a) | 420 | 0 | 21.1 | (33.95) | (6.05) | (23.68) | (422) | (0.00) |
| 17 | 21.10 | 33.99 | 6.22 | 419 | 10 | 21.07 | 33.96 | 6.09 | 23.70 | 420 | 0.04 |
| 36 | 20.89 | 34.21 | 6.35 | 398 | 20 | 21.10 | 34.00 | 6.22 | 23.72 | 418 | 0.08 |
| 50 | 19.94 | 34.11 | 6.39 | 380 | 30 | 21.02 | 34.10 | 6.30 | 23.82 | 409 | 0.12 |
| 59 | 19.18 | 34.04 | 6.53 | 367 | 50 | 19.94 | 34.11 | 6.39 | 24.12 | 380 | 0.20 |
| 68 | 18.69 | 33.96 | 6.69 | 361 | 75 | 18.43 | 33.91 | 6.69 | 24.34 | 359 | 0.30 |
| 77 | 18.36 | 33.89 | 6.69 | 358 | 100 | 17.30 | 33.82 | 6.76 | 24.56 | 339 | 0.39 |
| 96 | 17.51 | 33.82 | 6.81 | 343 | 150 | 12.17 | 33.59 | 5.61 | 25.48 | 250 | 0.53 |
| 110 | 16.78 | 33.82 | 6.60 | 328 | 200 | 9.80 | 33.78 | 4.23 | 26.06 | 196 | 0.65 |
| 123 | 14.46 | 33.65 | 6.22 | 290 | 250 | 9.15 | 34.10 | 2.72 | 26.42 | 163 | 0.74 |
| 145 | 12.48 | 33.59 | 5.69 | 257 | 300 | 8.34 | 34.19 | 2.09 | 26.61 | 144 | 0.82 |
| 171 | 10.71 | 33.60 | 5.18 | 224 | 400 | 7.15 | 34.28 | 1.08 | 26.85 | 121 | 0.96 |
| 206 | 9.63 | 33.84 | 3.93 | 190 | 500 | 6.45 | 34.34 | 0.53 | 27.00 | 107 | 1.08 |
| 255 | 9.08 | 34.12 | 2.63 | 160 | | | | | | | |
| 330 | 7.88 | 34.22 | 1.72 | 135 | | | | | | | |
| 426 | 6.96 | 34.29 | 0.87 | 118 | | | | | | | |
| 560 | 6.10 | 34.37 | 0.38 | 100 | | | | | | | |

BLACK DOUGLAS; July 18, 1958; 1956 GCT; 28°18.5'N, 115°24'W; sounding, 140 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 07°. 118.39

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 20.05 | 33.69 | 7.16a) | 414 | 0 | 20.1 | (33.69) | (7.16) | (23.77) | (414) | (0.00) |
| 13 | 19.63 | 33.75 | 7.08 | 399 | 10 | 19.99 | 33.70 | 7.13 | 23.80 | 412 | 0.04 |
| 32 | 14.29 | 33.58 | 6.94 | 292 | 20 | 18.30 | 33.69 | 7.00 | 24.22 | 371 | 0.08 |
| 50 | 13.40 | 33.60 | 5.98 | 272 | 30 | 14.50 | 33.58 | 6.94 | 25.01 | 296 | 0.11 |
| 73 | 11.48 | 33.69 | 4.58 | 231 | 50 | 13.40 | 33.60 | 5.98 | 25.25 | 273 | 0.17 |
| 96 | 11.66 | 34.00 | 2.66 | 211 | 75 | 11.50 | 33.71 | 4.50 | 25.70 | 230 | 0.23 |
| 119 | 11.60 | 34.15 | 1.80 | 199 | 100 | 11.65 | 34.02 | 2.56 | 25.91 | 210 | 0.29 |
| 156 | 11.39 | 34.32 | 1.36 | 183 | 150 | 11.43 | 34.31 | 1.41 | 26.18 | 184 | 0.39 |
| 192 | 10.88 | 34.25 | 0.82 | 180 | | | | | | | |

BLACK DOUGLAS; July 18, 1958; 0058 GCT; 28°19'N, 114°53'W; sounding, 60 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 10°. 119.33

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.78 | 33.70 | 6.50a) | 406 | 0 | 19.78 | 33.70 | 6.50 | 23.85 | 406 | 0.00 |
| 9 | 19.80 | 33.69 | 6.48 | 408 | 10 | 19.80 | 33.69 | 6.48 | 23.84 | 407 | 0.04 |
| 28 | 19.53 | 33.66 | 6.28 | 403 | 20 | 19.74 | 33.68 | 6.43 | 23.85 | 406 | 0.08 |
| 45 | 17.65 | 33.64 | 6.26 | 360 | 30 | 19.40 | 33.66 | 6.27 | 23.91 | 400 | 0.12 |
| 68 | 16.07 | 33.62 | 6.16 | 326 | 50 | 17.26 | 33.64 | 6.25 | 24.42 | 351 | 0.20 |
| 91 | 11.90 | 33.60 | 4.55 | 245 | 75 | 15.40 | 33.62 | 5.97 | 24.84 | 312 | 0.28 |

BLACK DOUGLAS; July 18, 1958; 0710 GCT; 28°23'N, 114°14.5'W; sounding, 30 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 01°. 120.25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.96 | 33.66 | 6.73a) | 389 | 0 | 18.96 | 33.66 | 6.73 | 24.03 | 389 | 0.00 |
| 9 | 18.94 | 33.67 | 6.87 | 388 | 10 | 18.90 | 33.67 | 6.88 | 24.05 | 387 | 0.04 |
| 28 | 14.50 | 33.57 | 7.23 | 297 | 20 | 16.69 | 33.62 | 7.07 | 24.54 | 340 | 0.08 |

BLACK DOUGLAS; July 18, 1958; 0320 GCT; 28°13'N, 114°34'W; sounding, 50 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 08°. 120.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.08 | 33.64 | 6.63a) | 394 | 0 | 19.08 | 33.64 | 6.63 | 23.92 | 394 | 0.00 |
| 9 | 19.06 | 33.68 | 6.73 | 390 | 10 | 19.05 | 33.68 | 6.74 | 24.02 | 390 | 0.04 |
| 28 | 17.44 | 33.60 | - | 358 | 20 | 18.84 | 33.67 | 6.78 | 24.06 | 386 | 0.08 |
| 46 | 15.24 | 33.55 | 7.02 | 314 | 30 | 17.15 | 33.59 | 6.93 | 24.42 | 352 | 0.11 |
| 69 | 12.73 | 33.62 | 5.16 | 258 | 50 | 14.78 | 33.55 | 6.83 | 24.92 | 304 | 0.18 |

a) All oxygen values appear to be 20 per cent high.

S10

CCOFI
5807

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

120.35 BLACK DOUGLAS; July 17, 1958; 2210 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 19.14 | 33.66 | 7.02a) | 394 | 0 | 19.1 | (33.66) | (7.02) | (23.98) | (394) | (0.00) |
| 15 | 18.84 | 33.63 | 7.06 | 388 | 10 | 19.03 | 33.65 | 7.04 | 24.00 | 392 | 0.04 |
| 34 | 16.34 | 33.62 | 7.39 | 332 | 20 | 18.72 | 33.63 | 7.08 | 24.06 | 386 | 0.08 |
| 52 | 13.34 | 33.58 | 5.50 | 273 | 30 | 18.00 | 33.62 | 7.19 | 24.23 | 370 | 0.12 |
| 75 | 11.08 | 33.71 | 3.09 | 223 | 50 | 13.46 | 33.58 | 5.62 | 25.22 | 276 | 0.18 |
| | | | | | 75 | 11.08 | 33.71 | 3.09 | 25.78 | 223 | 0.24 |

120.45 BLACK DOUGLAS; July 17, 1958; 1615 GCT; 27°44'N, 115°33.5'W; sounding, 1050 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 20.86 | 33.78 | 6.11a) | 428 | 0 | 20.9 | (33.78) | (6.11) | (23.62) | (428) | (0.00) |
| 17 | 20.89 | 33.79 | 6.35 | 428 | 10 | 20.86 | 33.78 | 6.16 | 23.62 | 428 | 0.04 |
| 35 | 18.30 | 33.56 | 7.03 | 381 | 20 | 20.85 | 33.79 | 6.38 | 23.63 | 427 | 0.08 |
| 48 | 15.32 | 33.51 | 7.17 | 318 | 30 | 19.71 | 33.68 | 6.71 | 23.84 | 407 | 0.13 |
| 56 | 14.22 | 33.46 | 7.19 | 299 | 50 | 15.12 | 33.50 | 7.19 | 24.84 | 312 | 0.20 |
| 65 | 13.24 | 33.51 | 6.86 | 276 | 75 | 12.21 | 33.51 | 5.95 | 25.42 | 257 | 0.27 |
| 74 | 12.25 | 33.51 | 6.01 | 258 | 100 | 11.25 | 33.68 | 4.37 | 25.72 | 228 | 0.33 |
| 92 | 11.42 | 33.70 | 4.70 | 236 | 150 | 9.97 | 34.02 | 2.75 | 26.21 | 182 | 0.44 |
| 105 | 11.14 | 33.75 | 4.21 | 220 | 200 | 9.94 | 34.29 | 1.64 | 26.44 | 160 | 0.52 |
| 118 | 10.50 | 33.84 | 3.84 | 204 | 250 | 9.45 | 34.40 | 1.14 | 26.60 | 145 | 0.60 |
| 140 | 10.09 | 33.97 | 3.21 | 187 | 300 | 8.93 | 34.40 | 0.81 | 26.68 | 137 | 0.67 |
| 166 | 10.44 | 34.24 | 1.77 | 173 | 400 | 7.97 | 34.42 | 0.46 | 26.84 | 122 | 0.81 |
| 201 | 9.94 | 34.30 | 1.64 | 160 | 500 | 6.91 | 34.42 | 0.40 | 27.00 | 107 | 0.93 |
| 249 | 9.46 | 34.40 | 1.15 | 145 | | | | | | | |
| 324 | 8.78 | 34.40 | 0.74 | 135 | | | | | | | |
| 418 | 7.72 | 34.42 | 0.44 | 118 | | | | | | | |
| 551 | 6.48 | 34.42 | 0.40 | 102 | | | | | | | |

120.50 BLACK DOUGLAS; July 17, 1958; 1311 GCT; 27°33.5'N, 115°53'W; sounding, 2100 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 20°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 20.44 | 33.75 | 420 | 0 | 20.5 | (33.75) | (23.71) | (420) | (0.00) |
| 15 | 20.48 | 33.78 | 418 | 10 | 20.46 | 33.77 | 23.72 | 419 | 0.04 |
| 32 | 18.43 | 33.62 | 380 | 20 | 20.47 | 33.78 | 23.73 | 417 | 0.08 |
| 45 | 17.30 | 33.61 | 354 | 30 | 18.66 | 33.64 | 24.08 | 384 | 0.12 |
| 54 | 15.96 | 33.57 | 327 | 50 | 16.36 | 33.59 | 24.61 | 334 | 0.20 |
| 63 | 14.84 | 33.53 | 307 | 75 | 13.34 | 33.66 | 25.30 | 268 | 0.27 |
| 71 | 13.82 | 33.64 | 278 | 100 | 11.82 | 33.89 | 25.78 | 223 | 0.33 |
| 88 | 12.02 | 33.69 | 241 | 150 | 10.46 | 34.20 | 26.27 | 176 | 0.44 |
| 101 | 11.82 | 33.89 | 222 | 200 | 9.19 | 34.23 | 26.50 | 154 | 0.52 |
| 114 | 11.13 | 33.89 | 210 | 250 | 9.50 | 34.44 | 26.65 | 140 | 0.59 |
| 136 | 10.96 | 34.14 | 189 | 300 | 8.79 | 34.41 | 26.71 | 134 | 0.66 |
| 161 | 10.90 | 34.33 | 174 | 400 | 7.72 | 34.36 | 26.83 | 123 | 0.80 |
| 195 | 9.33 | 34.22 | 156 | 500 | 6.85 | 34.38 | 26.98 | 109 | 0.92 |
| 243 | 9.58 | 34.44 | 144 | | | | | | |
| 316 | 8.53 | 34.40 | 131 | | | | | | |
| 408 | 7.61 | 34.36 | 121 | | | | | | |
| 536 | 6.51 | 34.40 | 103 | | | | | | |

a) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; July 17, 1958; 0635 GCT; 27°13'N, 116°31.5'W; sounding, 2000 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 05°. 120.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 19.68 | 33.60 | 6.70a) | 411 | 0 | 19.7 | (33.60) | (6.70) | (23.80) | (411) | (0.00) |
| 17 | 19.69 | 33.63 | 6.42 | 409 | 10 | 19.68 | 33.60 | 6.65 | 23.80 | 411 | 0.04 |
| 36 | 18.53 | 33.58 | 6.82 | 384 | 20 | 19.66 | 33.63 | 6.43 | 23.83 | 408 | 0.08 |
| 50 | 17.50 | 33.55 | 7.04 | 363 | 30 | 19.01 | 33.61 | 6.66 | 23.98 | 394 | 0.12 |
| 59 | 16.30 | 33.51 | 7.04 | 339 | 50 | 17.50 | 33.55 | 7.04 | 24.30 | 363 | 0.20 |
| 68 | 15.84 | 33.48 | 7.13 | 331 | 75 | 15.54 | 33.48 | 7.24 | 24.70 | 325 | 0.28 |
| 77 | 15.44 | 33.48 | 7.25 | 323 | 100 | 12.87 | 33.53 | 6.23 | 25.30 | 268 | 0.36 |
| 95 | 13.56 | 33.52 | 6.54 | 281 | 150 | 10.01 | 33.80 | 4.15 | 26.04 | 198 | 0.48 |
| 109 | 12.08 | 33.53 | 5.84 | 254 | 200 | 10.05 | 34.18 | 2.43 | 26.32 | 171 | 0.57 |
| 123 | 11.34 | 33.66 | 4.93 | 231 | 250 | 9.28 | 34.28 | 1.58 | 26.52 | 152 | 0.65 |
| 145 | 10.23 | 33.77 | 4.28 | 204 | 300 | 8.88 | 34.37 | 1.17 | 26.67 | 138 | 0.73 |
| 171 | 10.70 | 34.11 | 2.56 | 187 | 400 | 7.47 | 34.37 | 0.81 | 26.87 | 119 | 0.86 |
| 207 | 9.63 | 34.13 | 2.44 | 168 | 500 | 6.55 | 34.38 | 0.48 | 27.02 | 105 | 0.98 |
| 255 | 9.24 | 34.29 | 1.48 | 150 | | | | | | | |
| 330 | 8.53 | 34.61r | 1.00 | | | | | | | | |
| 425 | 7.08 | 34.35 | 0.72 | 115 | | | | | | | |
| 558 | 6.32 | 34.40 | 0.35 | 101 | | | | | | | |

BLACK DOUGLAS; July 16, 1958; 2325 GCT; 26°52.5'N, 117°12'W; sounding, 2000 fm; wind, 350°, force 4; weather, cloudy; sea, rough; wire angle, 16°. 120.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12 | 21.40 | 33.78 | 6.33a) | 442 | 0 | 21.4 | (33.78) | (6.33) | (23.48) | (442) | (0.00) |
| 21 | 21.38 | 33.80 | 6.29 | 440 | 10 | 21.4 | (33.78) | (6.33) | (23.48) | (442) | (0.04) |
| 39 | 20.39 | 33.77 | 6.44 | 416 | 20 | 21.39 | 33.80 | 6.29 | 23.50 | 440 | 0.09 |
| 52 | 19.21 | 33.68 | 6.77 | 394 | 30 | 20.66 | 33.78 | 6.37 | 23.68 | 422 | 0.13 |
| 60 | 19.38 | 34.07 | 6.90 | 372 | 50 | 19.26 | 33.68 | 6.73 | 23.97 | 395 | 0.21 |
| 69 | 18.96 | 34.06 | 6.82 | 360 | 75 | 18.32 | 33.92 | 6.90 | 24.40 | 354 | 0.31 |
| 77 | 18.12 | 33.89 | 6.92 | 352 | 100 | 16.67 | 33.87 | 6.74 | 24.75 | 321 | 0.39 |
| 94 | 17.20 | 33.89 | 6.76 | 331 | 150 | 11.12 | 33.62 | 5.38 | 25.70 | 230 | 0.53 |
| 107 | 15.93 | 33.84 | 6.70 | 307 | 200 | 9.58 | 33.91 | 3.85 | 26.19 | 184 | 0.64 |
| 120 | 14.49 | 33.72 | 6.35 | 286 | 250 | 8.68 | 34.11 | 2.85 | 26.49 | 155 | 0.73 |
| 141 | 11.81 | 33.58 | 5.74 | 245 | 300 | 8.27 | 34.24 | 2.18 | 26.66 | 139 | 0.80 |
| 167 | 10.30 | 33.71 | 4.66 | 210 | 400 | 7.47 | 34.36 | 0.71 | 26.87 | 119 | 0.94 |
| 202 | 9.54 | 33.91 | 3.81 | 183 | 500 | 6.58 | 34.38 | 0.36 | 27.01 | 106 | 1.06 |
| 250 | 8.68 | 34.11 | 2.85 | 155 | | | | | | | |
| 325 | 8.04 | 34.30 | 1.40 | 132 | | | | | | | |
| 416 | 7.37 | 34.36 | 0.63 | 118 | | | | | | | |
| 550 | 6.08 | 34.38 | 0.27 | 100 | | | | | | | |

BLACK DOUGLAS; July 16, 1958; 1642 GCT; 26°32.5'N, 117°48.5'W; sounding, 2000+ fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 15°. 120.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 21.48 | 33.82 | 6.07a) | 441 | 0 | 21.5 | (33.82) | (6.07) | (23.49) | (441) | (0.00) |
| 17 | 21.50 | 33.80 | 6.42 | 443 | 10 | 21.49 | 33.80 | 6.10 | 23.48 | 442 | 0.04 |
| 35 | 20.42 | 33.81 | 6.60 | 414 | 20 | 21.37 | 33.80 | 6.46 | 23.50 | 439 | 0.09 |
| 49 | 18.20 | 33.70 | 7.34 | 368 | 30 | 20.58 | 33.81 | 6.56 | 23.72 | 418 | 0.13 |
| 57 | 17.54 | 33.64 | 7.06 | 357 | 50 | 18.07 | 33.69 | 7.31 | 24.27 | 366 | 0.21 |
| 66 | 17.32 | 33.66 | 7.08 | 350 | 75 | 17.19 | 33.72 | 6.94 | 24.50 | 344 | 0.30 |
| 75 | 17.19 | 33.72 | 6.94 | 344 | 100 | 16.07 | 33.65 | 6.93 | 24.72 | 324 | 0.38 |
| 93 | 16.50 | 33.71 | 6.86 | 329 | 150 | 11.20 | 33.56 | 5.62 | 25.64 | 236 | 0.52 |
| 105 | 15.49 | 33.58 | 7.02 | 317 | 200 | 9.48 | 33.93 | 3.66 | 26.22 | 181 | 0.63 |
| 117 | 13.53 | 33.57 | 6.64 | 277 | 250 | 9.35 | 34.20 | 2.22 | 26.46 | 158 | 0.71 |
| 139 | 11.82 | 33.54 | 5.93 | 248 | 300 | 8.79 | 34.35 | 1.22 | 26.66 | 139 | 0.79 |
| 165 | 10.51 | 33.60 | 5.15 | 221 | 400 | 7.88 | 34.41 | 0.50 | 26.85 | 121 | 0.93 |
| 200 | 9.48 | 33.93 | 3.66 | 181 | 500 | 6.89 | 34.42 | 0.35 | 27.00 | 107 | 1.05 |
| 249 | 9.36 | 34.20 | 2.24 | 158 | | | | | | | |
| 323 | 8.58 | 34.38 | 0.90 | 133 | | | | | | | |
| 416 | 7.72 | 34.41 | 0.47 | 119 | | | | | | | |
| 548 | 6.27 | 34.42 | 0.30 | 99 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |
| 120.90 | BLACK DOUGLAS; July 16, 1958; 1008 GCT; 26°13'N, 118°27.5'W; sounding, 2100 fm; wind, 330°, force 3; weather, cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 8 | 21.49 | 33.76 | 6.33a) | 445 | 0 | 21.5 | (33.77) | (6.29) | (23.44) | (445) | (0.00) |
| 17 | 21.55 | 33.75 | 6.35 | 446 | 10 | 21.49 | 33.76 | 6.33 | 23.44 | 446 | 0.04 |
| 35 | 19.67 | 33.80 | 6.67 | 396 | 20 | 21.44 | 33.75 | 6.37 | 23.45 | 444 | 0.09 |
| 49 | 19.71 | 34.05 | 6.56 | 379 | 30 | 19.95 | 33.78 | 6.65 | 23.87 | 404 | 0.13 |
| 57 | 19.16 | 34.04 | 6.59 | 366 | 50 | 19.68 | 34.05 | 6.55 | 24.14 | 378 | 0.21 |
| 66 | 18.61 | 33.97 | 6.77 | 359 | 75 | 18.00 | 33.94 | 6.76 | 24.48 | 346 | 0.30 |
| 75 | 18.00 | 33.94 | 6.76 | 346 | 100 | 17.27 | 33.93 | 6.50 | 24.65 | 330 | 0.39 |
| 93 | 17.52 | 33.93 | 6.56 | 335 | 150 | 11.82 | 33.62 | 5.50 | 25.58 | 242 | 0.53 |
| 106 | 16.93 | 33.93 | 6.41 | 322 | 200 | 9.59 | 33.86 | 2.92 | 26.15 | 187 | 0.64 |
| 120 | 14.90 | 33.79 | 5.96 | 289 | 250 | 8.92 | 34.15 | 2.59 | 26.48 | 156 | 0.73 |
| 141 | 12.42 | 33.64 | 5.75 | 252 | 300 | 8.65 | 34.32 | 1.80 | 26.67 | 138 | 0.80 |
| 168 | 10.78 | 33.64 | 4.50 | 223 | 400 | 7.76 | 34.34 | 0.70 | 26.82 | 125 | 0.94 |
| 203 | 9.50 | 33.89 | 2.83 | 184 | 500 | 6.71 | 34.35 | 0.52 | 26.97 | 110 | 1.06 |
| 252 | 8.87 | 34.16 | 2.58 | 154 | | | | | | | |
| 328 | 8.52 | 34.34 | 1.10 | 135 | | | | | | | |
| 422 | 7.49 | 34.34 | 0.63 | 121 | | | | | | | |
| 553 | 6.20 | 34.35 | 0.47 | 104 | | | | | | | |
| 123.37 | BLACK DOUGLAS; July 15, 1958; 0224 GCT; 27°24'N, 114°39.5'W; sounding, 40 fm; wind, 310°, force 4; weather, clear; sea, slight; wire angle, 11°. | | | | | | | | | | |
| 4 | 18.20 | 33.80 | 8.24a) | 361 | 0 | 18.2 | (33.80) | (8.24) | (24.32) | (361) | (0.00) |
| 13 | 17.68 | 33.78 | 8.35 | 350 | 10 | 18.18 | 33.80 | 8.25 | 24.33 | 360 | 0.04 |
| 31 | 14.96 | 34.11 | 2.97 | 266 | 20 | 15.79 | 34.01 | 4.63 | 25.06 | 291 | 0.07 |
| 49 | 14.30 | 34.13 | 2.16 | 252 | 30 | 15.02 | 34.10 | 3.12 | 25.29 | 269 | 0.10 |
| 58 | 13.72 | 34.16 | 1.65 | 238 | 50 | 14.25 | 34.13 | 2.09 | 25.48 | 251 | 0.15 |
| 123.42 | BLACK DOUGLAS; July 15, 1958; 0618 GCT; 27°14'N, 114°59.5'W; sounding, 640 fm; wind, 300°, force 4; weather, missing; sea, moderate; wire angle, 33°. | | | | | | | | | | |
| 4 | 20.76 | 33.77 | 6.66a) | 425 | 0 | 20.7 | (33.77) | (6.66) | (23.66) | (425) | (0.00) |
| 12 | 20.77 | 33.78 | 6.72 | 425 | 10 | 20.77 | 33.78 | 6.69 | 23.65 | 426 | 0.04 |
| 33 | 18.68 | 33.65 | 6.99 | 384 | 20 | 20.75 | 33.78 | 6.76 | 23.66 | 425 | 0.08 |
| 43 | 16.82 | 33.55 | 7.23 | 348 | 30 | 19.27 | 33.69 | 6.90 | 23.97 | 395 | 0.12 |
| 55 | 15.35 | 33.55 | 7.27 | 316 | 50 | 15.88 | 33.55 | 7.28 | 24.68 | 327 | 0.20 |
| 64 | 14.74 | 33.66 | 6.31 | 295 | 75 | 14.47 | 34.04 | 3.33 | 25.37 | 262 | 0.27 |
| 72 | 14.70 | 34.05 | 3.36 | 266 | 100 | 11.77 | 33.90 | 3.63 | 25.80 | 220 | 0.33 |
| 89 | 12.51 | 33.90 | 3.46 | 234 | 150 | 11.77 | 34.35 | 1.32 | 26.15 | 188 | 0.44 |
| 105 | 11.46 | 33.91 | 3.70 | 215 | 200 | 11.58 | 34.54 | 0.89 | 26.34 | 170 | 0.53 |
| 118 | 12.56 | 34.36 | 1.13 | 201 | 250 | 10.75 | 34.56 | 0.63 | 26.50 | 154 | 0.61 |
| 140 | 11.81 | 34.27 | 1.40 | 194 | 300 | 10.03 | 34.58 | 0.52 | 26.64 | 140 | 0.69 |
| 174 | 11.68 | 34.50 | - | 175 | 400 | 8.19 | 34.45 | 0.47 | 26.84 | 122 | 0.82 |
| 207 | 11.49 | 34.55 | 0.77 | 168 | 500 | 7.00 | 34.41 | 0.47 | 26.98 | 109 | 0.94 |
| 258 | 10.69 | 34.60 | 0.63 | 151 | | | | | | | |
| 345 | 9.22 | 34.55 | 0.39 | 131 | | | | | | | |
| 425 | 7.79 | 34.42 | 0.49 | 119 | | | | | | | |
| 567 | 6.43 | 34.41 | 0.38 | 102 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; July 15, 1958; 1119 GCT; 26°57.5'N, 115°30'W; sounding, 2000 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 11°. 123.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 21.56 | 33.80 | 6.41a) | 444 | 0 | 21.6 | (33.80) | (6.41) | (23.44) | (445) | (0.00) |
| 17 | 20.46 | 33.78 | 6.57 | 418 | 10 | 21.50 | 33.80 | 6.43 | 23.47 | 442 | 0.04 |
| 36 | 19.04 | 33.72 | 6.81 | 387 | 20 | 20.33 | 33.78 | 6.60 | 23.77 | 414 | 0.09 |
| 49 | 15.88 | 33.70 | 7.22 | 316 | 30 | 19.75 | 33.75 | 6.69 | 23.89 | 402 | 0.13 |
| 57 | 15.08 | 33.63 | 6.52 | 305 | 50 | 15.70 | 33.68 | 7.17 | 24.83 | 313 | 0.20 |
| 66 | 13.92 | 33.71 | 5.07 | 275 | 75 | 12.78 | 33.69 | 4.56 | 25.45 | 254 | 0.27 |
| 75 | 12.78 | 33.69 | 4.56 | 254 | 100 | 11.63 | 33.86 | 3.18 | 25.80 | 221 | 0.33 |
| 92 | 11.92 | 33.78 | 3.57 | 232 | 150 | 10.72 | 34.20 | 2.01 | 26.23 | 180 | 0.43 |
| 105 | 11.51 | 33.91 | 3.03 | 215 | 200 | 9.69 | 34.29 | 1.49 | 26.46 | 158 | 0.52 |
| 118 | 11.20 | 33.99 | 2.69 | 204 | 250 | 9.80 | 34.51 | 0.68 | 26.63 | 142 | 0.60 |
| 140 | 10.92 | 34.15 | 2.09 | 187 | 300 | 8.90 | 34.46 | 0.72 | 26.73 | 132 | 0.67 |
| 166 | 10.40 | 34.25 | 1.93 | 171 | 400 | 7.22 | 34.35 | 0.71 | 26.90 | 117 | 0.80 |
| 201 | 9.68 | 34.29 | 1.49 | 158 | 500 | 6.35 | 34.35 | 0.55 | 27.02 | 105 | 0.91 |
| 250 | 9.80 | 34.51 | 0.68 | 142 | | | | | | | |
| 325 | 8.48 | 34.43 | 0.76 | 128 | | | | | | | |
| 419 | 6.99 | 34.34 | 0.70 | 114 | | | | | | | |
| 552 | 6.04 | 34.36 | 0.46 | 101 | | | | | | | |

BLACK DOUGLAS; July 15, 1958; 1715 GCT; 26°36.5'N, 116°08'W; sounding, 2000+ fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 21°. 123.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 21.07 | 33.66 | 6.52a) | 442 | 0 | 21.1 | (33.66) | (6.52) | (23.46) | (443) | (0.00) |
| 14 | 20.66 | 33.68 | 6.56 | 430 | 10 | 20.92 | 33.67 | 6.54 | 23.53 | 437 | 0.04 |
| 31 | 19.60 | 33.71 | 6.64 | 401 | 20 | 20.22 | 33.69 | 6.60 | 23.72 | 419 | 0.09 |
| 44 | 17.41 | 33.53 | 7.21 | 362 | 30 | 19.61 | 33.71 | 6.64 | 23.90 | 402 | 0.13 |
| 52 | 17.05 | 33.54 | 7.10 | 354 | 50 | 17.14 | 33.54 | 7.11 | 24.39 | 355 | 0.20 |
| 61 | 16.80 | 33.57 | 7.10 | 346 | 75 | 16.55 | 33.60 | 7.00 | 24.57 | 338 | 0.29 |
| 70 | 16.60 | 33.58 | 7.10 | 340 | 100 | 14.64 | 33.64 | 6.90 | 25.02 | 295 | 0.37 |
| 87 | 16.53 | 33.81 | 6.94 | 322 | 150 | 10.96 | 33.96 | 3.45 | 26.00 | 202 | 0.50 |
| 100 | 14.64 | 33.64 | 6.90 | 295 | 200 | 10.47 | 34.26 | 1.96 | 26.31 | 172 | 0.59 |
| 112 | 12.52 | 33.52 | 6.54 | 262 | 250 | 10.25 | 34.44 | 1.00 | 26.49 | 155 | 0.67 |
| 132 | 10.94 | 33.55 | 5.35 | 232 | 300 | 9.97 | 34.54 | 0.42 | 26.62 | 143 | 0.75 |
| 154 | 10.96 | 34.03 | 2.94 | 197 | 400 | 8.20 | 34.48 | 0.33 | 26.86 | 120 | 0.89 |
| 184 | 10.58 | 34.22 | 2.17 | 176 | 500 | 6.90 | 34.42 | 0.32 | 27.00 | 107 | 1.01 |
| 227 | 10.37 | 34.38 | 1.49 | 161 | | | | | | | |
| 295 | 10.02 | 34.54 | 0.45 | 144 | | | | | | | |
| 381 | 8.45 | 34.49 | 0.35 | 123 | | | | | | | |
| 505 | 6.85 | 34.42 | 0.32 | 107 | | | | | | | |

BLACK DOUGLAS; July 15, 1958; 2244 GCT; 26°18.5'N, 116°47'W; sounding, 2100 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 18°. 123.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 21.90 | 33.79 | 6.43a) | 454 | 0 | 21.9 | (33.79) | (6.43) | (23.35) | (454) | (0.00) |
| 19 | 21.46 | 33.81 | 6.29 | 441 | 10 | 21.90 | 33.79 | 6.43 | 23.35 | 454 | 0.04 |
| 41 | 20.19 | 33.75 | 6.33 | 413 | 20 | 21.41 | 33.81 | 6.28 | 23.50 | 440 | 0.09 |
| 67 | 18.68 | 33.92 | 6.82 | 364 | 30 | 20.32 | 33.76 | 6.30 | 23.74 | 416 | 0.13 |
| 76 | 17.61 | 33.75 | 6.98 | 351 | 50 | 20.00 | 33.76 | 6.37 | 23.84 | 407 | 0.22 |
| 89 | 17.05 | 33.73 | 6.92 | 340 | 75 | 17.65 | 33.75 | 6.97 | 24.42 | 352 | 0.31 |
| 97 | 16.21 | 33.62 | 7.08 | 329 | 100 | 16.02 | 33.62 | 7.07 | 24.70 | 325 | 0.40 |
| 115 | 15.02 | 33.62 | 6.92 | 304 | 150 | 11.45 | 33.52 | 5.77 | 25.56 | 244 | 0.54 |
| 127 | 13.64 | 33.55 | 6.63 | 282 | 200 | 10.17 | 34.02 | 3.15 | 26.18 | 184 | 0.65 |
| 144 | 11.77 | 33.49 | 6.14 | 250 | 250 | 9.12 | 34.18 | 2.59 | 26.47 | 157 | 0.74 |
| 165 | 10.92 | 33.68 | 4.62 | 222 | 300 | 8.48 | 34.24 | 1.77 | 26.62 | 142 | 0.82 |
| 190 | 10.44 | 33.93 | 3.32 | 196 | 400 | 7.70 | 34.36 | 0.68 | 26.84 | 122 | 0.96 |
| 215 | 9.81 | 34.12 | 2.99 | 172 | 500 | 6.95 | 34.40 | 0.37 | 26.98 | 108 | 1.08 |
| 266 | 8.91 | 34.19 | 2.40 | 152 | | | | | | | |
| 345 | 8.07 | 34.29 | 1.20 | 132 | | | | | | | |
| 444 | 7.44 | 34.40 | 0.47 | 116 | | | | | | | |
| 577 | 6.12 | 34.38 | 0.28 | 100 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |
| **127.34** | BLACK DOUGLAS; July 14, 1958; 2040 GCT; 26°55.5'N, 114°06'W; sounding, 40 fm; wind, 280°, force 4; weather, clear; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 0 | 20.96 | 34.09 | 7.00a) | 407 | 0 | 20.96 | 34.09 | 7.00 | 23.84 | 407 | 0.00 |
| 9 | 19.79 | 34.00 | 7.71 | 385 | 10 | 19.60 | 34.00 | 7.59 | 24.12 | 380 | 0.04 |
| 28 | 15.95 | 34.04 | 3.41 | 293 | 20 | 17.55 | 34.02 | 5.16 | 24.66 | 330 | 0.07 |
| 46 | 13.78 | 34.27 | 0.90 | 231 | 30 | 15.50 | 34.06 | 2.93 | 25.16 | 282 | 0.10 |
| 55 | 13.78 | 34.29 | 0.71 | 230 | 50 | 13.78 | 34.28 | 0.85 | 25.70 | 230 | 0.16 |
| **127.40** | BLACK DOUGLAS; July 14, 1958; 1632 GCT; 26°36'N, 114°26'W; sounding, 1500 fm; wind, 290°, force 3; weather, partly cloudy; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 4 | 21.66 | 33.84 | 6.37a) | 445 | 0 | 21.7 | (33.84) | (6.37) | (23.43) | (446) | (0.00) |
| 13 | 21.38 | 33.86 | 6.41 | 435 | 10 | 21.54 | 33.85 | 6.39 | 23.49 | 440 | 0.04 |
| 32 | 18.04 | 33.80 | 7.36 | 357 | 20 | 20.50 | 33.85 | 6.63 | 23.77 | 414 | 0.09 |
| 45 | 16.09 | 33.73 | 7.17 | 318 | 30 | 18.41 | 33.81 | 7.27 | 24.27 | 366 | 0.13 |
| 54 | 15.08 | 33.77 | 6.24 | 294 | 50 | 15.58 | 33.75 | 6.69 | 24.90 | 306 | 0.19 |
| 64 | 14.04 | 33.76 | 5.32 | 274 | 75 | 13.21 | 33.81 | 4.33 | 25.45 | 254 | 0.26 |
| 73 | 13.30 | 33.80 | 4.48 | 256 | 100 | 12.57 | 34.15 | 2.45 | 25.84 | 217 | 0.32 |
| 90p | 12.72 | 33.96 | 3.19 | 234 | 150 | 11.94 | 34.60 | 0.52 | 26.31 | 172 | 0.42 |
| 114p | 12.40 | 34.45 | 3.66u | 192 | 200 | 11.05 | 34.63 | 0.45 | 26.50 | 154 | 0.50 |
| 149p | 11.96 | 34.60 | 0.53 | 172 | 250 | 10.30 | 34.62 | 0.42 | 26.62 | 143 | 0.58 |
| 206p | 10.96 | 34.63 | 0.44 | 153 | 300 | 9.75 | 34.60 | 0.41 | 26.71 | 134 | 0.65 |
| 281p | 9.97 | 34.61 | 0.41 | 138 | 400 | (8.75) | (34.56) | (0.42) | (26.84) | (122) | (0.78) |
| 395p | 8.80 | 34.56 | 0.42 | 123 | | | | | | | |
| **127.50** | BLACK DOUGLAS; July 14, 1958; 1015 GCT; 26°19'N, 115°04'W; sounding, 1500 fm; wind, 290°, force 3; weather, clear; sea, slight; wire angle, 16°. | | | | | | | | | | |
| 0 | 22.08 | 33.86 | 6.35a) | 454 | 0 | 22.08 | 33.86 | 6.35 | 23.35 | 454 | 0.00 |
| 9 | 21.87 | 33.85 | 6.35 | 449 | 10 | 21.83 | 33.85 | 6.36 | 23.40 | 449 | 0.04 |
| 27 | 20.35 | 33.87 | 6.49 | 408 | 20 | 21.10 | 33.86 | 6.41 | 23.62 | 428 | 0.09 |
| 40p | 18.80b) | 33.77 | 6.65 | 378 | 30 | 20.01 | 33.85 | 6.51 | 23.90 | 401 | 0.13 |
| 48p | 17.91c) | 33.78 | 6.99 | 356 | 50 | 17.77 | 33.78 | 7.03 | 24.42 | 352 | 0.21 |
| 56p | 17.36 | 33.75 | 7.12 | 345 | 75 | 15.75 | 33.82 | 6.88 | 24.92 | 304 | 0.29 |
| 63p | 16.83d) | 33.80 | 6.94 | 330 | 100 | 12.22 | 33.84 | 5.83 | 25.66 | 234 | 0.36 |
| 78p | 15.30 | 33.82 | 6.77 | 295 | 150 | 11.94 | 34.27 | 1.53 | 26.06 | 196 | 0.47 |
| 88p | 13.66 | 33.86 | 6.41 | 259 | 200 | 11.01 | 34.44 | 0.85 | 26.36 | 168 | 0.56 |
| 97p | 12.54 | 33.85 | 6.06 | 237 | 250 | 10.00 | 34.45 | 0.80 | 26.55 | 150 | 0.64 |
| 110p | 11.63 | 33.64u | 5.03 | | 300 | 8.45 | 34.30 | 1.23 | 26.68 | 137 | 0.72 |
| 127p | 11.84 | 33.96 | 3.18 | 218 | 400 | 7.55 | 34.36 | 0.64 | 26.86 | 120 | 0.85 |
| 150p | 11.94 | 34.27 | 1.53 | 196 | | | | | | | |
| 183p | 11.30 | 34.42 | 0.92 | 174 | | | | | | | |
| 240p | 10.26 | 34.47 | 0.75 | 153 | | | | | | | |
| 316p | 8.09 | 34.27 | 1.30 | 134 | | | | | | | |
| 434p | 7.41 | 34.40 | 0.41 | 115 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.
b) Alternate value, 18.66°C, not used in interpolation.
c) Alternate value, 17.79°C, not used in interpolation.
d) Alternate value, 16.95°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; July 14, 1958; 0401 GCT; 26°02'N, 115°44'W; sounding, 2000 fm; wind, 290°, force 3; weather, missing; sea, slight; wire angle, 08°. | | | | | | | | | | | 127.60 |
| 6 | 22.94 | 33.81 | 6.33a) | 480 | 0 | 23.0 | (33.81) | (6.33) | (23.05) | (482) | (0.00) |
| 15 | 20.92 | 33.86 | 6.41 | 423 | 10 | 22.20 | 33.82 | 6.38 | 23.28 | 460 | 0.05 |
| 34 | 20.65 | 33.87 | 6.37 | 416 | 20 | 20.85 | 33.86 | 6.40 | 23.68 | 422 | 0.09 |
| 48 | 19.66 | 33.78 | 6.71 | 397 | 30 | 20.82 | 33.86 | 6.40 | 23.69 | 421 | 0.13 |
| 56 | 18.04 | 33.58 | 6.94 | 373 | 50 | 19.42 | 33.75 | 6.75 | 23.98 | 394 | 0.21 |
| 66 | 17.66 | 33.75 | 7.13 | 352 | 75 | 17.09 | 33.75 | 7.02 | 24.56 | 339 | 0.31 |
| 75 | 17.09 | 33.75 | 7.02 | 339 | 100 | 14.49 | 33.66 | 6.29 | 25.07 | 290 | 0.39 |
| 93 | 15.44 | 33.71 | 6.62 | 306 | 150 | 10.75 | 33.81 | 4.15 | 25.92 | 209 | 0.51 |
| 106 | 13.68 | 33.62 | 6.03 | 277 | 200 | 9.89 | 34.08 | 2.88 | 26.27 | 176 | 0.61 |
| 120 | 12.69 | 33.57 | 5.45 | 262 | 250 | 9.41 | 34.27 | 1.70 | 26.50 | 154 | 0.70 |
| 142 | 11.09 | 33.78 | 4.36 | 218 | 300 | 8.72 | 34.30 | 1.27 | 26.64 | 141 | 0.77 |
| 168 | 10.21 | 33.87 | 3.76 | 197 | 400 | 7.82 | 34.35 | 0.85 | 26.81 | 125 | 0.91 |
| 203 | 9.88 | 34.08 | 2.82 | 176 | 500 | 6.95 | 34.40 | 0.46 | 26.98 | 109 | 1.04 |
| 249 | 9.42 | 34.27 | 1.72 | 154 | | | | | | | |
| 323 | 8.42 | 34.31 | 1.15 | 136 | | | | | | | |
| 416 | 7.72 | 34.36 | - | 122 | | | | | | | |
| 548 | 6.49 | 34.41 | 0.28 | 103 | | | | | | | |
| BLACK DOUGLAS; July 13, 1958; 0310 GCT; 26°29'N, 113°29'W; sounding, 40 fm; wind, 090°, force 2; weather, partly cloudy; sea, slight; wire angle, 05°. | | | | | | | | | | | 130.30 |
| 0 | 22.43 | 34.13 | 7.51a) | 444 | 0 | 22.43 | 34.13 | 7.51 | 23.46 | 444 | 0.00 |
| 9 | 20.03 | 34.11 | 7.00 | 383 | 10 | 18.98 | 34.11 | 6.31 | 24.36 | 357 | 0.04 |
| 28 | 14.81 | 34.10 | 2.71 | 264 | 20 | 15.55 | 34.10 | 3.40 | 25.18 | 280 | 0.07 |
| 46 | 13.84 | 34.33 | 0.61 | 228 | 30 | 14.65 | 34.11 | 2.47 | 25.38 | 261 | 0.10 |
| 55 | 13.82 | 34.32 | 0.61 | 228 | 50 | 13.81 | 34.33 | 0.61 | 25.72 | 228 | 0.15 |
| BLACK DOUGLAS; July 13, 1958; 0631 GCT; 26°19'N, 113°48.5'W; sounding, 200 fm; wind, 090°, force 2; weather, clear; sea, slight; wire angle, 14°. | | | | | | | | | | | 130.35 |
| 8 | 21.01 | 33.84 | 7.32a) | 427 | 0 | 21.0 | (33.84) | (7.32) | (23.63) | (427) | (0.00) |
| 17 | 17.78 | 33.75 | 7.06 | 355 | 10 | 20.88 | 33.84 | 7.32 | 23.66 | 424 | 0.04 |
| 35 | 16.25 | 33.82 | 6.68 | 316 | 20 | 17.52 | 33.76 | 7.01 | 24.46 | 348 | 0.08 |
| 52 | 14.14 | 33.84 | 4.64 | 270 | 30 | 16.69 | 33.80 | 6.83 | 24.69 | 326 | 0.11 |
| 75 | 13.06 | 34.11 | 2.24 | 230 | 50 | 14.36 | 33.84 | 4.95 | 25.23 | 275 | 0.18 |
| 97 | 12.96 | 34.44 | 0.84 | 203 | 75 | 13.06 | 34.11 | 2.24 | 25.70 | 230 | 0.24 |
| 118 | 12.86 | 34.52 | 0.68 | 196 | 100 | 12.98 | 34.46 | 0.80 | 26.00 | 202 | 0.29 |
| 153 | 12.62 | 34.58 | 0.41 | 186 | 150 | 12.64 | 34.57 | 0.44 | 26.14 | 188 | 0.39 |
| 189 | 12.51 | 34.62 | 0.41 | 181 | 200 | 12.42 | 34.62 | 0.41 | 26.23 | 180 | 0.48 |
| 232 | 12.06 | 34.63 | 0.41 | 172 | 250 | 11.72 | 34.64 | 0.40 | 26.38 | 166 | 0.57 |
| 278 | 11.10 | 34.65 | 0.35 | 154 | | | | | | | |
| BLACK DOUGLAS; July 13, 1958; 0950 GCT; 26°09'N, 114°07.5'W; sounding, 1200 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 05°. | | | | | | | | | | | 130.40 |
| 6 | 22.94 | 33.89 | 6.39a) | 474 | 0 | 23.0 | (33.89) | (6.39) | (23.12) | (476) | (0.00) |
| 15 | 22.06 | 33.89 | 6.64 | 451 | 10 | 22.75 | 33.89 | 6.45 | 23.19 | 469 | 0.05 |
| 34 | 17.84 | 33.69 | 7.33 | 360 | 20 | 21.18 | 33.86 | 6.80 | 23.60 | 430 | 0.09 |
| 43 | 16.54 | 33.64 | 7.33 | 335 | 30 | 18.88 | 33.74 | 7.20 | 24.11 | 382 | 0.13 |
| 52 | 15.60 | 33.68 | 7.37 | 312 | 50 | 15.79 | 33.68 | 7.36 | 24.80 | 316 | 0.20 |
| 61 | 14.27 | 33.57 | 6.72 | 292 | 75 | 13.18 | 33.77 | 5.04 | 25.43 | 256 | 0.27 |
| 70 | 13.62 | 33.73 | 5.54 | 268 | 100 | 11.86 | 33.95 | 3.31 | 25.82 | 219 | 0.34 |
| 90p | 12.22 | 33.84 | 4.08 | 234 | 150 | 11.26 | 34.37 | 1.55 | 26.25 | 178 | 0.43 |
| 110p | 11.66 | 34.06 | 2.52 | 207 | 200 | 10.45 | 34.50 | 0.90 | 26.50 | 154 | 0.52 |
| 135p | 11.39 | 34.27 | 1.65 | 186 | 250 | 9.72 | 34.55 | 0.67 | 26.67 | 138 | 0.59 |
| 170p | 10.90 | 34.42 | 1.08 | 167 | 300 | 9.06 | 34.49 | 0.53 | 26.72 | 133 | 0.66 |
| 228p | 10.02 | 34.59 | 0.79 | 141 | 400 | 8.07 | 34.47 | 0.45 | 26.86 | 120 | 0.80 |
| 303p | 9.05 | 34.49 | 0.53 | 132 | | | | | | | |
| 405p | 8.04 | 34.47 | 0.45 | 119 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |
| **130.50** | BLACK DOUGLAS; July 13, 1958; 1605 GCT; 25°47.5'N, 114°44'W; sounding, 2000+ fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 17°. | | | | | | | | | | |
| 6 | 22.48 | 33.73 | 6.32a) | 474 | 0 | 22.5 | (33.73) | (6.32) | (23.13) | (474) | (0.00) |
| 15 | 20.24 | 33.72 | 6.49 | 416 | 10 | 21.50 | 33.73 | 6.40 | 23.41 | 448 | 0.05 |
| 33 | 18.83 | 33.66 | 6.93 | 386 | 20 | 19.85 | 33.71 | 6.60 | 23.84 | 407 | 0.09 |
| 41 | 17.78 | 33.61 | 6.98 | 365 | 30 | 19.15 | 33.67 | 6.83 | 24.00 | 392 | 0.13 |
| 51 | 17.00 | 33.66 | 6.99 | 344 | 50 | 17.06 | 33.66 | 6.99 | 24.50 | 345 | 0.20 |
| 60 | 16.36 | 33.57 | 7.02 | 336 | 75 | 15.23 | 33.66 | 6.81 | 24.91 | 305 | 0.28 |
| 69 | 15.88 | 33.62 | 6.91 | 322 | 100 | 12.38 | 33.69 | 4.77 | 25.51 | 248 | 0.36 |
| 82 | 14.30 | 33.68 | 6.69 | 284 | 150 | 11.72 | 34.30 | 1.57 | 26.11 | 191 | 0.46 |
| 94 | 12.88 | 33.59b) | 4.92 | 256 | 200 | 11.00 | 34.45 | 0.93 | 26.37 | 167 | 0.56 |
| 105 | 12.13 | 33.69 | 4.67 | 242 | 250 | 9.65 | 34.39 | 0.79 | 26.55 | 150 | 0.64 |
| 125 | 12.22 | 34.14 | 2.34 | 212 | 300 | 8.63 | 34.35 | 1.07 | 26.68 | 137 | 0.71 |
| 149 | 11.76 | 34.29 | 1.63 | 192 | 400 | 7.82 | 34.41 | 0.48 | 26.86 | 120 | 0.84 |
| 178 | 11.30 | 34 45 | 1.07 | 172 | 500 | (6.80) | (34.42) | (0.22) | (27.01) | (106) | (0.96) |
| 219 | 10.16 | 34.38 | 0.71 | 158 | | | | | | | |
| 286 | 8.78 | 34.34 | 1.10c) | 139 | | | | | | | |
| 371 | 8.09 | 34.40 | 0.57 | 125 | | | | | | | |
| 486 | 6.96 | 34.42 | 0.26 | 108 | | | | | | | |
| **130.60** | BLACK DOUGLAS; July 13, 1958; 2217 GCT; 25°23'N, 115°25'W; sounding, 2100 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 8 | 23.60 | 34.02 | 6.15a) | 484 | 0 | 23.7 | (34.02) | (6.16) | (23.01) | (486) | (0.00) |
| 17 | 21.49 | 34.11 | 6.34 | 420 | 10 | 23.40 | 34.03 | 6.18 | 23.10 | 478 | 0.05 |
| 36 | 21.17 | 34.12 | 6.25 | 411 | 20 | 21.45 | 34.11 | 6.32 | 23.72 | 419 | 0.09 |
| 63 | 19.10 | 34.07 | 6.80 | 363 | 30 | 21.29 | 34.12 | 6.26 | 23.76 | 414 | 0.13 |
| 72 | 18.66 | 34.10 | 6.52 | 350 | 50 | 20.17 | 34.09 | 6.51 | 24.05 | 387 | 0.21 |
| 81 | 17.77 | 34.03 | 6.68 | 334 | 75 | 18.42 | 34.08 | 6.55 | 24.49 | 345 | 0.31 |
| 94 | 16.52 | 33.96 | 6.19 | 311 | 100 | 15.62 | 33.89 | 5.89 | 25.00 | 297 | 0.39 |
| 108 | 14.30 | 33.78 | 5.50 | 277 | 150 | 11.67 | 34.03 | 2.80 | 25.92 | 209 | 0.52 |
| 120 | 12.98 | 33.78 | 4.57 | 252 | 200 | 11.05 | 34.41 | 1.05 | 26.32 | 171 | 0.61 |
| 137 | 12.07 | 33.88 | 3.60 | 228 | 250 | 10.42 | 34.51 | 0.63 | 26.52 | 153 | 0.70 |
| 154 | 11.56 | 34.10 | 2.49 | 202 | 300 | 9.74 | 34.50 | 0.42 | 26.60 | 142 | 0.77 |
| 180 | 11.24 | 34.33 | 1.52 | 180 | 400 | 8.66 | 34.46 | 0.45 | 26.77 | 128 | 0.91 |
| 202 | 11.03 | 34.42 | 1.03 | 170 | 500 | 7.50 | 34.42 | 0.38 | 26.92 | 115 | 1.04 |
| 248 | 10.46 | 34.51 | 0.65 | 154 | | | | | | | |
| 322 | 9.48 | 34.49 | 0.39 | 139 | | | | | | | |
| 419 | 8.42 | 34.45 | 0.46 | 126 | | | | | | | |
| 546 | 6.94 | 34.41 | 0.30 | 108 | | | | | | | |
| **133.25** | BLACK DOUGLAS; July 12, 1958; 1446 GCT; 26°04.5'N, 112°48'W; sounding, 45 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 01°. | | | | | | | | | | |
| 2 | 23.16 | 33.98 | 6.35a) | 474 | 0 | 23.16 | (33.98) | (6.35) | (23.10) | (478) | (0.00) |
| 11 | 20.28 | 33.98 | 6.92 | 398 | 10 | 20.60 | 33.98 | 6.89 | 23.85 | 406 | 0.04 |
| 30 | 14.68 | 34.00 | 4.46 | 270 | 20 | 16.50 | 33.99 | 5.37 | 24.88 | 308 | 0.08 |
| 48 | 14.10 | 34.14 | 2.69 | 247 | 30 | 14.68 | 34.00 | 4.46 | 25.28 | 270 | 0.11 |
| 71 | 13.74 | 34.41 | 0.94 | 220 | 50 | 14.06 | 34.15 | 2.31 | 25.54 | 246 | 0.16 |
| | | | | | 75 | (13.70) | (34.44) | (0.83) | (25.83) | (218) | (0.22) |

a) All oxygen values appear to be 20 per cent high.
b) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.
c) Alternate value, 1.68 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| BLACK DOUGLAS; July 12, 1958; 1139 GCT; 25°54.5'N, 113°07.5'W; sounding, 105 fm; wind, 090°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 133.30 |
| 4 | 20.68 | 33.87 | 6.77a) | 417 | 0 | 22.0 | (33.87) | (6.77) | (23.38) | (451) | (0.00) |
| 13 | 18.84 | 33.89 | 6.92 | 370 | 10 | 19.50 | 33.89 | 6.89 | 24.06 | 386 | 0.04 |
| 32 | 15.41 | 33.78 | 6.11 | 300 | 20 | 17.29 | 33.84 | 6.63 | 24.58 | 337 | 0.08 |
| 50 | 14.45 | 33.77 | 5.33 | 281 | 30 | 15.55 | 33.78 | 6.17 | 24.94 | 303 | 0.11 |
| 73 | 13.68 | 34.02 | 3.16 | 248 | 50 | 14.45 | 33.77 | 5.33 | 25.16 | 281 | 0.17 |
| 96 | 13.21 | 34.15 | 2.22 | 229 | 75 | 13.63 | 34.03 | 3.05 | 25.53 | 246 | 0.23 |
| 118 | 12.93 | 34.49 | 1.16 | 199 | 100 | 13.26 | 34.31 | 1.82 | 25.82 | 219 | 0.29 |
| 145 | 12.61 | 34.55 | 0.55 | 188 | 150 | (12.57) | (34.56) | (0.50) | (26.16) | (187) | (0.40) |
| BLACK DOUGLAS; July 12, 1958; 0435 GCT; 25°34.5'N, 113°45.5'W; sounding, 1150 fm; wind, 090°, force 2; weather, missing; sea, moderate; wire angle, 02°. | | | | | | | | | | | 133.40 |
| 117p | 11.74 | 34.17 | 2.36a) | 200 | | | | | | | |
| 138p | 11.40 | 34.33 | 1.97 | 183 | | | | | | | |
| 164p | 10.98 | 34.36 | 1.26 | 173 | | | | | | | |
| 202p | 10.40 | 34.43 | 1.12 | 158 | | | | | | | |
| 264p | 9.88 | 34.51 | 0.39 | 144 | | | | | | | |
| 346p | 8.64 | 34.43 | 0.28 | 130 | | | | | | | |
| 462p | 7.60 | 34.42 | 0.30 | 116 | | | | | | | |
| BLACK DOUGLAS; July 11, 1958; 2101 GCT; 25°08'N, 114°22'W; sounding, 2000 fm; wind, 090°, force 2; weather, fog; sea, moderate; wire angle, 07°. | | | | | | | | | | | 133.50 |
| 6 | 21.57 | 33.82 | 5.62a) | 443 | 0 | 23.5 | (33.82) | (5.62) | (22.91) | (496) | (0.00) |
| 14 | 19.82 | 33.68 | 5.76 | 408 | 10 | 20.46 | 33.73 | 5.72 | 23.69 | 421 | 0.04 |
| 33 | 18.24 | 33.65 | 5.73 | 373 | 20 | 19.20 | 33.66 | 5.78 | 23.98 | 394 | 0.09 |
| 42 | 17.59 | 33.73 | 6.22 | 352 | 30 | 18.45 | 33.65 | 5.73 | 24.15 | 378 | 0.12 |
| 51 | 16.98 | 33.68 | 6.02 | 342 | 50 | 17.03 | 33.68 | 6.03 | 24.52 | 342 | 0.20 |
| 60 | 16.22 | 33.62 | 6.17 | 330 | 75 | 14.75 | 33.56 | 5.82 | 24.94 | 303 | 0.28 |
| 68 | 15.40 | 33.57 | 6.10 | 316 | 100 | 11.95 | 33.66 | 4.49 | 25.58 | 241 | 0.35 |
| 80 | 14.14 | 33.56 | - | 290 | 150 | 10.60 | 33.93 | 2.80 | 26.04 | 198 | 0.46 |
| 91 | 12.58 | 33.59 | 4.89 | 258 | 200 | 10.32 | 34.28 | 1.40 | 26.36 | 168 | 0.55 |
| 105 | 11.72 | 33.69 | 4.28 | 235 | 250 | 9.86 | 34.38 | 1.00 | 26.51 | 153 | 0.64 |
| 126 | 11.24 | 33.73 | 3.66 | 224 | 300 | 9.38 | 34.44 | 0.52 | 26.64 | 141 | 0.71 |
| 150 | 10.60 | 33.93 | 2.80 | 198 | 400 | 7.82 | 34.37 | 0.43 | 26.83 | 124 | 0.85 |
| 180 | 10.42 | 34.20 | 1.56 | 176 | 500 | (6.80) | (34.36) | (0.22) | (26.97) | (110) | (0.97) |
| 223 | 10.06 | 34.34 | 1.20 | 160 | | | | | | | |
| 293 | 9.46 | 34.44 | 0.52 | 142 | | | | | | | |
| 379 | 8.06 | 34.37 | 0.48 | 127 | | | | | | | |
| 496 | 6.86 | 34.36 | 0.22 | 111 | | | | | | | |
| BLACK DOUGLAS; July 11, 1958; 1452 GCT; 24°54.5'N, 115°01.5'W; sounding, 2100 fm; wind, 140°, force 1; weather, fog; sea, moderate; wire angle, 05°. | | | | | | | | | | | 133.60 |
| 6 | 22.42 | 33.89 | 5.45a) | 461 | 0 | 22.5 | (33.89) | (5.45) | (23.26) | (463) | (0.00) |
| 15 | 21.54 | 33.86 | 5.58 | 439 | 10 | 22.00 | 33.88 | 5.53 | 23.38 | 451 | 0.04 |
| 33 | 20.79 | 33.92 | 5.62 | 416 | 20 | 21.30 | 33.88 | 5.60 | 23.58 | 432 | 0.09 |
| 42 | 19.67 | 33.86 | 5.76 | 392 | 30 | 20.94 | 33.91 | 5.62 | 23.70 | 420 | 0.13 |
| 51 | 19.50 | 33.89 | 5.76 | 386 | 50 | 19.51 | 33.89 | 5.76 | 24.06 | 386 | 0.21 |
| 60 | 18.91 | 33.86 | 5.85 | 374 | 75 | 17.25 | 33.69 | 6.15 | 24.47 | 348 | 0.30 |
| 70 | 17.74 | 33.70 | 6.11 | 358 | 100 | 15.05 | 33.71 | 5.76 | 24.98 | 298 | 0.39 |
| 83 | 16.59 | 33.68 | 6.13 | 333 | 150 | 11.80 | 34.08 | 2.35 | 25.93 | 208 | 0.52 |
| 96 | 15.66 | 33.75 | 5.91 | 308 | 200 | 11.05 | 34.37 | 1.14 | 26.29 | 174 | 0.61 |
| 109 | 13.50 | 33.58 | 5.34 | 276 | 250 | 10.42 | 34.48 | 0.57 | 26.50 | 154 | 0.70 |
| 131 | 12.50 | 33.81 | 3.59 | 240 | 300 | 9.58 | 34.48 | 0.47 | 26.64 | 141 | 0.77 |
| 158 | 11.56 | 34.16 | 2.03 | 198 | 400 | 8.18 | 34.47 | 0.45 | 26.85 | 121 | 0.91 |
| 189 | 11.18 | 34.32 | 1.33 | 179 | 500 | 7.19 | 34.45 | 0.28 | 26.98 | 109 | 1.03 |
| 233 | 10.68 | 34.48 | 0.64 | 159 | | | | | | | |
| 304 | 9.52 | 34.48 | 0.47 | 140 | | | | | | | |
| 394 | 8.25 | 34.47 | 0.44 | 122 | | | | | | | |
| 513 | 7.04 | 34.44 | 0.24 | 108 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

137.23 BLACK DOUGLAS; July 10, 1958; 1114 GCT; 25°33'N, 112°18.5'W; sounding, 42 fm; wind, direction missing, force 1; weather, clear; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 23.38 | 34.13 | 5.43a) | 469 | 0 | 23.5 | (34.13) | (5.43) | (23.16) | (472) | (0.00) |
| 15 | 20.88 | 34.12 | 5.82 | 404 | 10 | 22.60 | 34.13 | 5.59 | 23.40 | 448 | 0.05 |
| 34 | 15.66 | 34.11 | 3.20 | 282 | 20 | 19.16 | 34.12 | 5.07 | 24.32 | 361 | 0.09 |
| 52 | 15.12 | 34.29 | - | 256 | 30 | 15.84 | 34.11 | 3.43 | 25.11 | 286 | 0.12 |
| 61 | 14.74 | 34.36 | - | 244 | 50 | 15.25 | 34.29 | | 25.39 | 260 | 0.17 |

137.30 BLACK DOUGLAS; July 10, 1958; 1455 GCT; 25°20'N, 112°45.5'W; sounding, 170 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 21.81 | 33.97 | 5.49a) | 438 | 0 | (22.3) | (33.97) | (5.48) | (23.37) | (452) | (0.00) |
| 15 | 20.72 | 33.93 | 5.62 | 413 | 10 | 21.40 | 33.95 | 5.55 | 23.61 | 429 | 0.04 |
| 34 | 16.08 | 33.84 | 5.38 | 310 | 20 | 19.17 | 33.90 | 5.62 | 24.26 | 377 | 0.08 |
| 52 | 14.71 | 34.04 | 3.59 | 267 | 30 | 16.51 | 33.84 | 5.48 | 24.76 | 319 | 0.12 |
| 75 | 13.59 | 34.22 | 1.99 | 231 | 50 | 14.82 | 34.02 | 3.73 | 25.28 | 270 | 0.18 |
| 98 | 13.56 | 34.38 | 1.01 | 218 | 75 | 13.59 | 34.22 | 1.99 | 25.69 | 231 | 0.24 |
| 119 | 13.26 | 34.56 | 0.85 | 200 | 100 | 13.57 | 34.39 | 1.00 | 25.83 | 218 | 0.30 |
| 155 | 11.98 | 34.60 | 0.54 | 173 | 150 | 12.14 | 34.59 | 0.61 | 26.27 | 176 | 0.40 |
| 191 | 11.75 | 34.63 | 0.32 | 166 | 200 | 11.62 | 34.62 | 0.29 | 26.35 | 168 | 0.48 |
| 236 | 11.03 | 34.60 | 0.13 | 156 | | | | | | | |

137.35 BLACK DOUGLAS; July 10, 1958; 1804 GCT; 25°10'N, 113°04.5'W; sounding, 625 fm; wind, 340°, force 1; weather, partly cloudy; sea, rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 22.46 | 33.94 | 5.71a) | 458 | 0 | 22.9 | (33.94) | (5.71) | (23.18) | (470) | (0.00) |
| 15 | 21.94 | 33.88 | 5.55 | 448 | 10 | 22.24 | 33.91 | 5.65 | 23.34 | 454 | 0.05 |
| 34 | 18.34 | 33.71 | 6.12 | 370 | 20 | 21.43 | 33.85 | 5.58 | 23.52 | 438 | 0.09 |
| 43 | 17.59 | 33.78 | 6.12 | 348 | 30 | 19.16 | 33.73 | 6.04 | 24.03 | 389 | 0.13 |
| 52 | 16.10 | 33.86 | 5.88 | 309 | 50 | 16.50 | 33.84 | 5.98 | 24.76 | 320 | 0.20 |
| 61 | 15.52 | 33.93 | 4.68 | 291 | | | | | | | |
| 70 | 15.06 | 34.05 | 3.35 | 274 | | | | | | | |
| 138b) | 11.16 | 34.32 | 1.31 | | | | | | | | |
| 195b) | 10.90 | 34.47 | 0.81 | | | | | | | | |
| 238b) | 10.54 | 34.49 | 0.21 | | | | | | | | |
| 321b) | 9.58 | - | 0.30 | | | | | | | | |
| 431b) | 8.34 | 34.51 | 0.17 | | | | | | | | |

137.40 BLACK DOUGLAS; July 10, 1958; 2117 GCT; 25°00'N, 113°23.5'W; sounding, 1200 fm; wind, 340°, force 1; weather, partly cloudy; sea, moderate; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 23.37 | 33.86 | 5.34a) | 488 | 0 | 24.3 | (33.86) | (5.34) | (22.71) | (515) | (0.00) |
| 17 | 21.25 | 33.78 | 5.54 | 438 | 10 | 23.00 | 33.85 | 5.36 | 23.08 | 480 | 0.05 |
| 36 | 17.60 | 33.73 | 6.17 | 352 | 20 | 20.61 | 33.77 | 5.64 | 23.68 | 422 | 0.09 |
| 45 | 16.60 | 33.58 | 6.12 | 340 | 30 | 18.40 | 33.74 | 6.07 | 24.23 | 370 | 0.13 |
| 54 | 15.63 | 33.62 | 6.12 | 317 | 50 | 16.10 | 33.60 | 6.14 | 24.67 | 328 | 0.20 |
| 63 | 14.46 | 33.59 | 5.28 | 294 | 75 | 13.82 | 33.71 | 4.64 | 25.25 | 273 | 0.28 |
| 72 | 14.06 | 33.72 | 4.72 | 277 | 100 | 12.11 | 33.83 | 3.33 | 25.68 | 232 | 0.34 |
| 86 | 12.58 | 33.66 | 4.27 | 253 | 150 | 11.38 | 34.34 | 1.15 | 26.21 | 182 | 0.45 |
| 100 | 12.11 | 33.83 | 3.33 | 232 | 200 | 10.61 | 34.48 | 0.72 | 26.46 | 158 | 0.53 |
| 113 | 11.64 | 33.95 | 2.76 | 215 | 250 | 10.15 | 34.54 | 0.36 | 26.58 | 146 | 0.61 |
| 134 | 11.40 | 34.18 | 1.79 | 194 | 300 | 9.48 | 34.49 | 0.27 | 26.66 | 139 | 0.69 |
| 161 | 11.34 | 34.41 | 0.81 | 175 | 400 | 7.87 | 34.44 | 0.25 | 26.88 | 118 | 0.82 |
| 191 | 10.70 | 34.46 | 0.79 | 161 | 500 | 7.07 | 34.49 | 0.20 | 27.03 | 104 | 0.94 |
| 235 | 10.34 | 34.54 | 0.42 | 148 | | | | | | | |
| 305 | 9.44 | 34.49 | 0.27 | 138 | | | | | | | |
| 395 | 7.96 | 34.44 | 0.25 | 120 | | | | | | | |
| 512 | 7.00 | 34.49 | 0.18 | 103 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.
b) Pretrip; depth too uncertain for interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_{T}{}^{-5}{}_{3}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_{T}{}^{-5}{}_{3}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

BLACK DOUGLAS; July 11, 1958; 0320 GCT; 24°40'N, 114°01.5'W; sounding, 1700 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 06°. 137.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 20.84 | 33.77 | 5.75a) | 428 | 0 | 22.3 | (33.77) | (5.75) | (23.22) | (466) | (0.00) |
| 15 | 20.44 | 33.77 | 5.84 | 418 | 10 | 20.64 | 33.77 | 5.81 | 23.68 | 423 | 0.04 |
| 34 | 19.30 | 33.76 | 5.88 | 390 | 20 | 19.78 | 33.73 | 5.88 | 23.88 | 404 | 0.08 |
| 43 | 19.18 | 33.84 | 5.79 | 381 | 30 | 19.27 | 33.70 | 5.88 | 24.00 | 391 | 0.12 |
| 52 | 18.86 | 33.87 | 5.82 | 372 | 50 | 18.99 | 33.86 | 5.81 | 24.17 | 376 | 0.20 |
| 61 | 18.43 | 33.96 | 5.86 | 355 | 75 | 17.66 | 34.01 | 5.94 | 24.62 | 334 | 0.29 |
| 70 | 17.88 | 34.00 | 5.99 | 339 | 100 | 13.27 | 33.68 | 5.48 | 25.32 | 266 | 0.37 |
| 84 | 17.20 | 34.01 | 5.84 | 323 | 150 | 11.28 | 34.10 | 3.12 | 26.05 | 197 | 0.48 |
| 97 | 13.78 | 33.69 | 5.62 | 274 | 200 | 10.59 | 34 44 | 1.80 | 26.44 | 160 | 0.57 |
| 109 | 12.47 | 33.71 | 5.03 | 248 | 250 | 10.00 | 34.49 | 1.07 | 26.57 | 147 | 0.65 |
| 131 | 11.78 | 34.00 | 3.18 | 213 | 300 | 9.19 | 34.49 | 0.84 | 26.71 | 134 | 0.73 |
| 158 | 11.10 | 34.15 | 3.09 | 191 | 400 | 8.24 | 34.51 | 0.26 | 26.87 | 119 | 0.86 |
| 189 | 10.69 | 34.42 | 2.04 | 164 | 500 | 7.02 | 34.44 | 0.24 | 27.00 | 107 | 0.98 |
| 233 | 10.24 | 34.48 | 1.18 | 152 | | | | | | | |
| 305 | 9.13 | 34.49 | 0.80 | 134 | | | | | | | |
| 395 | 8.28 | 34.51 | 0.27 | 120 | | | | | | | |
| 515 | 6.84 | 34.43 | 0.24 | 106 | | | | | | | |

BLACK DOUGLAS; July 11, 1958; 0917 GCT; 24°20'N, 114°39.5'W; sounding, 2000 fm; wind, direction missing, force 1; weather, fog; sea, moderate; wire angle, 05°. 137.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 21.88 | 33.82 | 5.51a) | 452 | 0 | 22.2 | (33.82) | (5.51) | (23.28) | (460) | (0.00) |
| 17 | 20.42 | 33.78 | 5.66 | 416 | 10 | 21.75 | 33.82 | 5.52 | 23.41 | 448 | 0.04 |
| 36 | 19.91 | 33.89 | 5.78 | 395 | 20 | 20.33 | 33.79 | 5.67 | 23.77 | 414 | 0.09 |
| 45 | 18.27 | 33.72 | 6.17 | 368 | 30 | 20.05 | 33.86 | 5.75 | 23.90 | 402 | 0.13 |
| 54 | 17.82 | 33.73 | 6.04 | 357 | 50 | 18.02 | 33.73 | 6.11 | 24.32 | 362 | 0.20 |
| 63 | 17.15 | 33.68 | 6.06 | 345 | 75 | 15.95 | 33.64 | 6.12 | 24.74 | 322 | 0.29 |
| 72 | 16.14 | 33.64 | 6.12 | 326 | 100 | 14.66 | 33.83 | 4.70 | 25.17 | 281 | 0.37 |
| 86 | 15.38 | 33.68 | 5.81 | 307 | 150 | 12.10 | 34.21 | 1.82 | 25.98 | 204 | 0.49 |
| 99 | 14.72 | 33.82 | 4.75 | 283 | 200 | 11.00 | 34.45 | 0.79 | 26.36 | 167 | 0.58 |
| 112 | 14.16 | 33.94 | 3.81 | 263 | 250 | 10.29 | 34.54 | 0.54 | 26.56 | 148 | 0.66 |
| 134 | 12.82 | 34.12 | 2.32 | 224 | 300 | 9.70 | 34.58 | 0.40 | 26.69 | 136 | 0.74 |
| 160 | 11.76 | 34.27 | 1.54 | 193 | 400 | 8.46 | 34.53 | 0.24 | 26.86 | 120 | 0.87 |
| 192 | 11.14 | 34.42 | 0.85 | 172 | 500 | 7.42 | 34.51 | 0.25 | 27.00 | 107 | 0.99 |
| 236 | 10.48 | 34.52 | 0.60 | 153 | | | | | | | |
| 308 | 9.60 | 34.58 | 0.38 | 134 | | | | | | | |
| 398 | 8.50 | 34.53 | 0.24 | 121 | | | | | | | |
| 518 | 7.24 | 34.51 | 0.26 | 105 | | | | | | | |

a) All oxygen values appear to be 20 per cent high.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40.55-S | VII-7 | 0435 | 41°14.0' | 125°44.0' | 1700 | 340° | 4 | overcast | very rough | 14.48 | 32.75 | 10.40 | 32.97 |
| 40.65-S | 7 | 1023 | 40°53.5' | 126°30.0' | 1750 | 330° | 4 | overcast | very rough | 16.24 | 32.79 | 12.65 | 32.79 |
| 43.42-S | 6 | 1200 | 41°04.0' | 124°20.5' | 80 | calm | | fog | rough | 11.58 | 33.34 | 9.61 | 33.51 |
| 43.45-S | 6 | 1002 | 40°58.5' | 124°35.0' | 315 | 010° | 4 | fog | very rough | 11.54 | 32.74 | 10.19 | 33.31 |
| 43.55-S | 6 | 0255 | 40°34.0' | 125°26.0' | 1600 | 350° | 4 | fog | high | 12.76 | 33.10 | 9.58 | 33.57 |
| 60.52-S | 10 | 0450 | 37°53.5' | 123°02.5' | 42 | 320° | 3 | fog | moderate | 11.66 | 33.42 | 9.87 | 33.69 |
| 60.65-S | 10 | 1330 | 37°27.0' | 123°59.0' | 1995 | 340° | 5 | overcast | very rough | 15.92 | 33.07 | 11.98 | 33.19 |
| 63.55-S | 12 | 0430 | 37°14.0' | 122°49.5' | 120 | 320° | 3 | fog | moderate | 12.90 | 32.66 | 9.50 | 33.48 |
| 63.65-S | 11 | 2240 | 36°53.0' | 123°32.0' | 1950 | 330° | 5 | overcast | very rough | 15.51 | 32.90 | 11.21 | 32.90 |
| 67.50-S | 12 | 1050 | 36°49.0' | 122°04.5' | 140 | 320° | 3 | fog | moderate | 11.51 | 33.62 | 9.56 | 33.78 |
| 67.65-S | 12 | 1940 | 36°19.0' | 123°08.5' | 1900 | 340° | 5 | overcast | high | 16.34 | 32.97 | - | - |
| 70.85-S | 14 | 0400 | 34°59.0' | 124°10.0' | 2370 | 340° | 6 | clear | high | 16.68 | - | 14.38 | 33.13 |
| 70.55-P | 14 | 2330 | 36°03.0' | 122°02.0' | 710 | 320° | 5 | partly cloudy | high | 12.60 | 33.36 | 10.61 | 33.51 |
| 70.65-P | 14 | 1630 | 35°42.0' | 122°43.0' | 1100 | 290° | 6 | cloudy | high | 16.42 | 32.99 | 13.90 | 33.02 |
| 70.75-P | 14 | 0745 | 35°20.5' | 123°32.0' | 35 | 320° | 7 | cloudy | high | 16.08 | 32.91 | 13.01 | 32.94 |
| 73.51-P | 13 | 0210 | 35°35.0' | 121°21.5' | 206 | 340° | 5 | overcast | rough | 11.86 | 33.57 | 10.11 | 33.74 |
| 73.65-P | 13 | 1130 | 35°11.0' | 122°20.5' | 2300 | 320° | 5 | overcast | very rough | 14.74 | 33.14 | 12.84 | 33.05 |
| 73.75-P | 13 | 1845 | 34°51.5' | 123°03.0' | 2300 | 320° | 5 | cloudy | very rough | 14.84 | 33.04 | 13.40 | 33.22 |
| 77.50-P | 11 | 1640 | 35°05.5' | 120°53.5' | 75 | 320° | 3 | fog | rough | 12.58 | 33.48 | 10.23 | 33.70 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77.65-P | VII-11 | 0520 | 34°32.5' | 121°57.0' | 2350 | 320° | 6 | overcast | very rough | 14.27 | 33.45 | 11.38 | 33.51 |
| 77.75-P | 10 | 2050 | 34°11.5' | 122°35.5' | 2380 | 320° | 6 | overcast | very rough | 16.60 | - | 12.64 | 33.22 |
| 77.85-P | 10 | 1440 | 33°54.0' | 123°18.0' | 2680 | 320° | 6 | overcast | very rough | 17.90 | 33.19 | 14.68 | 33.28 |
| 80.65-P | 9 | 0745 | 33°57.5' | 121°28.0' | 2000 | 330° | 6 | overcast | rough | 16.82 | 33.28 | 12.63 | 33.27 |
| 80.75-P | 9 | 1445 | 33°35.5' | 122°10.0' | 2380 | 320° | 6 | overcast | very rough | 16.96 | 33.12 | 13.96 | 33.18 |
| 80.85-P | 9 | 2205 | 33°15.5' | 122°51.5' | 2500 | 320° | 5 | cloudy | very rough | 17.57 | 33.01 | 14.41 | 33.01 |
| 83.40-P | 8 | 1010 | 34°13.5' | 119°21.5' | 12 | 310° | 2 | fog | slight | 15.42 | 33.59 | - | - |
| 83.65-P | 7 | 1455 | 33°24.0' | 121°04.0' | 1670 | 320° | 3 | overcast | rough | 16.18 | 33.24 | 12.69 | 33.08 |
| 83.75-P | 7 | 0820 | 33°04.5' | 121°46.5' | 2400 | 310° | 3 | overcast | moderate | 17.56 | 33.10 | 14.80 | 33.22 |
| 83.85-P | 7 | 0110 | 32°41.5' | 122°25.0' | 2480 | 340° | 3 | overcast | rough | 17.72 | 33.12 | 17.46 | 33.48 |
| 87.50-P | 5 | 0830 | 33°20.0' | 119°39.0' | 44 | 230° | 3 | overcast | moderate | 15.63 | 33.63 | 9.34 | 33.89 |
| 87.65-P | 5 | 2245 | 32°41.5' | 120°41.5' | 2050 | 280° | 3 | overcast | moderate | 17.86 | 33.22 | 16.02 | 33.15 |
| 87.75-P | 6 | 0525 | 32°20.5' | 121°18.5' | 2400 | 300° | 3 | overcast | rough | 17.16 | 33.22 | 15.28 | 33.31 |
| 87.85-P | 6 | 1215 | 31°59.0' | 121°56.0' | 2400 | 270° | 3 | overcast | moderate | 18.59 | 33.48 | 16.12 | 33.44 |
| 90.65-O | 4 | 1209 | 32°09.0' | 120°15.0' | 2000+ | 310° | 3 | cloudy | rough | 15.11 | 33.16 | 13.86 | 33.48 |
| 90.75-O | 4 | 2020 | 31°43.0' | 121°00.0' | 2000+ | 320° | 4 | cloudy | rough | 17.62 | 33.22 | 15.72 | 33.33 |
| 90.85-O | 5 | 0300 | 31°35.0' | 121°39.0' | 2200 | 320° | 4 | cloudy | rough | 18.83 | 33.55 | 18.11 | 33.49 |
| 93.35-O | 7 | 0227 | 32°34.5' | 117°50.5' | 325 | 140° | 3 | partly cloudy | moderate | 18.38 | 33.59 | 12.74 | 33.49 |
| 93.45-O | 6 | 1952 | 32°14.5' | 118°34.0' | - | 300° | 2 | cloudy | moderate | 15.64 | 33.65 | 9.47 | 33.80 |



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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.55-O | VII-6 | 1315 | 31°52.0' | 119°08.0' | 400 | 300° | 2 | cloudy | moderate | 15.88 | 33.53 | 13.96 | 33.39 |
| 93.65-O | 6 | 0618 | 31°35.0' | 119°54.0' | 2000+ | 320° | 3 | cloudy | moderate | 16.31 | 33.33 | 15.52 | 33.31 |
| 93.75-O | 5 | 2315 | 31°20.0' | 120°34.0' | 2000 | 340° | 3 | cloudy | rough | 18.67 | 33.48 | 15.86 | 33.35 |
| 93.85-O | 5 | 1640 | 31°01.5' | 121°18.5' | 2000+ | 330° | 3 | cloudy | rough | 18.72 | 33.48 | 16.55 | 33.47 |
| 97.35-O | 8 | 1108 | 32°05.5' | 117°28.5' | 600+ | 320° | 2 | cloudy | slight | 18.81 | 33.63 | 12.80 | 33.46 |
| 97.45-O | 8 | 1725 | 31°46.5' | 118°10.0' | 600 | 320° | 3 | cloudy | slight | 17.87 | 33.60 | 14.28 | 33.42 |
| 97.55-O | 9 | 0111 | 31°26.0' | 118°50.0' | 1900+ | 310° | 4 | cloudy | rough | 17.91 | 33.56 | 14.43 | 33.46 |
| 97.75-O | 9 | 1550 | 30°35.5' | 120°08.0' | 2000 | 310° | 4 | cloudy | rough | 18.98 | 33.62 | 16.26 | 33.44 |
| 97.85-O | 9 | 2245 | 30°19.0' | 120°50.0' | 2000+ | 340° | 4 | partly cloudy | rough | 19.26 | 33.57 | 15.96 | 33.39 |
| 100.35-O | 13 | 0900 | 31°31.0' | 117°07.0' | 800 | 300° | 1 | cloudy | calm | 19.28 | 33.62 | 15.24 | 33.45 |
| 100.45-O | 11 | 1658 | 31°14.0' | 117°35.0' | 900 | 290° | 1 | cloudy | slight | 18.03 | 33.58 | 16.52 | 33.43 |
| 100.55-O | 11 | 1010 | 30°52.0' | 118°19.5' | 900 | 260° | 2 | overcast | moderate | 17.62 | 33.32 | 16.98 | 33.42 |
| 100.65-O | 11 | 0200 | 30°31.0' | 119°04.0' | 1700 | 300° | 2 | cloudy | moderate | 19.25 | 33.69 | 16.47 | 33.49 |
| 100.75-O | 10 | 1827 | 30°09.5' | 119°48.0' | 1900 | 310° | 3 | cloudy | moderate | - | 33.58 | - | 33.58 |
| 100.85-O | 10 | 1100 | 29°50.0' | 120°28.0' | 2000+ | 320° | 4 | cloudy | rough | 19.36 | 33.54 | 17.80 | 33.82 |
| 103.45-O | 14 | 0530 | 30°38.0' | 117°24.0' | 900 | 260° | 2 | cloudy | slight | 18.28 | 33.48 | 15.93 | 33.42 |
| 103.55-O | 14 | 1220 | 30°10.5' | 118°03.0' | 900 | 270° | 1 | cloudy | slight | 19.05 | 33.60 | 17.34 | 33.57 |
| 103.65-O | 14 | 1904 | 29°41.0' | 118°46.5' | 1800 | 320° | 2 | cloudy | moderate | 19.52 | 33.67 | 19.10 | 33.66 |
| 103.75-O | 15 | 0100 | 29°37.0' | 119°24.0' | 1800 | 310° | 3 | cloudy | moderate | 19.61 | 33.62 | 17.64 | 33.64 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 103.85-O | VII-15 | 0744 | 29°14.5' | 120°08.5' | 1900+ | 340° | 3 | cloudy | moderate | 20.28 | 33.72 | 17.97 | 33.75 |
| 107.45-O | 18 | 0400 | 29°58.0' | 116°59.5' | 1000 | 320° | 5 | cloudy | rough | 18.50 | 33.49 | 16.98 | 33.62 |
| 107.55-O | 17 | 2100 | 29°41.0' | 117°42.0' | 1772 | 320° | 5 | cloudy | rough | 19.48 | 33.61 | 18.46 | 33.53 |
| 107.65-O | 16 | 1257 | 29°18.0' | 118°26.0' | 700+ | 340° | 4 | partly cloudy | rough | 20.42 | 33.71 | 16.25 | 33.60 |
| 107.75-O | 16 | 0530 | 29°00.5' | 119°00.0' | 2000 | 340° | 5 | cloudy | rough | 20.06 | 33.72 | 19.44 | 33.68 |
| 107.85-O | 15 | 2300 | 28°43.0' | 119°37.0' | 2000+ | 340° | 2 | cloudy | rough | 19.86 | 33.67 | 17.04 | 33.59 |
| 110.45-O | 19 | 0239 | 29°24.0' | 116°37.0' | 400 | 310° | 4 | cloudy | moderate | 18.92 | 33.52 | 16.04 | 33.48 |
| 110.55-O | 19 | 0920 | 29°00.0' | 117°20.0' | 1930 | 320° | 3 | cloudy | moderate | 19.36 | 33.64 | 17.27 | 33.55 |
| 110.65-O | 19 | 1745 | 28°37.5' | 118°02.0' | 1800 | 340° | 4 | cloudy | moderate | 20.36 | 33.78 | 17.90 | 33.63 |
| 110.75-O | 19 | 2300 | 28°24.5' | 118°36.0' | 2000 | 330° | 3 | partly cloudy | moderate | 20.38 | 33.78 | 15.95 | 33.57 |
| 113.45-B | 21 | 1030 | 28°47.5' | 116°17.5' | 1500 | 330° | 5 | partly cloudy | moderate | 19.42 | 33.62 | 13.26 | 33.48 |
| 113.55-B | 21 | 0353 | 28°32.0' | 116°57.0' | 1800 | 340° | 4 | partly cloudy | rough | 19.08 | 33.51 | 16.52 | 33.51 |
| 113.65-B | 20 | 2045 | 28°11.0' | 117°38.0' | 2000 | 340° | 3 | partly cloudy | rough | 20.42 | 33.73 | 19.11 | 33.64 |
| 117.45-B | 19 | 0835 | 28°18.0' | 115°55.0' | 1700 | 320° | 3 | partly cloudy | moderate | 20.77 | 33.78 | 13.00 | 33.62 |
| 117.55-B | 19 | 1430 | 27°57.5' | 116°36.5' | 2200 | 340° | 4 | partly cloudy | moderate | 18.85 | 33.59 | 15.14 | 33.49 |
| 117.65-B | 19 | 2052 | 27°37.5' | 117°13.0' | 2000 | 340° | 3 | partly cloudy | moderate | 19.19 | 33.53 | 17.00 | 33.53 |
| 117.75-B | 20 | 0230 | 27°17.5' | 117°52.0' | 2100 | 360° | 3 | partly cloudy | rough | 21.33 | 34.13 | 19.96 | 34.14 |
| 120.40-B | 17 | 1900 | 27°56.5' | 115°14.0' | 20 | 320° | 4 | partly cloudy | moderate | 18.30 | 33.68 | - | - |
| 120.55-B | 17 | 0935 | 27°23.0' | 116°13.0' | 2000 | 340° | 5 | partly cloudy | rough | 20.65 | 33.75 | 16.71 | 33.57 |



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## TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120.65-B | VII-17 | 0253 | 27°03.0' | 116°51.0' | 2050 | 360° | 5 | cloudy | rough | 21.04 | 33.93 | 19.16 | 34.02 |
| 120.75-B | 16 | 2007 | 26°45.0' | 117°29.0' | 2000+ | 360° | 5 | cloudy | rough | 21.59 | 33.78 | 19.29 | 33.78 |
| 120.85-B | 16 | 1300 | 26°23.0' | 118°08.0' | 1950 | 340° | 4 | cloudy | moderate | 21.67 | 33.82 | 19.62 | 33.88 |
| 123.45-B | 15 | 0750 | 27°08.0' | 115°11.0' | 2250 | 320° | 4 | missing | moderate | 20.38 | 33.76 | 16.44 | 33.52 |
| 123.55-B | 15 | 1417 | 26°47.0' | 115°49.0' | 1950 | 320° | 4 | cloudy | moderate | 21.50 | 33.78 | 17.39 | 33.53 |
| 127.45-B | 14 | 1250 | 26°27.5' | 114°45.0' | 1800 | 320° | 3 | cloudy | moderate | 20.75 | 33.71 | 16.25 | 33.68 |
| 127.55-B | 14 | 0710 | 26°10.0' | 115°24.5' | 2000 | 290° | 3 | clear | slight | 21.76 | 33.66 | 18.24 | 33.59 |
| 130.45-B | 13 | 1225 | 25°58.0' | 114°25.0' | 2000 | 310° | 3 | partly cloudy | slight | 22.22 | 33.84 | 15.28 | 33.72 |
| 130.55-B | 13 | 1905 | 23°35.0' | 115°04.0' | 2100 | 320° | 2 | overcast | slight | 22.58 | 33.84 | 19.56 | 33.89 |
| 133.35-B | 12 | 0830 | 25°44.5' | 113°26.5' | 480 | 090° | 2 | fog | moderate | 20.21 | 33.87 | 16.28 | 33.79 |
| 133.45-B | 12 | 0116 | 25°24.5' | 114°04.5' | 1850 | calm | | fog | moderate | 21.71 | 33.87 | 14.00 | 33.83 |
| 133.55-B | 11 | 1755 | 25°04.0' | 114°42.0' | 1900 | 140° | 1 | fog | moderate | 21.52 | 33.84 | 20.40 | 33.94 |
| 137.45-B | 11 | 0012 | 24°50.0' | 113°42.5' | 1850 | - | 1 | partly cloudy | moderate | 21.06 | 33.86 | 16.18 | 33.68 |
| 137.55-B | 11 | 0545 | 24°30.0' | 114°20.0' | 1850 | 140° | 2 | missing | moderate | 21.02 | 33.81 | 19.50 | 33.91 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

BLACK DOUGLAS; August 7, 1958; 0315 GCT; 29°22.5'N, 115°17.5'W; sounding, 30 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 02°. 113.30

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.30 | 33.55 | 5.20 | 382 | 0 | 18.30 | 33.55 | 5.20 | 24.11 | 382 | 0.00 | |
| 9 | 14.15 | 33.58 | 4.91 | 288 | 10 | 13.98 | 33.58 | 4.85 | 25.11 | 286 | 0.03 | |
| 18 | 13.24 | 33.56 | 3.60 | 273 | 20 | 13.20 | 33.56 | 3.56 | 25.26 | 272 | 0.06 | |
| 27 | 12.78 | 33.58 | 3.29 | 262 | | | | | | | | |

BLACK DOUGLAS; August 7, 1958; 0623 GCT; 29°12'N, 115°39'W; sounding, 650 fm; wind, 280°, force 3; weather, clear; sea, slight; wire angle, 08°. 113.35

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.08 | 33.53 | 6.41 | 355 | 0 | 17.08 | 33.53 | 6.41 | 24.39 | 355 | 0.00 | |
| 9 | 15.42 | 33.58 | 6.22 | 315 | 10 | 14.80 | 33.58 | 6.22 | 24.94 | 303 | 0.03 | |
| 28 | 13.54 | 33.56 | 6.26 | 278 | 20 | 14.00 | 33.57 | 6.23 | 25.10 | 287 | 0.06 | |
| 38 | 12.86 | 33.54 | 4.60 | 267 | 30 | 13.40 | 33.56 | 6.18 | 25.22 | 276 | 0.09 | |
| 47 | 11.86 | 33.50 | 4.49 | 252 | 50 | 11.66 | 33.50 | 4.45 | 25.51 | 248 | 0.14 | |
| 56 | 11.42 | 33.51 | 4.43 | 244 | 75 | 11.20 | 33.60 | 4.07 | 25.67 | 233 | 0.20 | |
| 66 | 11.38 | 33.51 | 4.47 | 242 | 100 | 10.82 | 33.84 | 3.12 | 25.92 | 209 | 0.26 | |
| 79 | 11.12 | 33.66 | - | 227 | 150 | 11.08 | 34.24 | 1.40 | 26.18 | 184 | 0.36 | |
| 93 | 10.90 | 33.78 | 3.25 | 214 | 200 | 10.59 | 34.34 | 1.10 | 26.35 | 168 | 0.45 | |
| 106 | 10.77 | 33.92 | 2.98 | 202 | 250 | 10.30 | 34.40 | 0.99 | 26.45 | 159 | 0.53 | |
| 128 | 10.98 | 34.09 | 1.92 | 193 | 300 | 9.57 | 34.39 | 0.86 | 26.56 | 148 | 0.61 | |
| 155 | 11.08 | 34.27 | 1.39 | 182 | 400 | 8.62 | 34.39 | 0.63 | 26.71 | 134 | 0.76 | |
| 186 | 10.68 | 34.31 | 1.19 | 172 | 500 | 7.15 | 34.31 | 0.58 | 26.88 | 118 | 0.89 | |
| 230 | 10.58 | 34.40 | 1.07 | 163 | | | | | | | | |
| 301 | 9.56 | 34.39 | 0.85 | 147 | | | | | | | | |
| 392 | 8.72 | 34.39 | 0.66 | 135 | | | | | | | | |
| 512 | 6.92 | 34.30 | 0.58 | 116 | | | | | | | | |

BLACK DOUGLAS; August 7, 1958; 0925 GCT; 29°02'N, 115°58.5'W; sounding, 950 fm; wind, 290°, force 2; weather, clear; sea, slight; wire angle, 12°. 113.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.33 | 33.66 | 5.61 | 423 | 0 | 20.33 | 33.66 | 5.61 | 23.68 | 423 | 0.00 | |
| 9 | 20.16 | 33.69 | 5.64 | 416 | 10 | 20.15 | 33.69 | 5.65 | 23.75 | 416 | 0.04 | |
| 28 | 18.30 | 33.56 | 6.03 | 381 | 20 | 19.68 | 33.67 | 5.74 | 23.85 | 406 | 0.08 | |
| 38 | 16.77 | 33.51 | 6.05 | 349 | 30 | 18.08 | 33.55 | 6.06 | 24.16 | 376 | 0.12 | |
| 47 | 15.09 | 33.44 | 5.90 | 319 | 50 | 14.79 | 33.46 | 5.81 | 24.85 | 311 | 0.19 | |
| 56 | 14.06 | 33.55 | 5.44 | 290 | 75 | 11.83 | 33.66 | 3.83 | 25.60 | 240 | 0.26 | |
| 65 | 12.60 | 33.58 | 4.49 | 259 | 100 | 11.62 | 34.07 | 2.07 | 25.96 | 206 | 0.32 | |
| 79 | 11.69 | 33.68 | 3.69 | 236 | 150 | 11.63 | 34.30 | 1.02 | 26.13 | 189 | 0.42 | |
| 91 | 11.52 | 33.96 | 2.50 | 212 | 200 | 11.05 | 34.39 | 0.77 | 26.31 | 172 | 0.51 | |
| 104 | 11.72 | 34.14 | 1.78 | 202 | 250 | 10.80 | 34.46 | 0.71 | 26.42 | 162 | 0.59 | |
| 126 | 11.70 | 34.27 | 1.17 | 192 | 300 | 10.17 | 34.49 | 0.68 | 26.54 | 150 | 0.67 | |
| 152 | 11.62 | 34.31 | 1.01 | 188 | 400 | 8.86 | 34.39 | 0.59 | 26.68 | 136 | 0.82 | |
| 182 | 11.37 | 34.40 | 0.88 | 177 | 500 | 7.45 | 34.34 | 0.63 | 26.85 | 121 | 0.96 | |
| 224 | 11.01 | 34.43 | 0.75 | 169 | | | | | | | | |
| 294 | 10.24 | 34.49 | 0.69 | 152 | | | | | | | | |
| 384 | 9.03 | 34.40 | 0.59 | 139 | | | | | | | | |
| 503 | 7.41 | 34.34 | 0.64 | 120 | | | | | | | | |

BLACK DOUGLAS; August 7, 1958; 2158 GCT; 29°11'N, 114°55'W; sounding, 41 fm; wind, 300°, force 3; weather, clear; sea, slight; wire angle, 03°. 115.27

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.00 | 33.55 | 5.84 | 398 | 0 | 19.00 | 33.55 | 5.84 | 23.94 | 398 | 0.00 | |
| 9 | 16.82 | 33.57 | 6.30 | 346 | 10 | 16.65 | 33.56 | 6.28 | 24.52 | 343 | 0.04 | |
| 18 | 13.88 | 33.50 | 5.04 | 290 | 20 | 13.75 | 33.50 | 4.94 | 25.11 | 286 | 0.07 | |
| 32 | 12.60 | 33.60 | 4.10 | 258 | 30 | 12.79 | 33.58 | 4.23 | 25.36 | 263 | 0.10 | |
| 55 | 11.29 | 33.75 | 3.37 | 224 | 50 | 11.46 | 33.71 | 3.46 | 25.70 | 230 | 0.14 | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 115.30 | BLACK DOUGLAS; August 7, 1958; 1949 GCT; 29°04'N, 115°08'W; sounding, 50 fm; wind, 300°, force 3; weather, partly cloudy; sea, slight; wire angle, 02°. | | | | | | | | | | |
| 0 | 18.65 | 33.58 | 6.24 | 388 | 0 | 18.65 | 33.58 | 6.24 | 24.04 | 388 | 0.00 |
| 9 | 17.74 | 33.57 | 6.09 | 367 | 10 | 17.60 | 33.57 | 6.06 | 24.29 | 364 | 0.04 |
| 23 | 15.45 | 33.51 | 5.77 | 321 | 20 | 15.60 | 33.51 | 5.78 | 24.72 | 324 | 0.07 |
| 41 | 14.03 | 33.57 | 4.85 | 288 | 30 | 14.60 | 33.53 | 5.27 | 24.95 | 302 | 0.10 |
| 60 | 11.72 | 33.57 | 3.82 | 244 | 50 | 12.82 | 33.57 | 4.26 | 25.34 | 264 | 0.16 |
| 78 | 11.51 | 33.69 | 3.31 | 232 | 75 | 11.55 | 33.65 | 3.55 | 25.65 | 235 | 0.22 |
| 115.35 | BLACK DOUGLAS; August 7, 1958; 1608 GCT; 28°55'N, 115°27.5'W; sounding, 500 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 11°. | | | | | | | | | | |
| 0 | 20.74 | 33.72 | 5.49 | 429 | 0 | 20.74 | 33.72 | 5.49 | 23.61 | 429 | 0.00 |
| 9 | 20.72 | 33.74 | 5.50 | 427 | 10 | 20.65 | 33.74 | 5.52 | 23.65 | 425 | 0.04 |
| 28 | 16.74 | 33.55 | 6.06 | 346 | 20 | 18.15 | 33.62 | 5.92 | 24.20 | 372 | 0.08 |
| 37 | 15.90 | 33.51 | 5.93 | 330 | 30 | 16.55 | 33.54 | 6.02 | 24.52 | 342 | 0.12 |
| 46 | 14.22 | 33.46 | 5.39 | 300 | 50 | 13.60 | 33.48 | 5.05 | 25.12 | 285 | 0.18 |
| 55 | 13.03 | 33.53 | 4.73 | 272 | 75 | 12.72 | 33.74 | 3.75 | 25.49 | 250 | 0.25 |
| 64 | 12.78 | 33.68 | 3.86 | 255 | 100 | 11.87 | 33.92 | 2.50 | 25.80 | 221 | 0.31 |
| 78 | 12.69 | 33.86 | 2.71 | 240 | 150 | 11.75 | 34.30 | 1.15 | 26.11 | 191 | 0.41 |
| 91 | 11.87 | 33.86 | 2.71 | 225 | 200 | 11.10 | 34.33 | 1.03 | 26.25 | 178 | 0.51 |
| 104 | 12.18 | 34.03 | 1.84 | 218 | 250 | 10.41 | 34.35 | 0.99 | 26.40 | 164 | 0.59 |
| 126 | 11.63 | 34.05 | 2.00 | 208 | 300 | 9.88 | 34.46 | 0.66 | 26.58 | 147 | 0.68 |
| 152 | 11.76 | 34.32a) | 1.10 | 190 | 400 | 8.41 | 34.34 | 0.72 | 26.72 | 134 | 0.82 |
| 182 | 11.40 | 34.34 | 1.04 | 182 | 500 | 7.20 | 34.37 | 0.52 | 26.91 | 115 | 0.95 |
| 226 | 10.63 | 34.32 | 1.03 | 170 | | | | | | | |
| 299 | 9.90 | 34.46 | 0.66 | 148 | | | | | | | |
| 389 | 8.58 | 34.34 | 0.72 | 136 | | | | | | | |
| 509 | 7.08 | 34.37 | 0.50 | 114 | | | | | | | |
| 115.40 | BLACK DOUGLAS; August 7, 1958; 1228 GCT; 28°45'N, 115°47'W; sounding, 750 fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 12°. | | | | | | | | | | |
| 0 | 20.28 | 33.71 | 5.58 | 418 | 0 | 20.28 | 33.71 | 5.58 | 23.72 | 418 | 0.00 |
| 9 | 18.66 | 33.59 | 6.07 | 387 | 10 | 18.50 | 33.59 | 6.03 | 24.08 | 384 | 0.04 |
| 28 | 15.80 | 33.61 | 5.50 | 321 | 20 | 17.80 | 33.59 | 5.88 | 24.27 | 366 | 0.08 |
| 37 | 14.29 | 33.53 | 5.36 | 296 | 30 | 15.69 | 33.61 | 5.49 | 24.77 | 319 | 0.11 |
| 46 | 13.35 | 33.58 | 4.96 | 274 | 50 | 12.82 | 33.62 | 4.20 | 25.38 | 260 | 0.17 |
| 55 | 13.26 | 33.87 | 2.61 | 250 | 75 | 12.93 | 34.09 | 1.33 | 25.72 | 228 | 0.23 |
| 64 | 12.68 | 33.95 | 2.12 | 234 | 100 | 12.88 | 34.20 | 1.06 | 25.81 | 219 | 0.29 |
| 77 | 12.94 | 34.14 | 1.31 | 225 | 150 | 12.21 | 34.25 | 1.06 | 25.99 | 203 | 0.40 |
| 90 | 12.92 | 34.16 | 1.08 | 223 | 200 | 11.28 | 34.31 | 1.34 | 26.20 | 182 | 0.49 |
| 102 | 12.86 | 34.21 | 1.06 | 218 | 250 | 10.47 | 34.44 | 1.33 | 26.45 | 159 | 0.58 |
| 123 | 12.32 | 34.17 | 1.24 | 211 | 300 | 9.18 | 34.37 | 1.61 | 26.61 | 144 | 0.66 |
| 148 | 12.24 | 34.25 | 1.03 | 203 | 400 | 8.42 | 34.36 | 0.66 | 26.72 | 133 | 0.80 |
| 176 | 11.80 | 34.29 | 1.34 | 192 | 500 | 6.92 | 34.33 | 0.40 | 26.92 | 114 | 0.93 |
| 219 | 11.60 | 34.50 | 0.92 | 174 | | | | | | | |
| 289 | 9.23 | 34.37 | 1.64 | 144 | | | | | | | |
| 380 | 8.70 | 34.36 | 0.85 | 136 | | | | | | | |
| 500 | 6.92 | 34.33 | 0.40 | 114 | | | | | | | |
| 117.26 | BLACK DOUGLAS; August 8, 1958; 0042 GCT; 28°56'N, 114°41'W; sounding, 42 fm; wind, 280°, force 3; weather, partly cloudy; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 18.58 | 33.56 | 6.10 | 387 | 0 | 18.58 | 33.56 | 6.10 | 24.05 | 387 | 0.00 |
| 9 | 16.77 | 33.60 | 6.34 | 343 | 10 | 16.60 | 33.60 | 6.33 | 24.56 | 339 | 0.04 |
| 18 | 15.18 | 33.53 | 6.19 | 314 | 20 | 14.90 | 33.53 | 6.11 | 24.88 | 308 | 0.07 |
| 32 | 13.48 | 33.54 | 4.64 | 279 | 30 | 13.79 | 33.54 | 5.10 | 25.12 | 285 | 0.10 |
| 55 | 11.29 | 33.64 | 3.03 | 232 | 50 | 11.78 | 33.62 | 3.32 | 25.58 | 242 | 0.15 |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

BLACK DOUGLAS; August 8, 1958; 0305 GCT; 28°48'N, 114°56.5'W; sounding, 55 fm; wind, 280°, force 3; weather, partly cloudy; sea, moderate; wire angle, 11°. 117.30

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.73 | 33.58 | 6.06 | 390 | 0 | 18.73 | 33.58 | 6.06 | 24.02 | 390 | 0.00 | |
| 8 | 17.71 | 33.57 | 5.98 | 366 | 10 | 17.50 | 33.57 | 5.98 | 24.32 | 362 | 0.04 | |
| 22 | 16.25 | 33.56 | 5.96 | 334 | 20 | 16.60 | 33.56 | 5.98 | 24.54 | 341 | 0.07 | |
| 40 | 13.12 | 33.52 | 4.68 | 274 | 30 | 15.80 | 33.56 | 5.82 | 24.70 | 325 | 0.11 | |
| 59 | 12.12 | 33.58a) | 4.04 | 250 | 50 | 12.55 | 33.55 | 4.35 | 25.38 | 260 | 0.16 | |
| 77 | 11.33 | 33.69a) | 3.18 | 228 | 75 | 11.40 | 33.68 | 3.32 | 25.70 | 230 | 0.22 | |

BLACK DOUGLAS; August 8, 1958; 0617 GCT; 28°38'N, 115°16'W; sounding, 100 fm; wind, 300°, force 3; weather, partly cloudy; sea, moderate; wire angle, 08°. 117.35

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.12 | 33.54 | 5.77 | 402 | 0 | 19.12 | 33.54 | 5.77 | 23.90 | 402 | 0.00 | |
| 9 | 18.83 | 33.58 | 5.85 | 392 | 10 | 18.72 | 33.58 | 5.88 | 24.03 | 389 | 0.04 | |
| 18 | 16.16 | 33.53 | 5.85 | 335 | 20 | 15.90 | 33.53 | 5.78 | 24.65 | 330 | 0.08 | |
| 28 | 14.97 | 33.53 | 5.31 | 310 | 30 | 14.78 | 33.54 | 5.21 | 24.92 | 305 | 0.11 | |
| 41 | 13.82 | 33.55 | 4.62 | 285 | 50 | 13.14 | 33.57 | 4.36 | 25.28 | 270 | 0.16 | |
| 64 | 12.40 | 33.60 | 4.12 | 254 | 75 | 11.97 | 33.66 | 3.88 | 25.58 | 242 | 0.23 | |
| 87 | 11.55 | 33.73 | 3.43 | 230 | 100 | 11.40 | 33.83 | 3.12 | 25.82 | 219 | 0.29 | |
| 123 | 11.64 | 34.16 | 1.68 | 200 | 150 | 11.60 | 34.26 | 1.26 | 26.11 | 191 | 0.39 | |
| 160 | 11.54 | 34.27 | 1.24 | 189 | | | | | | | | |

BLACK DOUGLAS; August 8, 1958; 0910 GCT; 28°28'N, 115°35.5'W; sounding, 400 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 12°. 117.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.42 | 33.57 | 5.81 | 407 | 0 | 19.42 | 33.57 | 5.81 | 23.84 | 407 | 0.00 | |
| 10 | 19.39 | 33.64 | 5.97 | 401 | 10 | 19.39 | 33.64 | 5.97 | 23.91 | 401 | 0.04 | |
| 28 | 16.66 | 33.60 | 5.86 | 340 | 20 | 18.05 | 33.62 | 5.82 | 24.22 | 371 | 0.08 | |
| 38 | 15.53 | 33.58 | 5.74 | 318 | 30 | 16.42 | 33.60 | 5.83 | 24.60 | 335 | 0.11 | |
| 47 | 14.94 | 33.57 | 5.45 | 306 | 50 | 14.55 | 33.57 | 5.18 | 24.99 | 298 | 0.18 | |
| 56 | 13.94 | 33.60 | 4.67 | 284 | 75 | 13.25 | 33.96 | 1.77 | 25.56 | 244 | 0.24 | |
| 65 | 13.50 | 33.89 | 2.48 | 254 | 100 | 12.83 | 34.10 | 1.30 | 25.75 | 225 | 0.30 | |
| 79 | 13.18 | 33.99 | 1.66 | 240 | 150 | 11.76 | 34.17 | 1.47 | 26.00 | 202 | 0.41 | |
| 92 | 12.83 | 34.04 | 1.49 | 230 | 200 | 11.28 | 34.32 | 1.00 | 26.22 | 181 | 0.51 | |
| 105 | 12.82 | 34.15 | 1.10 | 222 | 250 | 10.69 | 34.37 | 0.91 | 26.36 | 168 | 0.60 | |
| 126 | 12.47 | 34.22 | 0.99 | 210 | 300 | 10.20 | 34.42 | 0.86 | 26.48 | 156 | 0.68 | |
| 152 | 11.72 | 34.16 | 1.50 | 201 | 400 | 8.50 | 34.40 | 0.52 | 26.74 | 131 | 0.83 | |
| 183 | 11.50 | 34.30 | 1.04 | 187 | 500 | 7.40 | 34.36 | 0.50 | 26.88 | 118 | 0.96 | |
| 226 | 10.94 | 34.35 | 0.93 | 173 | | | | | | | | |
| 297 | 10.23 | 34.42 | 0.87 | 156 | | | | | | | | |
| 388 | 8.66 | 34.40 | 0.52 | 133 | | | | | | | | |
| 508 | 7.32 | 34.36 | 0.50 | 117 | | | | | | | | |

BLACK DOUGLAS; August 8, 1958; 1936 GCT; 28°40.5'N, 114°25.5'W; sounding, 45 fm; wind, 290°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°. 118$^{5}$.25

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.51 | 33.60 | 5.77 | 407 | 0 | 19.51 | 33.60 | 5.77 | 23.84 | 407 | 0.00 | |
| 9 | 18.72 | 33.57 | 5.89 | 390 | 10 | 18.50 | 33.57 | 5.90 | 24.08 | 384 | 0.04 | |
| 28 | 15.74 | 33.56 | 5.92 | 323 | 20 | 17.12 | 33.57 | 5.92 | 24.40 | 354 | 0.08 | |
| 46 | 13.36 | 33.58 | 4.53 | 273 | 30 | 15.40 | 33.56 | 5.86 | 24.80 | 316 | 0.11 | |
| 69 | 11.22 | 33.71 | 2.53 | 226 | 50 | 12.97 | 33.60 | 4.18 | 25.33 | 265 | 0.17 | |

BLACK DOUGLAS; August 8, 1958; 1700 GCT; 28°30.5'N, 114°45.5'W; sounding, 60 fm; wind, 300°, force 3; weather, partly cloudy; sea, slight; wire angle, 10°. 118$^{5}$.30

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.59 | 33.63 | 5.20 | 431 | 0 | 20.59 | 33.63 | 5.20 | 23.59 | 431 | 0.00 | |
| 8 | 20.52 | 33.68 | 5.34 | 426 | 10 | 20.51 | 33.68 | 5.35 | 23.64 | 426 | 0.04 | |
| 27 | 19.32 | 33.62 | 5.65 | 401 | 20 | 19.62 | 33.64 | 5.59 | 23.84 | 408 | 0.08 | |
| 45 | 17.05 | 33.57 | 5.61 | 351 | 30 | 19.20 | 33.62 | 5.66 | 23.94 | 398 | 0.12 | |
| 68 | 13.28 | 33.58 | 4.17 | 272 | 50 | 16.15 | 33.57 | 5.41 | 24.64 | 332 | 0.20 | |
| 90 | 11.40 | 33.72 | 2.19 | 228 | 75 | 12.62 | 33.62 | 3.73 | 25.42 | 257 | 0.27 | |

a) Salinity samples at 59 and 77 meters appear to have been reversed; they are assumed to be listed in correct order.

S10

CCOFI
5808

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **$118^{5}.35$** | BLACK DOUGLAS; August 8, 1958; 1312 GCT; 28°20.5'N, 115°05'W; sounding, 65 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.71 | 33.68 | 5.35 | 431 | 0 | 20.71 | 33.68 | 5.35 | 23.59 | 431 | 0.00 |
| 9 | 20.73 | 33.68 | 5.38 | 432 | 10 | 20.73 | 33.68 | 5.38 | 23.59 | 431 | 0.04 |
| 28 | 19.29 | 33.58 | 5.74 | 403 | 20 | 20.57 | 33.66 | 5.41 | 23.62 | 428 | 0.09 |
| 46 | 16.96 | 33.58 | 5.90 | 348 | 30 | 19.17 | 33.58 | 5.77 | 23.92 | 400 | 0.13 |
| 69 | 13.79 | 33.82 | 2.94 | 264 | 50 | 15.95 | 33.64 | 5.59 | 24.75 | 321 | 0.20 |
| 93 | 13.01 | 33.87 | 2.25 | 246 | 75 | 13.58 | 33.84 | 2.73 | 25.40 | 259 | 0.27 |
| | | | | | 100 | (12.87) | (33.88) | (2.17) | (25.58) | (242) | (0.34) |
| 119.33 | BLACK DOUGLAS; August 8, 1958; 1500 GCT; 28°19'N, 114°53'W; sounding, 62 fm; wind, 320°, force 3; weather, partly cloudy; sea, slight; wire angle, 04°. | | | | | | | | | | |
| 0 | 20.70 | 33.66 | 5.17 | 432 | 0 | 20.70 | 33.66 | 5.17 | 23.58 | 432 | 0.00 |
| 9 | 20.71 | 33.69 | 5.29 | 430 | 10 | 20.71 | 33.69 | 5.29 | 23.60 | 430 | 0.04 |
| 28 | 20.20 | 33.64 | 5.36 | 421 | 20 | 20.63 | 33.68 | 5.30 | 23.61 | 429 | 0.09 |
| 47 | 19.41 | 33.63 | 5.37 | 402 | 30 | 20.17 | 33.64 | 5.36 | 23.70 | 420 | 0.13 |
| 69 | 15.56 | 33.55 | 5.27 | 320 | 50 | 19.20 | 33.62 | 5.37 | 23.95 | 397 | 0.21 |
| 92 | 12.28 | 33.58 | 3.58 | 254 | 75 | 14.80 | 33.56 | 5.10 | 24.92 | 304 | 0.30 |
| 120.25 | BLACK DOUGLAS; August 8, 1958; 2210 GCT; 28°23'N, 114°14.5'W; sounding, 28 fm; wind, 270°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 20.12 | 33.64 | 5.49 | 419 | 0 | 20.12 | 33.64 | 5.49 | 23.71 | 419 | 0.00 |
| 9 | 19.38 | 33.63 | 5.58 | 401 | 10 | 19.37 | 33.63 | 5.58 | 23.91 | 401 | 0.04 |
| 28 | 16.42 | 33.61 | 5.85 | 334 | 20 | 18.17 | 33.62 | 5.70 | 24.16 | 377 | 0.08 |
| 37 | 14.92 | 33.58 | 5.28 | 304 | 30 | 15.98 | 33.60 | 5.74 | 24.71 | 324 | 0.11 |
| 120.30 | BLACK DOUGLAS; August 9, 1958; 0057 GCT; 28°13'N, 114°34'W; sounding, 52 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 20.92 | 33.68 | 4.65 | 436 | 0 | 20.92 | 33.68 | 4.65 | 23.54 | 436 | 0.00 |
| 9 | 20.74 | 33.69 | 5.21 | 431 | 10 | 20.68 | 33.69 | 5.21 | 23.61 | 429 | 0.04 |
| 23 | 20.01 | 33.68 | 5.14 | 414 | 20 | 20.25 | 33.68 | 5.15 | 23.71 | 420 | 0.08 |
| 41 | 17.31 | 33.58 | 5.61 | 356 | 30 | 19.08 | 33.65 | 5.28 | 23.98 | 394 | 0.13 |
| 59 | 13.68 | 33.58 | 4.49 | 280 | 50 | 15.55 | 33.58 | 5.36 | 24.78 | 318 | 0.20 |
| 78 | 11.76 | 33.68 | 2.90 | 236 | 75 | 11.96 | 33.67 | 3.10 | 25.58 | 241 | 0.27 |
| 120.35 | BLACK DOUGLAS; August 9, 1958; 0333 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 330°, force 4; weather, partly cloudy; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 20.68 | 33.69 | 5.39 | 430 | 0 | 20.68 | 33.69 | 5.39 | 23.60 | 430 | 0.00 |
| 9 | 20.55 | 33.66 | 5.39 | 428 | 10 | 20.54 | 33.66 | 5.40 | 23.62 | 428 | 0.04 |
| 28 | 17.66 | 33.55 | 6.04 | 367 | 20 | 19.60 | 33.61 | 5.65 | 23.83 | 408 | 0.08 |
| 46 | 15.52 | 33.55 | 5.44 | 320 | 30 | 17.40 | 33.55 | 6.03 | 24.34 | 360 | 0.12 |
| 69 | 12.74 | 33.68 | 2.95 | 254 | 50 | 15.00 | 33.56 | 5.10 | 24.88 | 308 | 0.19 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{10^{-5}}T_3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{10^{-5}}T_3$ cm/g | ΔD dyn. m | |

BLACK DOUGLAS; August 9, 1958; 0839 GCT; 27°43'N, 115°33'W; sounding, 1150 fm; wind, 290°, force 2; weather, clear; sea, slight; wire angle, 05°. 120.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.84 | 33.95 | 5.82 | 390 | 0 | 19.84 | 33.95 | 5.82 | 24.02 | 390 | 0.00 |
| 10 | 19.88 | 33.89 | 5.73 | 395 | 10 | 19.88 | 33.89 | 5.73 | 23.97 | 395 | 0.04 |
| 29 | 17.00 | 33.68 | 5.35 | 342 | 20 | 18.48 | 33.76 | 5.60 | 24.23 | 370 | 0.08 |
| 38 | 15.78 | 33.73 | 4.70 | 312 | 30 | 16.80 | 33.68 | 5.28 | 24.57 | 338 | 0.11 |
| 48 | 14.68 | 33.77 | 4.07 | 286 | 50 | 14.27 | 33.76 | 3.98 | 25.18 | 279 | 0.17 |
| 57 | 13.63 | 33.73 | 3.90 | 268 | 75 | 12.78 | 33.88 | 3.12 | 25.60 | 240 | 0.24 |
| 66 | 13.00 | 33.82 | 3.48 | 249 | 100 | 12.19 | 34.00 | 2.70 | 25.80 | 220 | 0.30 |
| 79 | 12.68 | 33.90 | 2.91 | 238 | 150 | 11.70 | 34.40 | 0.90 | 26.21 | 182 | 0.40 |
| 93 | 12.28 | 33.95 | 2.86 | 226 | 200 | 11.40 | 34.51 | 0.50 | 26.34 | 169 | 0.49 |
| 105 | 12.10 | 34.08 | 2.29 | 214 | 250 | 10.78 | 34.58 | 0.42 | 26.50 | 154 | 0.57 |
| 128 | 11.88 | 34.31 | 1.28 | 192 | 300 | 10.00 | 34.56 | 0.40 | 26.63 | 142 | 0.65 |
| 154 | 11.69 | 34.42 | 0.83 | 181 | 400 | 8.00 | 34.36 | 0.55 | 26.80 | 126 | 0.78 |
| 185 | 11.37 | 34.43 | 0.78 | 174 | 500 | 6.95 | 34.36 | 0.40 | 26.94 | 112 | 0.91 |
| 229 | 11.05 | 34.58 | 0.45 | 158 | | | | | | | |
| 300 | 10.00 | 34.56 | 0.40 | 142 | | | | | | | |
| 391 | 8.10 | 34.36 | 0.56 | 128 | | | | | | | |
| 511 | 6.82 | 34.36 | 0.38 | 111 | | | | | | | |

BLACK DOUGLAS; August 10, 1958; 2035 GCT; 26°29'N, 113°29'W; sounding, 44 fm; wind, 300°, force 2; weather, overcast; sea, moderate; wire angle, 02°. 130.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.41 | 34.17 | 4.92 | 496 | 0 | 24.41 | 34.17 | 4.92 | 22.91 | 496 | 0.00 |
| 9 | 24.02 | 34.13 | 5.02 | 487 | 10 | 23.85 | 34.13 | 5.05 | 23.04 | 484 | 0.05 |
| 19 | 20.86 | 34.28 | 5.34 | 392 | 20 | 20.60 | 34.29 | 5.31 | 24.08 | 384 | 0.09 |
| 32 | 17.59 | 34.39 | 2.93 | 304 | 30 | 17.70 | 34.39 | 3.06 | 24.90 | 306 | 0.13 |
| 56 | 15.68 | 34.29 | 2.22 | 269 | 50 | 16.57 | 34.38 | 2.45 | 25.16 | 282 | 0.18 |

BLACK DOUGLAS; August 10, 1958; 1735 GCT; 26°17.5'N, 113°47'W; sounding, 200 fm; wind, 250°, force 2; weather, rain; sea, moderate; wire angle, 03°. 130.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.67 | 34.07 | 4.93 | 482 | 0 | 23.67 | 34.07 | 4.93 | 23.06 | 482 | 0.00 |
| 9 | 23.62 | 34.07 | 5.04 | 480 | 10 | 23.62 | 34.07 | 5.04 | 23.08 | 480 | 0.05 |
| 28 | 18.44 | 33.86 | 5.61 | 362 | 20 | 23.52 | 34.07 | 5.05 | 23.10 | 478 | 0.10 |
| 46 | 16.06 | 34.13 | 3.61 | 288 | 30 | 18.07 | 33.86 | 5.53 | 24.40 | 354 | 0.14 |
| 64 | 15.06 | 34.33 | 1.78 | 253 | 50 | 15.80 | 34.20 | 3.18 | 25.22 | 276 | 0.20 |
| 91 | 14.50 | 34.63 | 0.58 | 219 | 75 | 14.65 | 34.45 | 1.30 | 25.64 | 236 | 0.26 |
| 136 | 13.76 | 34.61 | 0.47 | 206 | 100 | 14.48 | 34.66 | 0.50 | 25.84 | 217 | 0.32 |
| 182 | 12.72 | 34.67 | 0.39 | 182 | 150 | 13.47 | 34.62 | 0.44 | 26.03 | 199 | 0.43 |
| 227 | 11.77 | 34.61 | 0.25 | 168 | 200 | 12.00 | 34.60 | 0.38 | 26.30 | 173 | 0.52 |
| 273 | 11.00 | 34.62 | 0.21 | 154 | 250 | 11.39 | 34.62 | 0.25 | 26.43 | 161 | 0.61 |
| 323 | 10.30 | 34.56 | 0.27 | 147 | 300 | 10.61 | 34.59 | 0.25 | 26.54 | 150 | 0.69 |

BLACK DOUGLAS; August 10, 1958; 1410 GCT; 26°09'N, 114°07.5'W; sounding, 1150 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 14°. 130.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.00 | 34.02 | 4.74 | 495 | 0 | 24.00 | 34.02 | 4.74 | 22.92 | 495 | 0.00 |
| 9 | 23.74 | 34.03 | 4.96 | 486 | 10 | 23.65 | 34.03 | 5.00 | 23.04 | 484 | 0.05 |
| 28 | 17.38 | 33.62 | 5.89 | 355 | 20 | 20.38 | 33.80 | 5.60 | 23.77 | 414 | 0.09 |
| 37 | 16.48 | 33.65 | 5.64 | 333 | 30 | 17.15 | 33.62 | 5.83 | 24.44 | 350 | 0.13 |
| 46 | 16.00 | 33.68 | 5.60 | 320 | 50 | 16.20 | 33.80 | 4.90 | 24.80 | 316 | 0.20 |
| 55 | 15.12 | 33.75 | 4.67 | 296 | 75 | 14.60 | 34.22 | 2.23 | 25.47 | 252 | 0.27 |
| 64 | 15.57 | 34.14 | 3.02 | 277 | 100 | 13.70 | 34.42 | 1.30 | 25.81 | 219 | 0.33 |
| 78 | 14.36 | 34.23 | 2.03 | 246 | 150 | 12.66 | 34.65 | 0.38 | 26.21 | 182 | 0.43 |
| 90 | 13.96 | 34.38 | 1.35 | 226 | 200 | 11.35 | 34.58 | 0.30 | 26.40 | 164 | 0.52 |
| 103 | 13.62 | 34.44 | 1.24 | 216 | 250 | 10.92 | 34.60 | 0.26 | 26.50 | 154 | 0.60 |
| 125 | 13.17 | 34.54 | 0.60 | 199 | 300 | 10.22 | 34.58 | 0.22 | 26.60 | 144 | 0.68 |
| 150 | 12.66 | 34.65 | 0.38 | 182 | 400 | 9.06 | 34.49 | 0.30 | 26.72 | 133 | 0.82 |
| 182 | 11.80 | 34.62 | 0.35 | 168 | 500 | 7.64 | 34.43 | 0.34 | 26.89 | 117 | 0.95 |
| 224 | 11.26 | 34.61 | 0.29 | 160 | | | | | | | |
| 294 | 10.28 | 34.58 | 0.22 | 145 | | | | | | | |
| 384 | 9.24 | 34.50 | 0.27 | 135 | | | | | | | |
| 501 | 7.63 | 34.43 | 0.34 | 117 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_{-5}^{3}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_{-5}^{3}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

130.45 BLACK DOUGLAS; August 10, 1958; 1100 GCT; 25°59'N, 114°25.5'W; sounding, 2000 fm; wind, 280°, force 2; weather, partly cloudy; sea, slight; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.77 | 34.01 | 4.81 | 488 | 0 | 23.77 | 34.01 | 4.81 | 22.99 | 488 | 0.00 |
| 10 | 23.82 | 33.98 | 4.96 | 493 | 10 | 23.82 | 33.98 | 4.96 | 22.94 | 493 | 0.05 |
| 28 | 19.56 | 33.78 | 5.50 | 395 | 20 | 21.65 | 33.88 | 4.99 | 23.48 | 442 | 0.10 |
| 38 | 17.85 | 33.69 | 5.58 | 360 | 30 | 19.10 | 33.76 | 5.53 | 24.07 | 385 | 0.14 |
| 47 | 17.06 | 33.70 | 4.81 | 342 | 50 | 16.77 | 33.71 | 4.90 | 24.60 | 335 | 0.21 |
| 57 | 15.74 | 33.76 | 5.33 | 309 | 75 | 12.98 | 33.68 | 3.92 | 25.39 | 260 | 0.28 |
| 65 | 13.86 | 33.64 | 4.53 | 279 | 100 | 11.97 | 34.04 | 2.68 | 25.88 | 213 | 0.34 |
| 79 | 12.68 | 33.69 | 3.72 | 253 | 150 | 11.45 | 34.42 | 1.03 | 26.26 | 176 | 0.44 |
| 93 | 11.66 | 33.95 | 3.32 | 215 | 200 | 11.45 | 34.65 | 0.27 | 26.44 | 160 | 0.53 |
| 105 | 11.47 | 33.98 | 2.50 | 210 | 250 | 10.80 | 34.62 | 0.24 | 26.54 | 151 | 0.61 |
| 128 | 12.35 | 34.44 | 0.88 | 192 | 300 | 10.25 | 34.62 | 0.24 | 26.64 | 141 | 0.68 |
| 155 | 11.22 | 34.42 | 1.09 | 173 | 400 | 8.48 | 34.49 | 0.16 | 26.82 | 124 | 0.82 |
| 186 | 11.62 | 34.66 | 0.32 | 162 | 500 | 7.41 | 34.44 | 0.17 | 26.94 | 112 | 0.94 |
| 231 | 11.04 | 34.63 | 0.24 | 154 | | | | | | | |
| 304 | 10.18 | 34.62 | 0.24 | 140 | | | | | | | |
| 396 | 8.55 | 34.49 | 0.16 | 125 | | | | | | | |
| 515 | 7.26a) | 34.44 | 0.18 | 111 | | | | | | | |

a) Alternate value, 7.36°C, not used in interpolation.

TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.33-B | VIII-6 | 2200 | 29°50.5' | 115°52.0' | 50 | calm | | partly cloudy | smooth | 15.60 | 33.49 | 12.54 | 33.48 |
| 110.35-B | 6 | 2030 | 29°46.5' | 116°00.0' | 600 | 220° | 1 | partly cloudy | smooth | 19.54 | 33.52 | 15.34 | 33.41 |
| 110.40-B | 6 | 1800 | 29°42.0' | 116°19.5' | 1250 | calm | | cloudy | smooth | 19.48 | 33.51 | 16.26 | 33.46 |
| 112.30-B | 21 | 0700 | 29°35.0' | 115°29.0' | - | - | - | missing | missing | 15.44 | 33.53 | - | - |
| 116.25-B | 20 | 0805 | 29°06.0' | 114°40.5' | - | - | - | missing | missing | 17.94 | 33.55 | - | - |
| 117.24-B | 20 | 0555 | 28°55.0' | 114°31.0' | - | - | - | missing | missing | 18.00 | 33.56 | - | - |
| 118.28-B | 20 | 0045 | 28°43.5' | 114°45.0' | 53 | 300° | 4 | missing | moderate | 20.78 | 33.58 | 14.30 | 33.56 |
| 118.33-B | 19 | 2210 | 28°29.5' | 115°00.0' | 70 | 320° | 4 | partly cloudy | moderate | 22.18 | 33.70 | 18.14 | 33.62 |
| 118.36-B | 19 | 2000 | 28°20.0' | 115°11.0' | - | - | - | missing | missing | 21.38 | 33.69 | - | - |
| 119.37-B | 16 | 2020 | 28°07.5' | 115°09.5' | - | - | - | missing | missing | 20.76 | 33.68 | - | - |
| 119.40-B | 17 | 0645 | 28°04.0' | 115°18.0' | - | - | - | missing | missing | 19.04 | 33.76 | - | - |
| 119$^{5}$.39-B | 17 | 0755 | 28°02.0' | 115°12.5' | - | - | - | missing | missing | 21.45 | 33.68 | - | - |
| 120.33-B | 19 | 0020 | 28°10.5' | 114°50.0' | 52 | 320° | 5 | partly cloudy | rough | 22.28 | - | 19.90 | - |
| 120.40-B | 9 | 0555 | 27°56.5' | 115°14.0' | 21 | 240° | 2 | partly cloudy | missing | 18.68 | 33.58 | - | - |
| 120$^{5}$.27-B | 18 | 1135 | 28°11.0' | 114°15.5' | 20 | 320° | 3 | clear | moderate | 21.80 | 33.62 | - | - |
| 120$^{5}$.31-B | 18 | 2200 | 28°06.0' | 114°33.0' | 45 | 320° | 5 | partly cloudy | moderate | 22.36 | - | 16.68 | - |
| 120$^{5}$.37-B | 18 | 0430 | 27°53.0' | 115°00.5' | - | - | - | missing | missing | 23.48 | 33.84 | - | - |
| 121.30-B | 18 | 0900 | 27°58.5' | 114°26.5' | 18 | 310° | 3 | clear | moderate | 22.12 | 33.76 | - | - |
| 121.34-B | 18 | 0645 | 27°52.5' | 114°42.5' | 20 | 340° | 4 | clear | moderate | 22.28 | 33.67 | - | - |



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TEMPERATURE AND SALINITY AT 10 AND 50 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S | 50 Meters T | 50 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 123.37-B | VIII-9 | 1810 | 27°24.0' | 114°39.5' | 40 | 290° | 2 | partly cloudy | slight | 17.84 | 34.04 | 15.44 | - |
| 123.42-B | 9 | 1545 | 27°14.0' | 114°59.5' | 875 | 290° | 2 | partly cloudy | slight | 19.65 | 33.66 | 14.20 | 33.69 |
| 123.45-B | 9 | 1315 | 27°08.0' | 115°11.0' | 1250 | 290° | 2 | partly cloudy | moderate | 20.40 | 33.67 | 15.66 | 33.48 |
| 126.34-B | 14 | 1630 | 27°06.0' | 114°13.0' | - | - | - | missing | missing | 20.96 | 34.16 | - | - |
| 127.32-B | 13 | 2025 | 26°58.0' | 113°58.0' | - | - | - | missing | missing | 19.86 | 34.15 | - | - |
| 127.34-B | 10 | 0000 | 26°55.5' | 114°06.0' | 43 | 270° | 3 | partly cloudy | moderate | 22.66 | 34.17 | 16.73 | 34.24 |
| 127.40-B | 10 | 0320 | 26°43.5' | 114°29.5' | 1550 | 300° | 3 | partly cloudy | moderate | 21.62 | 33.96 | 14.54 | 33.73 |
| 127.45-B | 10 | 0610 | 26°33.5' | 114°48.5' | 1900 | 320° | 2 | partly cloudy | moderate | 22.34 | 33.78 | 15.44 | 33.53 |
| 129.28-B | 12 | 0440 | 26°43.5' | 113°27.0' | - | - | - | missing | missing | 23.94 | 34.39 | - | - |
| 133.25-B | 11 | 0645 | 26°04.5' | 112°48.0' | 44 | 300° | 2 | missing | missing | 25.60 | 34.17 | 17.34 | 34.28 |
| 133.30-B | 11 | 0930 | 25°54.5' | 113°07.5' | 105 | 300° | 2 | missing | slight | 25.25 | 34.34 | 17.76 | 34.22 |
| 137.23-B | 11 | 1735 | 25°34.0' | 112°18.5' | 40 | 270° | 1 | cloudy | slight | 26.05 | 34.30 | 19.95 | 34.59 |
| 137.30-B | 11 | 1420 | 25°20.0' | 112°45.5' | 135 | - | - | cloudy | slight | 25.83 | 34.29 | 17.91 | 33.85 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |
| ORCA; September 10, 1958; 0940 GCT; 33°24.5'N, 117°55'W; sounding, 340 fm; wind, 240°, force 1; weather, clear; sea, moderate; wire angle, 08°. | | | | | | | | | | | 90.30 |
| 1 | 21.65 | 33.51 | 4.53 | 468 | 0 | (21.65) | (33.51) | (4.53) | (23.20) | (468) | (0.00) |
| 10 | 21.66 | 33.53 | 5.41 | 467 | 10 | 21.66 | 33.53 | 5.41 | 23.21 | 467 | 0.05 |
| 30 | 15.70 | 33.22 | 6.26 | 347 | 20 | 19.94 | 33.44 | 5.68 | 23.59 | 431 | 0.09 |
| 40 | 14.70 | 33.15 | 6.29 | 332 | 30 | 15.70 | 33.22 | 6.26 | 24.47 | 347 | 0.13 |
| 50 | 13.76 | 33.18 | 6.19 | 311 | 50 | 13.76 | 33.18 | 6.19 | 24.86 | 311 | 0.20 |
| 60 | 13.01 | 33.22 | 5.47 | 293 | 75 | 11.96 | 33.27 | 5.10 | 25.28 | 270 | 0.27 |
| 71 | 12.12 | 33.26 | 5.18 | 274 | 100 | 10.54 | 33.37 | 4.43 | 25.61 | 238 | 0.33 |
| 85 | 11.54 | 33.31 | 4.91 | 260 | 150 | 9.41 | 33.68 | 3.65 | 26.02 | 198 | 0.44 |
| 99 | 10.56 | 33.37 | 4.44 | 239 | 200 | 8.84 | 33.93 | 2.59 | 26.32 | 171 | 0.54 |
| 114 | 10.09 | 33.47 | 4.17 | 224 | 250 | 8.50 | 34.07 | 1.96 | 26.49 | 155 | 0.62 |
| 135 | 9.66 | 33.64 | 3.84 | 205 | 300 | 8.08 | 34.17 | 1.80 | 26.63 | 142 | 0.70 |
| 164 | 9.15 | 33.71 | 3.48 | 191 | 400 | 7.26 | 34.26 | 0.86 | 26.82 | 124 | 0.84 |
| 196 | 8.85 | 33.91 | 2.60 | 172 | 500 | 6.55 | 34.31 | 0.50 | 26.96 | 111 | 0.96 |
| 241 | 8.58 | 34.05 | 1.98 | 157 | | | | | | | |
| 315 | 7.96 | 34.20 | 1.75 | 138 | | | | | | | |
| 410 | 7.20 | 34.27 | 0.73 | 122 | | | | | | | |
| 534 | 6.26 | 34.32 | 0.43 | 106 | | | | | | | |
| ORCA; September 14, 1958; 0530, 0607 GCT; 33°24'N, 117°55.5'W; sounding, 321 fm; wind, calm; weather, clear; sea, moderate; wire angle, 02°, 02°. | | | | | | | | | | | 90.30 |
| 0 | 21.42 | 33.44 | 5.36 | 467 | 0 | 21.42 | 33.44 | 5.36 | 23.21 | 467 | 0.00 |
| 10 | 21.37 | 33.48 | 5.37 | 462 | 10 | 21.37 | 33.48 | 5.37 | 23.26 | 462 | 0.05 |
| 30 | 16.01 | 33.25 | 6.22 | 352 | 20 | 19.74 | 33.41 | 5.66 | 23.64 | 426 | 0.09 |
| 40 | 15.85 | 33.49 | 5.98 | 330 | 30 | 16.01 | 33.25 | 6.22 | 24.42 | 352 | 0.13 |
| 50 | 14.70 | 33.44 | 5.89 | 311 | 50 | 14.70 | 33.44 | 5.89 | 24.85 | 311 | 0.20 |
| 60 | 13.24 | 33.32 | 5.45 | 290 | 75 | 11.70 | 33.30 | 4.97 | 25.35 | 264 | 0.27 |
| 70 | 12.06 | 33.30 | 5.13 | 270 | 100 | 11.10 | 33.53 | 4.45 | 25.64 | 236 | 0.33 |
| 84 | 11.28 | 33.32 | 4.01r | 255 | 150 | 9.88 | 33.83 | 2.78 | 26.08 | 194 | 0.44 |
| 98 | 11.18 | 33.48 | 4.61 | 241 | 200 | 9.48 | 34.07 | 2.17 | 26.34 | 170 | 0.53 |
| 112 | 10.70 | 33.68 | 3.43 | 218 | 250 | 8.38 | 34.05 | 2.10 | 26.49 | 155 | 0.62 |
| 137 | 10.16 | 33.78 | 2.99 | 202 | 300 | 8.27 | 34.16 | 1.50 | 26.60 | 145 | 0.69 |
| 165 | 9.64 | 33.88 | 2.59 | 186 | 400 | 7.35 | 34.25 | 0.70 | 26.80 | 126 | 0.83 |
| | | | | | 500 | 6.41 | 34.30 | 0.53 | 26.96 | 110 | 0.96 |
| 197 | 9.52 | 34.07 | 2.18 | 170 | | | | | | | |
| 244 | 8.41 | 34.04 | 2.14 | 156 | | | | | | | |
| 321 | 8.24 | 34.20 | 1.33 | 142 | | | | | | | |
| 417 | 7.14 | 34.26 | 0.62 | 122 | | | | | | | |
| 543 | 6.02 | 34.33 | 0.50 | 103 | | | | | | | |
| ORCA; September 17, 1958; 0948 GCT; 33°24.5'N, 117°55'W; sounding, 300+ fm; wind, calm; weather, clear; sea, smooth; wire angle, 00°. | | | | | | | | | | | 90.30 |
| 0 | 21.25 | 33.44 | 5.34 | 462 | 0 | 21.25 | 33.44 | 5.34 | 23.26 | 462 | 0.00 |
| 10 | 21.09 | 33.40 | 5.34 | 461 | 10 | 21.09 | 33.40 | 5.34 | 23.28 | 461 | 0.05 |
| 30 | 16.00 | 33.15 | 6.28 | 359 | 20 | 18.50 | 33.27 | 5.84 | 23.84 | 407 | 0.09 |
| 41 | 14.79 | 33.18 | 6.20 | 331 | 30 | 16.00 | 33.15 | 6.28 | 24.35 | 359 | 0.13 |
| 49 | 13.52 | 33.22 | 5.92 | 303 | 50 | 13.45 | 33.23 | 5.85 | 24.96 | 301 | 0.19 |
| 60 | 12.69 | 33.38 | 4.77 | 276 | 75 | 11.40 | 33.44 | 4.29 | 25.50 | 249 | 0.26 |
| 69 | 11.33 | 33.31 | 4.80 | 256 | 100 | 10.87 | 33.58 | 3.80 | 25.71 | 229 | 0.32 |
| 83 | 11.28 | 33.55 | 4.19 | 238 | 150 | 9.99 | 33.79 | 2.93 | 26.04 | 198 | 0.43 |
| 98 | 10.92 | 33.58 | 3.98 | 229 | 200 | 8.81 | 33.94 | 2.47 | 26.34 | 170 | 0.53 |
| 112 | 10.74 | 33.67 | 3.39 | 220 | 250 | 8.66 | 34.13 | 1.70 | 26.51 | 153 | 0.61 |
| 135 | 10.26 | 33.72 | 3.15 | 208 | 300 | 8.02 | 34.14 | 1.63 | 26.62 | 143 | 0.68 |
| 164 | 9.74 | 33.86 | 2.75 | 189 | 400 | 7.38 | 34.23 | 0.89 | 26.79 | 127 | 0.82 |
| 196 | 8.84 | 33.93 | 2.52 | 170 | 500 | 6.45 | 34.30 | 0.52 | 26.96 | 110 | 0.95 |
| 244 | 8.76 | 34.13 | 1.72 | 154 | | | | | | | |
| 321 | 7.83 | 34.14 | 1.60 | 140 | | | | | | | |
| 419 | 7.26 | 34.25 | 0.72 | 124 | | | | | | | |
| 548 | 5.84 | 34.33 | 0.42 | 100 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 90.37 | ORCA; September 10, 1958; 1505, 1555 GCT; 33°10.5'N, 118°23.5'W; sounding, 600+ fm; wind, 290°, force 4; weather, partly cloudy; sea, moderate; wire angle, 18°, 18°. | | | | | | | | | | |
| 0 | 21.36 | 33.48 | 5.32 | 462 | 0 | 21.36 | 33.48 | 5.32 | 23.26 | 462 | 0.00 |
| 10 | 21.36 | 33.49 | 5.37 | 462 | 10 | 21.36 | 33.49 | 5.37 | 23.26 | 462 | 0.05 |
| 28 | 17.05 | 33.27 | 6.29 | 373 | 20 | 21.35 | 33.49 | 5.38 | 23.27 | 461 | 0.09 |
| 43 | 14.32 | 33.17 | 6.37 | 327 | 30 | 16.55 | 33.25 | 6.34 | 24.29 | 364 | 0.13 |
| 52 | 13.44 | 33.19 | 6.18 | 304 | 50 | 13.57 | 33.18 | 6.22 | 24.89 | 307 | 0.20 |
| 63 | 12.86 | 33.22 | 5.42 | 291 | 75 | 11.72 | 33.34 | 4.88 | 25.38 | 261 | 0.27 |
| 72 | 11.95 | 33.31 | 4.99 | 267 | 100 | 10.30 | 33.53 | 4.08 | 25.78 | 223 | 0.33 |
| 91 | 10.74 | 33.49 | 4.38 | 233 | 150 | 9.08 | 33.82 | 3.00 | 26.20 | 183 | 0.44 |
| 105 | 10.12 | 33.55 | 3.96 | 219 | 200 | 8.52 | 34.04 | 2.20 | 26.47 | 157 | 0.52 |
| | | | | | 250 | 8.02 | 34.09 | 1.64 | 26.58 | 146 | 0.60 |
| 119 | 9.78 | 33.59 | 3.73 | 210 | 300 | 7.72 | 34.17 | 1.27 | 26.69 | 136 | 0.67 |
| 139 | 9.26 | 33.75 | 3.22 | 190 | 400 | 7.10 | 34.29 | 0.72 | 26.86 | 120 | 0.81 |
| 168 | 8.82 | 33.90 | 2.65 | 173 | 500 | 6.48 | 34.32 | 0.48 | 26.98 | 109 | 0.93 |
| 204 | 8.49 | 34.05 | 2.17 | 156 | | | | | | | |
| 257 | 7.96 | 34.10 | 1.56 | 145 | | | | | | | |
| 336 | 7.50 | 34.23 | 1.05 | 129 | | | | | | | |
| 436 | 6.88 | 34.31 | 0.56 | 115 | | | | | | | |
| 578 | 5.95 | 34.33 | 0.39 | 102 | | | | | | | |
| 90.37 | ORCA; September 14, 1958; 1105, 1147 GCT; 33°10.5'N, 118°23.5'W; sounding, 678 fm; wind, 020°, force 1; weather, clear; sea, moderate; wire angle, 05°, 03°. | | | | | | | | | | |
| 0 | 21.20 | 33.42 | 5.39 | 463 | 0 | 21.20 | 33.42 | 5.39 | 23.26 | 463 | 0.00 |
| 10 | 21.20 | 33.47 | 5.37 | 459 | 10 | 21.20 | 33.47 | 5.37 | 23.30 | 459 | 0.05 |
| 30 | 17.36 | 33.37 | 6.17 | 372 | 20 | 21.16 | 33.47 | 5.38 | 23.31 | 458 | 0.09 |
| 40 | 15.14 | 33.23 | 6.44 | 335 | 30 | 17.36 | 33.37 | 6.17 | 24.20 | 372 | 0.13 |
| 50 | 13.72 | 33.17 | 6.36 | 330 | 50 | 13.72 | 33.17 | 6.36 | 24.86 | 310 | 0.20 |
| 60 | 13.19 | 33.17 | 6.12 | 300 | 75 | 12.26 | 33.33 | 5.03 | 25.26 | 272 | 0.27 |
| 69 | 12.60 | 33.30 | 5.27 | 280 | 100 | 10.61 | 33.50 | 4.07 | 25.70 | 230 | 0.34 |
| 84 | 11.68 | 33.38 | 4.71 | 258 | 150 | 9.00 | 33.85 | 2.98 | 26.24 | 179 | 0.44 |
| 98 | 10.62 | 33.50 | 4.08 | 230 | 200 | 8.53 | 34.00 | 2.43 | 26.44 | 160 | 0.53 |
| 113 | 9.96 | 33.57 | 3.91 | 215 | 250 | 8.01 | 34.10 | 1.92 | 26.59 | 146 | 0.61 |
| 136 | 9.35 | 33.73 | 3.40 | 193 | 300 | 7.78 | 34.18 | 1.43 | 26.68 | 137 | 0.68 |
| 163 | 8.84 | 33.91 | 2.78 | 172 | 400 | 6.99 | 34.19 | 0.90 | 26.81 | 125 | 0.82 |
| | | | | | 500 | 6.40 | 34.27 | 0.46 | 26.95 | 112 | 0.94 |
| 198 | 8.54 | 34.00 | 2.44 | 161 | | | | | | | |
| 246 | 8.01 | 34.10 | 1.94 | 146 | | | | | | | |
| 323 | 7.61 | 34.20 | 1.25 | 133 | | | | | | | |
| 422 | 6.80 | 34.19 | 0.80 | 123 | | | | | | | |
| 549 | 6.13 | 34.36 | 0.37 | 101 | | | | | | | |
| 90.37 | ORCA; September 17, 1958; 1545 GCT; 33°10.5'N, 118°23.5'W; sounding, 600 fm; wind, 270°, force 3; weather, cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 20.41 | 33.44 | 5.22 | 441 | 0 | 20.41 | 33.44 | 5.22 | 23.49 | 441 | 0.00 |
| 10 | 20.38 | 33.43 | 4.72 | 441 | 10 | 20.38 | 33.43 | 4.72 | 23.49 | 441 | 0.04 |
| 30 | 19.31 | 33.37 | 5.25 | 419 | 20 | 20.25 | 33.42 | 4.78 | 23.51 | 438 | 0.09 |
| 45 | 14.58 | 33.15 | 5.80 | 329 | 30 | 19.31 | 33.37 | 5.25 | 23.72 | 419 | 0.13 |
| 55 | 13.60 | 33.15 | 5.97 | 310 | 50 | 14.12 | 33.15 | 5.88 | 24.76 | 320 | 0.20 |
| 66 | 12.56 | 33.22 | 5.47 | 285 | 75 | 11.85 | 33.30 | 5.26 | 25.32 | 266 | 0.28 |
| 76 | 11.82 | 33.30 | 5.24 | 266 | 100 | 10.30 | 33.50 | 4.05 | 25.75 | 226 | 0.34 |
| 95 | 10.44 | 33.48 | 4.12 | 229 | 150 | 9.13 | 33.76 | 3.32 | 26.15 | 188 | 0.44 |
| 110 | 10.05 | 33.55 | 3.94 | 218 | 200 | 8.56 | 33.99 | 2.40 | 26.42 | 162 | 0.53 |
| 124 | 9.60 | 33.63 | 3.69 | 204 | 250 | 7.92 | 34.06 | 1.92 | 26.57 | 148 | 0.61 |
| 148 | 9.16 | 33.76 | 3.34 | 188 | 300 | 7.52 | 34.13 | 1.43 | 26.68 | 137 | 0.69 |
| 176 | 8.87 | 33.89 | 2.73 | 174 | 400 | 6.95 | 34.23 | 0.72 | 26.84 | 122 | 0.82 |
| 213 | 8.38 | 34.02 | 2.24 | 157 | 500 | 6.38 | 34.29 | 0.45 | 26.96 | 110 | 0.94 |
| 266 | 7.76 | 34.07 | 1.81 | 144 | 600 | (5.83) | (34.34) | (0.40) | (27.07) | (100) | (1.05) |
| 347 | 7.29 | 34.19 | 1.01 | 129 | | | | | | | |
| 447 | 6.64 | 34.26 | 0.50 | 116 | | | | | | | |
| 590 | 5.90 | 34.33 | 0.40 | 102 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| ORCA; September 10, 1958; 2235, 2248 GCT; 32°55'N, 118°56'W; sounding, 800 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 11°, 11°. | | | | | | | | | | | 90.45 |
| 0 | 20.41 | 33.51 | 5.41 | 436 | 0 | 20.41 | 33.51 | 5.41 | 23.54 | 436 | 0.00 |
| 10 | 20.40 | 33.51 | 5.57 | 436 | 10 | 20.40 | 33.51 | 5.57 | 23.54 | 436 | 0.04 |
| | | | | | 20 | 15.97 | 33.35 | 5.90 | 24.52 | 343 | 0.08 |
| 34 | 14.34 | 33.30 | 6.00 | 313 | 30 | 14.80 | 33.31 | 5.97 | 24.74 | 322 | 0.12 |
| 44 | 13.38 | 33.37 | 5.43 | 289 | 50 | 12.90 | 33.39 | 5.18 | 25.19 | 279 | 0.18 |
| 58 | 12.15 | 33.42 | 4.83 | 263 | 75 | 11.20 | 33.50 | 4.44 | 25.60 | 240 | 0.24 |
| 69 | 11.68 | 33.48 | 4.53 | 250 | 100 | 9.90 | 33.61 | 3.82 | 25.90 | 211 | 0.30 |
| 78 | 10.86 | 33.52 | 4.39 | 233 | 150 | 9.03 | 33.92 | 2.69 | 26.30 | 174 | 0.39 |
| 98 | 9.95 | 33.60 | 3.83 | 212 | 200 | 8.65 | 34.10 | 2.00 | 26.49 | 155 | 0.48 |
| 115 | 9.40 | 33.78 | 3.15 | 190 | 250 | 8.16 | 34.16 | 1.65 | 26.61 | 143 | 0.55 |
| 130 | 9.44 | 33.80u | 3.13 | | 300 | 7.80 | 34.17 | 1.56 | 26.67 | 138 | 0.63 |
| 153 | 8.93 | 33.93 | 2.57 | 172 | 400 | 6.99 | 34.24 | 1.12 | 26.85 | 121 | 0.76 |
| 189 | 8.75 | 34.06 | 2.18 | 159 | 500 | 6.43 | 34.29 | 0.64 | 26.96 | 111 | 0.88 |
| 226 | 8.36 | 34.16 | 1.73 | 146 | 600 | 5.89 | 34.36 | 0.48 | 27.08 | 99 | 0.99 |
| 282 | 7.94 | 34.16 | 1.60 | 140 | | | | | | | |
| 368 | 7.22 | 34.22 | 1.37 | 126 | | | | | | | |
| 477 | 6.58 | 34.28 | 0.69 | 113 | | | | | | | |
| 626 | 5.78 | 34.38 | 0.42 | 96 | | | | | | | |
| ORCA; September 14, 1958; 1643 GCT; 32°57'N, 118°56.5'W; sounding, 950 fm; wind, 120°, force 2; weather, clear; sea, rough; wire angle, 08°. | | | | | | | | | | | 90.45 |
| 0 | 19.78 | 33.50 | 5.47 | 420 | 0 | 19.78 | 33.50 | 5.47 | 23.70 | 420 | 0.00 |
| 10 | 19.35 | 33.49 | 5.64 | 411 | 10 | 19.35 | 33.49 | 5.64 | 23.80 | 411 | 0.04 |
| 30 | 13.41 | 33.35 | 5.48 | 291 | 20 | 14.08 | 33.37 | 5.49 | 24.93 | 304 | 0.08 |
| 40 | 12.31 | 33.37 | 4.80 | 269 | 30 | 13.41 | 33.35 | 5.48 | 25.06 | 291 | 0.11 |
| 51 | 11.76 | 33.41 | 4.53 | 256 | 50 | 11.80 | 33.41 | 4.57 | 25.42 | 256 | 0.16 |
| 60 | 11.20 | 33.46 | 4.46 | 243 | 75 | 10.15 | 33.54 | 3.92 | 25.81 | 220 | 0.22 |
| 68 | 10.38 | 33.52 | 4.05 | 225 | 100 | 9.59 | 33.68 | 3.44 | 26.01 | 201 | 0.28 |
| 85 | 9.92 | 33.58 | 3.80 | 233 | 150 | 8.92 | 33.99 | 2.55 | 26.36 | 167 | 0.37 |
| 99 | 9.60 | 33.68 | 3.45 | 201 | 200 | 8.40 | 34.08 | 1.95 | 26.51 | 153 | 0.45 |
| 112 | 9.43 | 33.77 | 3.23 | 191 | 250 | 8.05 | 34.15 | 1.70 | 26.62 | 143 | 0.52 |
| 136 | 9.08 | 33.90 | 2.78 | 176 | 300 | 7.66 | 34.19 | 1.43 | 26.72 | 134 | 0.60 |
| 164 | 8.73 | 34.05 | 2.29 | 160 | 400 | 6.84 | 34.26 | 0.71 | 26.88 | 118 | 0.73 |
| 196 | 8.44 | 34.07 | 2.00 | 154 | 500 | 6.40 | 34.29 | 0.50 | 26.96 | 110 | 0.84 |
| 243 | 8.08 | 34.14 | 1.72 | 143 | | | | | | | |
| 320 | 7.46 | 34.21 | 1.29 | 130 | | | | | | | |
| 415 | 6.78 | 34.27 | 0.65 | 116 | | | | | | | |
| 541 | 6.22 | 34.30 | 0.47 | 107 | | | | | | | |
| ORCA; September 17, 1958; 2107, 2149 GCT; 32°55'N, 118°56'W; sounding, 900 fm; wind, 270°, force 3; weather, cloudy; sea, slight; wire angle, 09°, 08°. | | | | | | | | | | | 90.45 |
| 0 | 20.02 | 33.39 | 5.51 | 435 | 0 | 20.02 | 33.39 | 5.51 | 23.55 | 435 | 0.00 |
| 10 | 19.74 | 33.38 | 5.51 | 428 | 10 | 19.74 | 33.38 | 5.51 | 23.62 | 428 | 0.04 |
| | | | | | 20 | 19.50 | 33.37 | 5.53 | 23.67 | 423 | 0.09 |
| 30 | 14.45 | 33.20 | 5.83 | 322 | 30 | 14.45 | 33.20 | 5.83 | 24.73 | 322 | 0.12 |
| 45 | 13.10 | 33.33 | 5.42 | 287 | 50 | 13.01 | 33.32 | 5.46 | 25.11 | 286 | 0.18 |
| 55 | 12.92 | 33.31 | 5.48a) | 285 | 75 | 11.44 | 33.42 | 4.51 | 25.49 | 250 | 0.25 |
| 65 | 12.16 | 33.38 | 4.92 | 266 | 100 | 9.77 | 33.62 | 3.80 | 25.94 | 208 | 0.31 |
| 74 | 11.45 | 33.42 | 4.52 | 250 | 150 | 8.95 | 33.90 | 2.60 | 26.28 | 175 | 0.41 |
| 93 | 10.00 | 33.59 | 3.96 | 214 | 200 | 8.62 | 34.02 | 2.14 | 26.44 | 160 | 0.49 |
| 107 | 9.59 | 33.66 | 3.65 | 202 | 250 | 8.10 | 34.09 | 1.70 | 26.57 | 148 | 0.57 |
| 121 | 9.35 | 33.77 | 3.07 | 190 | 300 | 7.72 | 34.11 | 1.46 | 26.64 | 141 | 0.64 |
| 144 | 8.98 | 33.89 | 2.64 | 176 | 400 | 6.99 | 34.18 | 0.98 | 26.80 | 126 | 0.78 |
| 172 | 8.85 | 33.96 | 2.39 | 168 | 500 | 6.40 | 34.27 | 0.62 | 26.95 | 112 | 0.91 |
| 209 | 8.54 | 34.04 | 2.07 | 158 | 600 | (5.82) | (34.35) | | (27.08) | (99) | (1.02) |
| 261 | 8.00 | 34.10 | 1.62 | 146 | | | | | | | |
| 340 | 7.41 | 34.12 | 1.32 | 136 | | | | | | | |
| 439 | 6.71 | 34.22 | 0.70 | 119 | | | | | | | |
| 580 | 5.92 | 34.33 | 0.50 | 101 | | | | | | | |

a) Alternate value, 5.24 ml/L, not used in interpolation.

SIO

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 90.50 | ORCA; September 11, 1958; 0255 GCT; 32°44'N, 119°15'W; sounding, 112 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 19.14 | 33.45 | 5.68 | 409 | 0 | 19.14 | 33.45 | 5.68 | 23.82 | 409 | 0.00 |
| 9 | 19.14 | 33.46 | 5.69 | 408 | 10 | 19.13 | 33.46 | 5.69 | 23.84 | 407 | 0.04 |
| 28 | 18.76 | 33.42 | 5.71 | 402 | 20 | 19.08 | 33.45 | 5.69 | 23.85 | 406 | 0.08 |
| 47 | 14.98 | 33.28 | 6.32 | 328 | 30 | 18.70 | 33.42 | 5.72 | 23.90 | 401 | 0.12 |
| 70 | 12.26 | 33.40 | 4.86 | 267 | 50 | 14.78 | 33.29 | 6.25 | 24.72 | 324 | 0.19 |
| 94 | 11.23 | 33.52 | 4.26 | 240 | 75 | 12.00 | 33.42 | 4.70 | 25.38 | 260 | 0.27 |
| | | | | | 100 | (10.90) | (33.57) | (4.05) | (25.70) | (230) | (0.33) |
| 90.50 | ORCA; September 14, 1958; 2105 GCT; 32°45.5'N, 119°14.5'W; sounding, 128 fm; wind, 300°, force 3; weather, clear; sea, rough; wire angle, 01°. | | | | | | | | | | |
| 0 | 19.98 | 33.53 | 5.68 | 424 | 0 | 19.98 | 33.53 | 5.68 | 23.67 | 424 | 0.00 |
| 10 | 19.12 | 33.48 | 5.62 | 406 | 10 | 19.12 | 33.48 | 5.62 | 23.85 | 406 | 0.04 |
| 30 | 16.64 | 33.40 | 5.68 | 355 | 20 | 18.88 | 33.47 | 5.63 | 23.91 | 401 | 0.08 |
| 50 | 13.14 | 33.29 | 5.80 | 290 | 30 | 16.64 | 33.40 | 5.68 | 24.39 | 355 | 0.12 |
| 76 | 11.60 | 33.40 | 4.98 | 254 | 50 | 13.14 | 33.29 | 5.80 | 25.07 | 290 | 0.18 |
| 100 | 10.67 | 33.57 | 3.99 | 226 | 75 | 11.63 | 33.40 | 5.01 | 25.44 | 256 | 0.25 |
| | | | | | 100 | 10.67 | 33.57 | 3.99 | 25.74 | 226 | 0.31 |
| 90.50 | ORCA; September 18, 1958; 0145 GCT; 32°44.5'N, 119°16.5'W; sounding, 180 fm; wind, 300°, force 4; weather, cloudy; sea, moderate; wire angle, 18°. | | | | | | | | | | |
| 0 | 19.08 | 33.47 | 5.55 | 406 | 0 | 19.08 | 33.47 | 5.55 | 23.86 | 406 | 0.00 |
| 9 | 19.28 | 33.44 | 5.60 | 413 | 10 | 19.28 | 33.44 | 5.60 | 23.78 | 413 | 0.04 |
| 28 | 17.06 | 33.36 | 5.85 | 367 | 20 | 18.05 | 33.39 | 5.79 | 24.05 | 387 | 0.08 |
| 47 | 13.62 | 33.30 | 5.55 | 299 | 30 | 17.05 | 33.40 | 5.85 | 24.29 | 364 | 0.12 |
| 73 | 11.52 | 33.37 | 4.84 | 256 | 50 | 13.45 | 33.33 | 5.45 | 25.05 | 292 | 0.18 |
| 96 | 9.75 | 33.62 | 3.53 | 208 | 75 | 11.40 | 33.38 | 4.83 | 25.46 | 253 | 0.25 |
| | | | | | 100 | (9.48) | (33.64) | (3.35) | (26.00) | (202) | (0.31) |
| 90.60 | ORCA; September 11, 1958; 1055, 1240 GCT; 32°22'N, 119°57.5'W; sounding, 450+ fm; wind, 300°, force 6; weather, clear; sea, very rough; wire angle, 26°, 22°. | | | | | | | | | | |
| 0 | 18.88 | 33.26 | 5.86 | 416 | 0 | 18.88 | 33.26 | 5.86 | 23.74 | 416 | 0.00 |
| 9 | 18.85 | 33.31 | 5.56 | 412 | 10 | 18.86 | 33.31 | 5.57 | 23.78 | 412 | 0.04 |
| 27 | 18.89 | 33.26 | 5.66 | 416 | 20 | 18.87 | 33.28 | 5.61 | 23.76 | 415 | 0.08 |
| 40 | 16.22 | 33.24 | 6.19 | 357 | 30 | 18.77 | 33.25 | 5.70 | 23.76 | 415 | 0.12 |
| 50 | 15.37 | 33.25 | 6.02 | 338 | 50 | 15.37 | 33.25 | 6.02 | 24.57 | 338 | 0.20 |
| 59 | 14.66 | 33.22 | 6.16 | 326 | 75 | 13.78 | 33.21 | 6.09 | 24.87 | 309 | 0.28 |
| 69 | 14.06 | 33.21 | 6.13 | 315 | 100 | 11.26 | 33.27 | 5.23 | 25.40 | 259 | 0.35 |
| 86 | 13.08 | 33.21 | 5.94 | 295 | 150 | 9.23 | 33.64 | 4.02 | 26.05 | 197 | 0.47 |
| 98 | 11.36 | 33.26 | 5.26 | 261 | 200 | 8.47 | 33.96 | 2.93 | 26.41 | 163 | 0.56 |
| 111 | 10.59 | 33.35 | 5.08 | 241 | 250 | 7.77 | 33.99 | 2.36 | 26.54 | 150 | 0.64 |
| 131 | 9.63 | 33.44 | 4.73 | 220 | 300 | 7.12 | 34.08 | 1.64 | 26.70 | 135 | 0.71 |
| 155 | 9.16 | 33.68 | 3.88 | 194 | 400 | 6.41 | 34.14 | 0.82 | 26.84 | 122 | 0.85 |
| | | | | | 500 | 5.82 | 34.20 | 0.57 | 26.97 | 110 | 0.97 |
| 201 | 8.46 | 33.96 | 2.93 | 163 | | | | | | | |
| 251 | 7.76 | 33.99 | 2.35 | 150 | | | | | | | |
| 327 | 6.86 | 34.11 | 1.37 | 130 | | | | | | | |
| 423 | 6.30 | 34.15 | 0.74 | 120 | | | | | | | |
| 559 | 5.44 | 34.26 | 0.48 | 101 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| ORCA; September 15, 1958; 0435 GCT; 32°23'N, 119°52.5'W; sounding, 500 fm; wind, 300°, force 3; weather, clear; sea, very rough; wire angle, 08°. | | | | | | | | | | | 90.60 |
| 0 | 18.72 | 33.38 | 5.67 | 404 | 0 | 18.72 | 33.38 | 5.67 | 23.88 | 404 | 0.00 |
| 10 | 18.65 | 33.42 | - | 400 | 10 | 18.65 | 33.42 | | 23.92 | 400 | 0.04 |
| 30 | 18.42 | 33.40 | 5.71 | 395 | 20 | 18.54 | 33.41 | 5.68 | 23.95 | 397 | 0.08 |
| 40 | 16.46 | 33.34 | 6.14 | 355 | 30 | 18.42 | 33.40 | 5.71 | 23.97 | 395 | 0.12 |
| 50 | 15.58 | 33.31 | 6.20 | 338 | 50 | 15.58 | 33.31 | 6.20 | 24.56 | 338 | 0.19 |
| 59 | 14.71 | 33.25 | 6.36 | 325 | 75 | 13.70 | 33.29 | 5.60 | 24.95 | 302 | 0.27 |
| 70 | 14.28 | 33.31 | 5.51 | 311 | 100 | 11.26 | 33.31 | 5.20 | 25.44 | 255 | 0.34 |
| 84 | 12.43 | 33.23 | 5.80 | 283 | 150 | 9.40 | 33.59 | 4.32 | 25.98 | 204 | 0.46 |
| 100 | 11.26 | 33.31 | 5.20 | 255 | 200 | 8.50 | 33.92 | 2.92 | 26.38 | 166 | 0.55 |
| 114 | 10.28 | 33.36 | 4.74 | 235 | 250 | 7.78 | 34.05 | 2.08 | 26.58 | 146 | 0.63 |
| 138 | 9.60 | 33.48 | 4.67 | 216 | 300 | 7.38 | 34.11 | 1.60 | 26.70 | 136 | 0.71 |
| 166 | 9.14 | 33.71 | 3.70 | 192 | 400 | 6.40 | 34.19 | 0.90 | 26.89 | 117 | 0.84 |
| 199 | 8.50 | 33.92 | 2.92 | 166 | 500 | 5.92 | 34.27 | 0.57 | 27.00 | 106 | 0.96 |
| 245 | 7.81 | 34.04 | 2.13 | 148 | | | | | | | |
| 319 | 7.19 | 34.14 | 1.36 | 132 | | | | | | | |
| 413 | 6.32 | 34.20 | 0.87 | 116 | | | | | | | |
| 540 | 5.74 | 34.31 | 0.45 | 100 | | | | | | | |
| ORCA; September 18, 1958; 0858 GCT; 32°25'N, 119°57.5'W; sounding, 450 fm; wind, 240°, force 5; weather, clear; sea, rough; wire angle, 15°. | | | | | | | | | | | 90.60 |
| 0 | 18.83 | 33.28 | 5.51 | 414 | 0 | 18.83 | 33.28 | 5.51 | 23.77 | 414 | 0.00 |
| 10 | 18.83 | 33.31 | 5.53 | 412 | 10 | 18.83 | 33.31 | 5.53 | 23.79 | 412 | 0.04 |
| 28 | 18.83 | 33.28 | 5.46 | 414 | 20 | 18.83 | 33.28 | 5.50 | 23.77 | 414 | 0.08 |
| 43 | 15.48 | 33.26 | 6.07 | 340 | 30 | 18.82 | 33.28 | 5.46 | 23.77 | 414 | 0.12 |
| 53 | 15.00 | 33.26 | 6.06 | 330 | 50 | 15.17 | 33.26 | 6.06 | 24.61 | 334 | 0.20 |
| 62 | 14.50 | 33.31 | 6.02 | 316 | 75 | 13.66 | 33.30 | 5.86 | 24.97 | 300 | 0.28 |
| 72 | 13.90 | 33.30 | 5.92 | 305 | 100 | 11.60 | 33.39 | 5.27 | 25.44 | 255 | 0.35 |
| 92 | 12.31 | 33.36 | 5.44 | 270 | 150 | 9.41 | 33.51 | 4.26 | 25.91 | 210 | 0.46 |
| 105 | 11.14 | 33.41 | 5.18 | 246 | 200 | 8.72 | 33.93 | 2.45 | 26.35 | 168 | 0.56 |
| 119 | 10.37 | 33.45 | 4.99 | 229 | 250 | 8.17 | 34.04 | 1.83 | 26.52 | 152 | 0.64 |
| 142 | 9.48 | 33.49 | 4.41 | 213 | 300 | 7.40 | 34.04 | 1.50 | 26.63 | 142 | 0.72 |
| 169 | 9.22 | 33.73 | 3.34 | 191 | 400 | 6.41 | 34.11 | 0.87 | 26.82 | 124 | 0.86 |
| 206 | 8.62 | 33.95 | 2.36 | 166 | 500 | 5.84 | 34.19 | 0.50 | 26.96 | 111 | 0.98 |
| 256 | 8.09 | 34.04 | 1.77 | 151 | | | | | | | |
| 334 | 6.92 | 34.04 | 1.31 | 136 | | | | | | | |
| 434 | 6.20 | 34.15 | 0.64 | 118 | | | | | | | |
| 573 | 5.40 | 34.23 | 0.33 | 103 | | | | | | | |
| ORCA; September 11, 1958; 2025, 2048 GCT; 32°05.5'N, 120°36'W; sounding, 2000+ fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 35°, 45°. | | | | | | | | | | | 90.70 |
| 0 | 18.86 | 33.25 | 5.62 | 417 | 0 | 18.86 | 33.25 | 5.62 | 23.74 | 417 | 0.00 |
| 8 | 18.82 | 33.28 | 5.67 | 414 | 10 | 18.82 | 33.28 | 5.66 | 23.77 | 414 | 0.04 |
| 24 | 18.82 | 33.24 | 5.65 | 417 | 20 | 18.82 | 33.25 | 5.65 | 23.75 | 416 | 0.08 |
| 36 | 18.28 | 33.30 | 5.74 | 399 | 30 | 18.81 | 33.24 | 5.65 | 23.75 | 416 | 0.12 |
| 44 | 16.44 | 33.30 | 6.36 | 358 | 50 | 15.46 | 33.28 | 6.17 | 24.57 | 338 | 0.20 |
| 53 | 15.30 | 33.28 | 6.15 | 334 | 75 | 14.42 | 33.25 | 6.14 | 24.77 | 318 | 0.28 |
| 62 | 14.87 | 33.28 | 6.16 | 326 | 100 | 13.10 | 33.35 | 5.72 | 25.11 | 286 | 0.36 |
| 79 | 14.24 | 33.24 | 6.14 | 316 | 150 | 9.56 | 33.57 | 4.90 | 25.92 | 209 | 0.48 |
| 90 | 13.56 | 33.24 | 6.12 | 302 | | | | | | | |
| 107 | 11.94 | 33.40 | 5.59 | 260 | | | | | | | |
| 129 | 10.33 | 33.48 | 5.15 | 227 | | | | | | | |
| 160 | 9.30 | 33.63 | 4.74 | 200 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T_3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T_3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |
| 90.70 | ORCA; September 15, 1958; 1120 GCT; 32°01.5'N, 120°30'W; sounding, 2100+ fm; wind, 300°, force 2; weather, clear; sea, rough; wire angle, 08°. | | | | | | | | | | |
| 0 | 18.66 | 33.36 | 5.62 | 404 | 0 | 18.66 | 33.36 | 5.62 | 23.87 | 404 | 0.00 |
| 10 | 18.64 | 33.42 | 5.30 | 399 | 10 | 18.64 | 33.42 | 5.30 | 23.92 | 399 | 0.04 |
| 30 | 18.71 | 33.35 | 5.42 | 406 | 20 | 18.68 | 33.37 | 5.40 | 23.87 | 404 | 0.08 |
| 39 | 18.38 | 33.36 | 5.45 | 397 | 30 | 18.71 | 33.35 | 5.42 | 23.85 | 406 | 0.12 |
| 49 | 15.86 | 33.33 | 5.83 | 342 | 50 | 15.80 | 33.33 | 5.85 | 24.53 | 342 | 0.20 |
| 59 | 15.20 | 33.31 | 5.96 | 330 | 75 | 14.44 | 33.32 | 5.85 | 24.82 | 313 | 0.28 |
| 68 | 14.72 | 33.31 | 5.89 | 320 | 100 | 13.58 | 33.40 | 5.69 | 25.06 | 291 | 0.36 |
| 82 | 14.15 | 33.35 | 5.85 | 306 | 150 | 9.20 | 33.55 | 4.42 | 25.95 | 205 | 0.48 |
| 97 | 13.69 | 33.39 | 5.72 | 294 | 200 | 8.41 | 33.87 | 3.18 | 26.34 | 169 | 0.57 |
| 110 | 11.77 | 33.45 | 5.24 | 253 | 250 | 7.86 | 33.96 | 2.42 | 26.50 | 154 | 0.65 |
| 132 | 9.88 | 33.51 | 4.95 | 218 | 300 | 7.32 | 34.03 | 1.85 | 26.64 | 141 | 0.73 |
| 159 | 9.13 | 33.64 | 4.37 | 196 | 400 | 6.45 | 34.12 | 0.98 | 26.83 | 123 | 0.87 |
| 191 | 8.57 | 33.84 | 3.35 | 173 | 500 | 5.75 | 34.13 | 0.95 | 26.92 | 114 | 0.99 |
| 235 | 8.01 | 33.94 | 2.64 | 158 | | | | | | | |
| 309 | 7.21 | 34.04 | 1.77 | 139 | | | | | | | |
| 401 | 6.44 | 34.12 | 0.97 | 123 | | | | | | | |
| 527 | 5.58 | 34.13 | 0.95 | 112 | | | | | | | |
| 93.27 | ORCA; September 10, 1958; 0011, 0037 GCT;[a] 32°55'N, 117°21.5'W; sounding, 300 fm; wind, 300°, force 4; weather, clear; sea, moderate; wire angle, 15°, 18°. | | | | | | | | | | |
| 227 | 9.10 | 34.04 | 2.14 | 167 | | | | | | | |
| 238 | 8.80 | 34.07 | 2.05 | 160 | | | | | | | |
| 247 | 8.86 | 34.11 | 1.64 | 158 | | | | | | | |
| 256 | 8.80 | 34.14 | 1.64 | 155 | | | | | | | |
| 265 | 8.64 | 34.16 | 1.57 | 151 | | | | | | | |
| 274 | 8.70 | 34.20 | 1.38 | 149 | | | | | | | |
| 283 | 8.61 | 34.18 | 1.38 | 149 | | | | | | | |
| 293 | 8.45 | 34.18 | 1.40 | 146 | | | | | | | |
| 302 | 8.45 | 34.16 | 1.33 | 147 | | | | | | | |
| 312 | 8.36 | 34.21 | 1.29 | 143 | | | | | | | |
| 321 | 8.23 | 34.20 | 1.24 | 142 | | | | | | | |
| 330 | 8.18 | 34.21 | 1.21 | 140 | | | | | | | |
| 340 | 8.00 | 34.22 | 1.16 | 137 | | | | | | | |
| 350 | 7.95 | 34.21 | 1.22 | 137 | | | | | | | |
| 359 | 7.88 | 34.22 | 1.09 | 135 | | | | | | | |
| 368 | 7.84 | - | 1.13 | | | | | | | | |
| 378 | 7.77 | 34.22 | 0.96 | 133 | | | | | | | |
| 93.27 | ORCA; September 13, 1958; 1800, 1828 GCT; 32°55'N, 117°21.5'W; sounding, 228 fm;[b] wind, 180°, force 3; weather, clear; sea, moderate; wire angle, 05°, 05°. | | | | | | | | | | |
| 0 | 19.36 | 33.39 | 5.97 | 418 | 0 | 19.36 | 33.39 | 5.97 | 23.73 | 418 | 0.00 |
| 10 | 16.09 | 33.30 | 6.29 | 350 | 10 | 16.09 | 33.30 | 6.29 | 24.44 | 350 | 0.04 |
| 20 | 15.24 | 33.60r | 6.24 | | 20 | 15.24 | 33.33 | 6.24 | 24.65 | 330 | 0.07 |
| 30 | 14.54 | 33.59r | 6.29 | | 30 | 14.54 | 33.36 | 6.29 | 24.83 | 313 | 0.10 |
| 40 | 14.28 | 33.37 | 5.95 | 307 | 50 | 13.06 | 33.35 | 5.00 | 25.12 | 285 | 0.16 |
| 50 | 13.06 | 33.35 | 5.00 | 285 | 75 | 11.53 | 33.51 | 4.54 | 25.54 | 245 | 0.23 |
| 70 | 11.64 | 33.48 | 4.63 | 250 | 100 | 10.98 | 33.56 | 4.17 | 25.67 | 233 | 0.29 |
| 90 | 11.26 | 33.55 | 4.30 | 238 | 150 | 10.12 | 33.75 | 3.32 | 25.98 | 203 | 0.40 |
| | | | | | 200 | 9.55 | 33.96 | 2.43 | 26.24 | 179 | 0.50 |
| 69c) | 11.78u | 33.48u | 4.42u | | 250 | 9.06 | 34.10 | 1.89 | 26.42 | 162 | 0.59 |
| 93 | 10.96u | - | 4.30u | | 300 | 8.57 | 34.17 | 1.60 | 26.56 | 148 | 0.67 |
| 116 | 10.54 | 33.58 | 3.90 | 223 | | | | | | | |
| 139 | 10.23 | 33.69 | 3.50 | 210 | | | | | | | |
| 186 | 9.68 | 33.90 | 2.66 | 186 | | | | | | | |
| 236 | 9.24 | 34.07 | 1.96 | 166 | | | | | | | |
| 282 | 8.73 | 34.15 | 1.86 | 152 | | | | | | | |
| 315p | 8.42 | 34.20 | 1.47 | 145 | | | | | | | |

a) Test cast.

b) Sounding varies from 228 to 195 fathoms.

c) Overlapping casts; reconciliation of property curves when necessary.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

ORCA; September 17, 1958; 0000 GCT; 32°55'N, 117°21.5'W; sounding, 275 fm; wind, calm; weather, clear; sea, slight; wire angle, 11°. 9327

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.32 | 33.47 | 5.30 | 489 | 0 | 22.32 | 33.47 | 5.30 | 22.98 | 489 | 0.00 |
| 10 | 21.68 | 33.41 | 5.45 | 476 | 10 | 21.68 | 33.41 | 5.45 | 23.12 | 476 | 0.05 |
| 20 | 17.80 | 33.31 | 6.05 | 387 | 20 | 17.80 | 33.31 | 6.05 | 24.05 | 387 | 0.09 |
| 29 | 15.10 | 33.31 | 5.67 | 328 | 30 | 15.05 | 33.31 | 5.64 | 24.68 | 327 | 0.13 |
| 40 | 13.36 | 33.33 | 5.11 | 291 | 50 | 12.52 | 33.39 | 4.80 | 25.26 | 272 | 0.19 |
| 50 | 12.52 | 33.39 | 4.80 | 272 | 75 | 11.42 | 33.50 | 4.23 | 25.55 | 244 | 0.25 |
| 60 | 11.98 | 33.46 | 4.72 | 257 | 100 | 11.01 | 33.53 | 3.94 | 25.65 | 235 | 0.31 |
| 78 | 11.34 | 33.51 | 4.15 | 242 | 150 | 10.04 | 33.73 | 3.08 | 25.98 | 204 | 0.42 |
| 97 | 11.02 | 33.53 | 3.95 | 235 | 200 | 9.41 | 33.92 | 2.57 | 26.23 | 180 | 0.52 |
| 126 | 10.32 | 33.60 | 3.68 | 218 | 250 | 8.87 | 34.09 | 1.80 | 26.45 | 159 | 0.61 |
| 150 | 10.04 | 33.73 | 3.08 | 204 | 300 | 8.39 | 34.15 | 1.44 | 26.57 | 148 | 0.69 |
| 173 | 9.87 | 33.84 | 2.82 | 193 | 400 | (7.25) | (34.20) | (1.02) | (26.78) | (128) | (0.83) |
| 196 | 9.46 | 33.91 | 2.59 | 181 | | | | | | | |
| 243 | 8.94 | 34.07 | 1.88 | 162 | | | | | | | |
| 294 | 8.47 | 34.14 | 1.51 | 149 | | | | | | | |
| 341 | 7.83 | 34.19 | 1.08 | 136 | | | | | | | |
| 390 | 7.28 | 34.20 | 1.02 | 128 | | | | | | | |

ORCA; September 19, 1958; 1528 GCT; 32°55'N, 117°21.5'W; sounding, 272 fm; wind, 270°, force 1; weather, overcast; sea, slight; wire angle, 09°. 9327

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.90 | 33.44 | 5.84 | 453 | 0 | 20.90 | 33.44 | 5.84 | 23.36 | 453 | 0.00 |
| 10 | - | 33.24 | 6.19 | | 10 | 20.10 | 33.24 | 6.19 | 23.42 | 447 | 0.04 |
| 20 | 15.86 | 33.29 | 6.25 | 346 | 20 | 15.86 | 33.29 | 6.25 | 24.48 | 346 | 0.08 |
| 29 | 13.90 | 33.22 | 6.18 | 310 | 30 | 13.85 | 33.22 | 6.15 | 24.86 | 310 | 0.12 |
| 39 | 13.28 | 33.30 | 5.68 | 292 | 50 | 12.55 | 33.26 | 5.27 | 25.16 | 282 | 0.18 |
| 49 | 12.60 | 33.26 | 5.34 | 283 | 75 | 11.10 | 33.46 | 4.39 | 25.58 | 242 | 0.24 |
| 58 | 12.09 | 33.40 | 4.70 | 263 | 100 | 10.63 | 33.55 | 3.92 | 25.73 | 227 | 0.30 |
| 78 | 10.99 | 33.47 | 4.32 | 239 | 150 | 10.10 | 33.78 | 3.03 | 26.01 | 201 | 0.41 |
| 97 | 10.66 | 33.55 | 3.95 | 227 | 200 | 9.57 | 33.92 | 2.29 | 26.20 | 183 | 0.51 |
| 125 | 10.39 | 33.68 | 3.31 | 213 | 250 | 8.80 | 34.05 | 1.78 | 26.43 | 161 | 0.60 |
| 149 | 10.12 | 33.78 | 3.03 | 201 | 300 | 8.38 | 34.17 | 1.27 | 26.58 | 146 | 0.68 |
| 170 | 10.04 | 33.88 | 2.38 | 193 | 400 | (7.03) | (34.25) | (0.62) | (26.85) | (121) | (0.82) |
| 195 | 9.64 | 33.91 | 2.34 | 184 | | | | | | | |
| 242 | 8.88 | 34.02 | 1.91 | 165 | | | | | | | |
| 294 | 8.47 | 34.16 | 1.36 | 148 | | | | | | | |
| 342 | 7.60 | 34.22 | 0.93 | 131 | | | | | | | |
| 392 | 7.12 | 34.25 | 0.66 | 123 | | | | | | | |

ORCA; September 13, 1958; 1505 GCT; 32°50'N, 117°31.5'W; sounding, 400+ fm; wind, 150°, force 2; weather, partly cloudy; sea, moderate; wire angle, 04°. 9330

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.72 | 33.53 | - | 468 | 0 | 21.72 | 33.53 | | 23.20 | 468 | 0.00 |
| 10 | 21.32 | 33.53 | 5.60 | 457 | 10 | 21.32 | 33.53 | 5.60 | 23.32 | 457 | 0.05 |
| 30 | 14.98 | 33.48a) | 6.35 | | 20 | 18.28 | 33.44 | 5.97 | 24.03 | 389 | 0.09 |
| 40 | 14.24 | 33.34 | 6.05 | 308 | 30 | 14.98 | 33.36 | 6.35 | 24.74 | 322 | 0.12 |
| 51 | 13.38 | 33.39 | 5.54 | 288 | 50 | 13.46 | 33.39 | 5.58 | 25.08 | 290 | 0.18 |
| 61 | 12.40 | 33.42 | 4.93 | 268 | 75 | 11.42 | 33.49 | 4.34 | 25.54 | 245 | 0.25 |
| 71 | 11.60 | 33.48 | 4.57 | 249 | 100 | 10.83 | 33.63 | 3.73 | 25.76 | 225 | 0.31 |
| 85 | 11.10 | 33.50 | 4.00 | 238 | 150 | 10.40 | 33.78 | 2.95 | 25.96 | 206 | 0.42 |
| 100 | 10.83 | 33.63 | 3.73 | 225 | 200 | 10.10 | 33.98 | 2.24 | 26.16 | 187 | 0.52 |
| 114 | 10.66 | 33.74a) | 3.55 | | 250 | 9.00 | 34.02 | 2.34 | 26.37 | 166 | 0.61 |
| 138 | 10.45 | 33.75 | 3.14 | 209 | 300 | 8.19 | 34.06 | 2.17 | 26.53 | 152 | 0.69 |
| 167 | 10.27 | 33.86 | 2.61 | 198 | 400 | 7.48 | 34.24 | 1.06 | 26.78 | 128 | 0.84 |
| 200 | 10.10 | 33.98 | 2.24 | 187 | 500 | 6.73 | 34.29 | 0.53 | 26.92 | 114 | 0.96 |
| 247 | 9.07 | 34.02 | 2.36 | 167 | | | | | | | |
| 324 | 7.88 | 34.08 | 1.99 | 146 | | | | | | | |
| 420 | 7.40 | 34.27 | 0.85 | 125 | | | | | | | |
| 548 | 6.21 | 34.30 | 0.37 | 108 | | | | | | | |

a) Cracked bottle; value does not fall on property curve.

SIO

CCOFI
5809

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| 9330 | ORCA; September 16, 1958; 2120 GCT; 32°50.5'N, 117°31.5'W; sounding, 400 fm; wind, 300°, force 2; weather, clear; sea, slight; wire angle, 26°. | | | | | | | | | | |
| 0 | 22.55 | 33.48 | 5.24 | 493 | 0 | 22.55 | 33.48 | 5.24 | 22.94 | 493 | 0.00 |
| 9 | 22.05 | 33.49 | 5.42 | 480 | 10 | 21.98 | 33.49 | 5.44 | 23.09 | 478 | 0.05 |
| 27 | 17.92 | 33.31 | 6.09 | 390 | 20 | 19.80 | 33.39 | 5.79 | 23.61 | 429 | 0.09 |
| 36 | 16.44 | 33.30 | 6.24 | 358 | 30 | 17.37 | 33.31 | 6.15 | 24.15 | 377 | 0.13 |
| 44 | 14.20 | 33.22 | 6.09 | 316 | 50 | 13.40 | 33.30 | 5.63 | 25.02 | 295 | 0.20 |
| 53 | 12.95 | 33.35 | 5.34 | 283 | 75 | 11.32 | 33.45 | 4.48 | 25.53 | 246 | 0.27 |
| 62 | 11.99 | 33.38 | 4.71 | 263 | 100 | 10.80 | 33.57 | 3.70 | 25.72 | 228 | 0.33 |
| 75 | 11.32 | 33.45 | 4.48 | 246 | 150 | 10.23 | 33.83 | 2.58 | 26.02 | 200 | 0.44 |
| 88 | 11.00 | 33.53 | 3.73 | 235 | 200 | 9.56 | 33.96 | 2.47 | 26.24 | 179 | 0.53 |
| 101 | 10.79 | 33.58 | 3.69 | 227 | 250 | 8.78 | 34.04 | 2.23 | 26.42 | 162 | 0.62 |
| 120 | 10.50 | 33.71 | 3.18 | 213 | 300 | 8.07 | 34.09 | 1.76 | 26.58 | 147 | 0.70 |
| 146 | 10.30 | 33.82 | 2.61 | 201 | 400 | 7.50 | 34.24 | 0.90 | 26.76 | 129 | 0.84 |
| 175 | 9.92 | 33.90 | 2.51 | 189 | 500 | (6.58) | (34.28) | (0.48) | (26.94) | (113) | (0.97) |
| 218 | 9.30 | 34.01 | 2.43 | 171 | | | | | | | |
| 287 | 8.19 | 34.07 | 1.91 | 150 | | | | | | | |
| 376 | 7.72 | 34.22 | 1.03 | 133 | | | | | | | |
| 497 | 6.60 | 34.28 | 0.50 | 113 | | | | | | | |
| 9330 | ORCA; September 19, 1958; 1300 GCT; 32°50'N, 117°31.5'W; sounding, 400 fm; wind, 320°, force 1; weather, overcast; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 0 | 21.71 | 33.47 | 5.45 | 472 | 0 | 21.71 | 33.47 | 5.45 | 23.16 | 472 | 0.00 |
| 11 | 21.42 | 33.47 | 5.48 | 465 | 10 | 21.60 | 33.47 | 5.46 | 23.19 | 469 | 0.05 |
| 30 | 13.79 | 33.17 | 6.13 | 312 | 20 | 18.90 | 33.36 | 5.70 | 23.82 | 409 | 0.09 |
| 40 | 12.38 | 33.28 | 5.43 | 277 | 30 | 13.79 | 33.17 | 6.13 | 24.84 | 312 | 0.13 |
| 49 | 12.10 | 33.33 | 5.18 | 269 | 50 | 12.08 | 33.34 | 5.14 | 25.30 | 268 | 0.18 |
| 59 | 11.82 | 33.46 | 4.62 | 254 | 75 | 11.42 | 33.49 | 4.20 | 25.54 | 246 | 0.25 |
| 69 | 11.65 | 33.48 | 4.28 | 250 | 100 | 10.68 | 33.56 | 3.55 | 25.73 | 227 | 0.31 |
| 83 | 11.06 | 33.51 | 4.12 | 237 | 150 | 10.35 | 33.79 | 2.68 | 25.97 | 204 | 0.42 |
| 98 | 10.70 | 33.56 | 3.70 | 227 | 200 | 9.89 | 34.03 | 2.15 | 26.23 | 179 | 0.52 |
| 113 | 10.61 | 33.65 | 3.25 | 219 | 250 | 9.37 | 34.14 | 1.73 | 26.41 | 163 | 0.60 |
| 135 | 10.42 | 33.73 | 2.96 | 210 | 300 | 8.72 | 34.16 | 1.57 | 26.52 | 152 | 0.68 |
| 163 | 10.25 | 33.84 | 2.55 | 199 | 400 | 7.40 | 34.19 | 1.11 | 26.74 | 131 | 0.83 |
| 196 | 9.95 | 34.00 | 2.19 | 181 | 500 | 6.58 | 34.25 | 0.60 | 26.91 | 115 | 0.96 |
| 243 | 9.44 | 34.14 | 1.78 | 164 | | | | | | | |
| 318 | 8.46 | 34.16 | 1.51 | 148 | | | | | | | |
| 413 | 7.21 | 34.20 | 1.00 | 128 | | | | | | | |
| 541 | 6.32 | 34.28 | 0.47 | 110 | | | | | | | |
| 9340 | ORCA; September 13, 1958; 0729 GCT; 32°31'N, 118°13'W; sounding, 900+ fm; wind, 270°, force 5; weather, clear; sea, very rough; wire angle, 18°. | | | | | | | | | | |
| 0 | 19.72 | 33.31a) | 5.59 | 433 | 0 | 19.72 | 33.31 | 5.59 | 23.57 | 433 | 0.00 |
| 10 | 19.71 | - | 5.57 | | 10 | 19.71 | 33.31 | 5.57 | 23.58 | 432 | 0.04 |
| 28 | 16.56 | - | 6.10 | | 20 | 19.10 | 33.30 | 5.67 | 23.72 | 419 | 0.08 |
| 43 | 15.30 | 33.27 | 6.22 | 335 | 30 | 16.40 | 33.28 | 6.14 | 24.35 | 358 | 0.12 |
| 57 | 14.08 | 33.20 | 6.14 | 316 | 50 | 14.73 | 33.23 | 6.22 | 24.70 | 326 | 0.19 |
| 65 | 13.45 | 33.17 | 6.03 | 305 | 75 | 12.55 | 33.28 | 5.64 | 25.17 | 280 | 0.27 |
| 75 | 12.55 | 33.28 | 5.64 | 280 | 100 | 10.41 | 33.38 | 4.80 | 25.64 | 236 | 0.34 |
| 93 | 10.72 | 33.33 | 5.09 | 244 | 150 | 9.15 | 33.75 | 3.12 | 26.13 | 189 | 0.44 |
| 110 | 10.04 | 33.49 | 4.36 | 222 | 200 | 8.60 | 33.97 | 2.46 | 26.40 | 164 | 0.53 |
| 123 | 9.74 | 33.62 | 3.92 | 207 | 250 | 8.04 | 34.05 | 1.94 | 26.55 | 150 | 0.61 |
| 144 | 9.34 | 33.70 | 3.28 | 195 | 300 | 7.46 | 34.12 | 1.48 | 26.68 | 137 | 0.68 |
| 178 | 8.79 | 33.91 | 2.72 | 171 | 400 | 6.80 | 34.22 | 0.85 | 26.86 | 120 | 0.82 |
| 212 | 8.46 | 34.00 | 2.26 | 160 | 500 | 6.22 | 34.27 | 0.48 | 26.96 | 110 | 0.94 |
| 265 | 7.82 | 34.07 | 1.72 | 145 | 600 | (5.62) | (34.29) | (0.34) | (27.07) | (100) | (1.05) |
| 345 | 7.11 | 34.18 | 1.16 | 128 | | | | | | | |
| 450 | 6.50 | 34.25 | 0.57 | 114 | | | | | | | |
| 592 | 5.70 | 34.29 | 0.34 | 102 | | | | | | | |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}$ $10^{-5}$ cm/g | ΔD dyn. m |

ORCA; September 16, 1958; 1325 GCT; 32°30'N, 118°13.5'W; sounding, 900 fm; wind, 290°, force 1; weather, clear; sea, slight; wire angle, 06°. 9340

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.51 | 33.53 | 5.36 | 437 | 0 | 20.51 | 33.53 | 5.36 | 23.52 | 437 | 0.00 |
| 10 | 20.50 | 33.92r | 5.20 | | 10 | 20.50 | 33.53 | 5.20 | 23.52 | 437 | 0.04 |
| 30 | 20.20 | 33.52 | 5.48 | 430 | 20 | 20.37 | 33.53 | 5.32 | 23.56 | 434 | 0.09 |
| 40 | 15.56 | 33.15 | 6.19 | 349 | 30 | 20.20 | 33.52 | 5.48 | 23.60 | 430 | 0.13 |
| 51 | 14.64 | 33.19 | 6.20 | 328 | 50 | 14.78 | 33.19 | 6.20 | 24.64 | 331 | 0.21 |
| 60 | 13.96 | 33.19 | 6.16 | 314 | 75 | 12.66 | 33.20 | 5.60 | 25.08 | 289 | 0.28 |
| 70 | 13.04 | 33.19 | 5.76 | 296 | 100 | 10.64 | 33.33 | 4.85 | 25.56 | 244 | 0.35 |
| 84 | 11.98 | 33.24 | 5.32 | 273 | 150 | 9.12 | 33.81 | 3.24 | 26.19 | 184 | 0.46 |
| 98 | 10.70 | 33.31 | 4.88 | 246 | 200 | 8.81 | 33.99 | 2.44 | 26.38 | 166 | 0.55 |
| 112 | 9.87 | 33.48 | 4.44 | 220 | 250 | 7.97 | 34.05 | 1.87 | 26.56 | 149 | 0.63 |
| 136 | 9.24 | 33.80 | 3.53 | 186 | 300 | 7.45 | 34.14 | 1.32 | 26.69 | 136 | 0.70 |
| 164 | 9.06 | 33.83 | 3.13 | 181 | 400 | 6.84 | 34.21 | 0.78 | 26.84 | 122 | 0.84 |
| 196 | 8.87 | 34.16u | 2.48 | | 500 | 6.21 | 34.26 | 0.50 | 26.96 | 110 | 0.96 |
| 243 | 8.03 | 34.04 | 1.97 | 150 | | | | | | | |
| 319 | 7.30 | 34.15 | 1.14 | 132 | | | | | | | |
| 415 | 6.77 | 34.22 | 0.71 | 120 | | | | | | | |
| 543 | 5.93 | 34.28 | 0.40 | 105 | | | | | | | |

ORCA; September 19, 1958; 0608 GCT; 32°30.5'N, 118°11'W; sounding, 1000 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 03°. 9340

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.78 | 33.45 | 5.36 | 450 | 0 | 20.78 | 33.45 | 5.36 | 23.40 | 450 | 0.00 |
| 10 | 20.75 | 33.48 | 5.40 | 447 | 10 | 20.75 | 33.48 | 5.40 | 23.42 | 447 | 0.04 |
| 30 | 20.20 | 33.51 | 5.53 | 430 | 20 | 20.66 | 33.49 | 5.42 | 23.45 | 444 | 0.09 |
| 40 | 16.10 | 33.27 | 6.16 | 352 | 30 | 20.20 | 33.51 | 5.53 | 23.60 | 430 | 0.13 |
| 50 | 15.47 | 33.28 | 6.18 | 339 | 50 | 15.47 | 33.28 | 6.18 | 24.56 | 339 | 0.21 |
| 60 | 14.18 | 33.17 | 6.18 | 320 | 75 | 13.80 | 33.15 | 6.06 | 24.82 | 314 | 0.29 |
| 69 | 14.10 | 33.16 | 6.14 | 319 | 100 | 11.62 | 33.22 | 5.27 | 25.30 | 268 | 0.37 |
| 84 | 12.88 | 33.12 | 5.92 | 298 | 150 | 9.52 | 33.62 | 3.70 | 25.98 | 204 | 0.48 |
| 98 | 11.74 | 33.22 | 5.32 | 270 | 200 | 8.59 | 33.94 | 2.44 | 26.37 | 166 | 0.58 |
| 112 | 10.48 | 33.33 | 4.89 | 241 | 250 | 8.05 | 34.03 | 2.18 | 26.52 | 152 | 0.66 |
| 135 | 9.78 | 33.47 | 4.28 | 219 | 300 | 7.64 | 34.10 | 1.66 | 26.64 | 141 | 0.74 |
| 163 | 9.26 | 33.80 | 3.05 | 186 | 400 | 6.79 | 34.21 | 0.85 | 26.84 | 122 | 0.87 |
| 196 | 8.62 | 33.93 | 2.47 | 168 | 500 | 6.25 | 34.25 | 0.62 | 26.95 | 112 | 0.99 |
| 244 | 8.10 | 34.02 | 2.21 | 154 | | | | | | | |
| 321 | 7.46 | 33.96u | 1.41 | | | | | | | | |
| 417 | 6.66 | 34.22 | 0.78 | 119 | | | | | | | |
| 545 | 6.06 | 34.26 | 0.56 | 108 | | | | | | | |

ORCA; September 12, 1958; 2210, 2303 GCT; 32°08'N, 118°55'W; sounding, 700 fm; wind, 300°, force 6; weather, partly cloudy; sea, high; wire angle, 30°, 35°. 9350

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.92 | 33.46 | 5.43 | 427 | 0 | 19.92 | 33.46 | 5.43 | 23.63 | 427 | 0.00 |
| 8 | 19.87 | 33.53 | 5.49 | 421 | 10 | 19.86 | 33.53 | 5.50 | 23.69 | 421 | 0.04 |
| 31 | 16.72 | 33.37 | 6.30 | 359 | 20 | 19.84 | 33.53 | 5.51 | 23.70 | 420 | 0.08 |
| | | | | | 30 | 17.23 | 33.39 | 6.18 | 24.25 | 368 | 0.12 |
| 40 | 15.12 | 33.33 | 6.59 | 327 | 50 | 13.48 | 33.37 | 5.93 | 25.05 | 292 | 0.19 |
| 52 | 13.42 | 33.37 | 5.82 | 290 | 75 | 10.96 | 33.43 | 4.33 | 25.58 | 241 | 0.26 |
| 61 | 12.18 | 33.40 | 4.87 | 265 | 100 | 9.55 | 33.55 | 4.06 | 25.92 | 209 | 0.31 |
| 70 | 11.26 | 33.40 | 4.51 | 249 | 150 | 9.20 | 33.89 | 2.64 | 26.24 | 179 | 0.41 |
| 86 | 10.36 | 33.53 | 3.92 | 224 | 200 | 8.52 | 34.02 | 2.24 | 26.45 | 159 | 0.50 |
| 103 | 9.46 | 33.55 | 4.08 | 208 | 250 | 7.80 | 34.14 | 2.00 | 26.65 | 140 | 0.57 |
| 115 | 9.22 | 33.69 | 3.52 | 194 | 300 | 7.30 | 34.14 | 1.48 | 26.72 | 133 | 0.64 |
| 137 | 9.04 | 33.78 | 2.95 | 184 | 400 | 6.59 | 34.22 | 0.76 | 26.88 | 118 | 0.78 |
| 170 | 8.70 | - | 2.53 | | 500 | 5.99 | 34.30 | 0.53 | 27.02 | 104 | 0.89 |
| 204 | 8.42 | 34.04 | 2.17 | 156 | | | | | | | |
| 254 | 7.74 | 34.14 | 1.96 | 139 | | | | | | | |
| 332 | 7.02 | 34.14 | 1.18 | 130 | | | | | | | |
| 435 | 6.36 | 34.27 | 0.65 | 111 | | | | | | | |
| 574 | 5.66 | 34.32 | 0.43 | 99 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

93.50 ORCA; September 16, 1958; 0558 GCT; 32°10.5'N, 118°53'W; sounding, 750 fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.27 | 33.33 | 5.42 | 445 | 0 | 20.27 | 33.33 | 5.42 | 23.44 | 445 | 0.00 |
| 10 | 19.94 | 33.25 | 5.39 | 442 | 10 | 19.94 | 33.25 | 5.39 | 23.48 | 442 | 0.04 |
| 30 | 19.83 | 33.30 | 5.39 | 436 | 20 | 19.88 | 33.27 | 5.39 | 23.50 | 440 | 0.09 |
| 40 | 16.61 | 33.30 | 6.19 | 361 | 30 | 19.83 | 33.30 | 5.39 | 23.54 | 436 | 0.13 |
| 49 | 14.42 | 33.30 | 6.30 | 315 | 50 | 14.30 | 33.30 | 6.27 | 24.83 | 313 | 0.21 |
| 60 | 12.90 | 33.33 | 5.44 | 283 | 75 | 11.04 | 33.40 | 4.46 | 25.54 | 245 | 0.28 |
| 67 | 11.56 | 33.38 | 4.60 | 255 | 100 | 9.83 | 33.55 | 3.92 | 25.88 | 214 | 0.34 |
| 84 | 10.77 | 33.45 | 4.25 | 236 | 150 | 8.90 | 33.90 | 2.46 | 26.29 | 174 | 0.43 |
| 98 | 9.85 | 33.53 | 3.93 | 216 | 200 | 8.34 | 33.97 | 2.27 | 26.44 | 160 | 0.52 |
| 112 | 9.44 | 33.71 | 3.13 | 196 | 250 | 7.88 | 34.05 | 1.84 | 26.57 | 147 | 0.60 |
| 136 | 9.04 | 33.85 | 2.60 | 180 | 300 | 7.38 | 34.12 | 1.36 | 26.69 | 136 | 0.67 |
| 164 | 8.76 | 33.94 | 2.39 | 168 | 400 | 6.79 | 34.20 | 0.81 | 26.84 | 122 | 0.80 |
| 197 | 8.34 | 33.97 | 2.27 | 160 | 500 | 6.16 | 34.25 | 0.46 | 26.96 | 110 | 0.92 |
| 245 | 7.90 | 34.05 | 1.85 | 148 | | | | | | | |
| 322 | 7.21 | 34.14 | 1.21 | 132 | | | | | | | |
| 418 | 6.64 | 34.22 | 0.67 | 119 | | | | | | | |
| 547 | 5.81 | 34.26 | 0.36 | 105 | | | | | | | |

93.50 ORCA; September 18, 1958; 2255 GCT; 32°10.5'N, 118°54.5'W; sounding, 715 fm; wind, 300°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.48 | 33.48 | 5.38 | 440 | 0 | 20.48 | 33.48 | 5.38 | 23.49 | 440 | 0.00 |
| 10 | 20.45 | 33.41 | 5.22 | 444 | 10 | 20.45 | 33.41 | 5.22 | 23.45 | 444 | 0.04 |
| 29 | 19.58 | 33.44 | 5.43 | 420 | 20 | 20.43 | 33.41 | 5.23 | 23.45 | 444 | 0.09 |
| 43 | 15.08 | 33.24 | 5.93 | 333 | 30 | 19.57 | 33.44 | 5.44 | 23.71 | 419 | 0.13 |
| 53 | 14.64 | 33.23 | 5.93 | 325 | 50 | 14.82 | 33.23 | 5.93 | 24.68 | 327 | 0.21 |
| 63 | 13.68 | 33.20 | 6.07 | 307 | 75 | 12.96 | 33.30 | 5.48 | 25.10 | 287 | 0.28 |
| 72 | 13.20 | 33.28 | 5.67 | 292 | 100 | 11.02 | 33.44 | 4.38 | 25.58 | 242 | 0.35 |
| 92 | 11.82 | 33.38 | 4.74 | 260 | 150 | 9.08 | 33.78 | 3.04 | 26.17 | 185 | 0.46 |
| 106 | 10.40 | 33.48 | 4.19 | 228 | 200 | 8.60 | 34.01 | 2.02 | 26.43 | 161 | 0.54 |
| 119 | 9.54 | 33.55 | 4.08 | 209 | 250 | 7.89 | 34.06 | 1.78 | 26.58 | 147 | 0.62 |
| 142 | 9.19 | 33.73 | 3.29 | 190 | 300 | 7.26 | 34.09 | 1.55 | 26.68 | 137 | 0.70 |
| 171 | 8.87 | 33.91 | 2.57 | 173 | 400 | 6.70 | 34.15 | 1.00 | 26.82 | 124 | 0.83 |
| 208 | 8.46 | 34.03 | 1.93 | 158 | 500 | 6.20 | 34.26 | 0.53 | 26.97 | 110 | 0.96 |
| 260 | 7.78 | 34.07 | 1.76 | 144 | 600 | (5.61) | (34.32) | | (27.08) | (99) | (1.07) |
| 339 | 6.87 | 34.10 | 1.31 | 130 | | | | | | | |
| 439 | 6.52 | 34.22 | 0.70 | 117 | | | | | | | |
| 581 | 5.76 | 34.31 | 0.37 | 101 | | | | | | | |

93.60 ORCA; September 12, 1958; 1305, 1400 GCT; 31°46'N, 119°35'W; sounding, 1400 fm; wind, 300°, force 5; weather, clear; sea, very rough; wire angle, 33°, 31°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.62 | 33.44 | 5.46 | 421 | 0 | 19.62 | 33.44 | 5.46 | 23.70 | 421 | 0.00 |
| 8 | 19.60 | 33.47 | 5.62 | 418 | 10 | 19.60 | 33.47 | 5.63 | 23.72 | 418 | 0.04 |
| 25 | 18.76 | 33.43 | 5.82 | 401 | 20 | 19.60 | 33.47 | 5.63 | 23.72 | 418 | 0.08 |
| 38 | 14.88 | 33.28 | 6.31 | 326 | 30 | 16.28 | 33.33 | 6.14 | 24.42 | 352 | 0.12 |
| 51 | 14.11 | 33.30 | 6.06 | 309 | 50 | 14.20 | 33.30 | 6.09 | 24.85 | 311 | 0.19 |
| 58 | 13.38 | 33.35 | 5.44 | 291 | 75 | 11.93 | 33.33 | 5.02 | 25.32 | 266 | 0.26 |
| 67 | 12.62 | 33.36 | 5.16 | 276 | 100 | 10.32 | 33.54 | 4.10 | 25.79 | 222 | 0.32 |
| 83 | 11.24 | 33.30 | 4.86 | 256 | 150 | 8.93 | 33.88 | 2.76 | 26.28 | 175 | 0.42 |
| 98 | 10.38 | 33.53 | 4.11 | 224 | 200 | 8.42 | 34.00 | 2.28 | 26.44 | 160 | 0.51 |
| 110 | 9.93 | 33.58 | 4.07 | 213 | 250 | 7.98 | 34.10 | 1.77 | 26.60 | 145 | 0.59 |
| 126 | 9.43 | 33.71 | 3.47 | 196 | 300 | 7.59 | 34.15 | 1.36 | 26.68 | 137 | 0.66 |
| 155 | 8.86 | 33.89 | 2.69 | 174 | 400 | 6.80 | 34.22 | 0.95 | 26.85 | 121 | 0.79 |
| 185 | 8.62 | 33.95 | 2.48 | 166 | 500 | 6.05 | 34.26 | 0.57 | 26.98 | 108 | 0.91 |
| 230 | 8.12 | 34.08 | 1.95 | 149 | | | | | | | |
| 303 | 7.59 | 34.15 | 1.36 | 136 | | | | | | | |
| 429 | 6.59 | 34.23 | 0.83 | 117 | | | | | | | |
| 562 | 5.67 | 34.29 | 0.40 | 101 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T}{}^{-5}{}_{3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T}{}^{-5}{}_{3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

ORCA; September 15, 1958; 2250 GCT; 31°49.5'N, 119°32'W; sounding, 1400 fm; wind, 290°, force 3; weather, clear; sea, rough; wire angle, 11°. 9360

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.98 | 33.48 | 5.64 | 427 | 0 | 19.98 | 33.48 | 5.64 | 23.63 | 427 | 0.00 |
| 10 | 19.30 | 33.48 | 5.53 | 410 | 10 | 19.30 | 33.48 | 5.53 | 23.81 | 410 | 0.04 |
| 30 | 19.14 | 33.46 | 5.46 | 408 | 20 | 19.14 | 33.46 | 5.46 | 23.83 | 408 | 0.08 |
| 39 | 16.64 | 33.33 | 5.89 | 360 | 30 | 19.14 | 33.46 | 5.46 | 23.83 | 408 | 0.12 |
| 49 | 14.70 | 33.31 | 5.78 | 320 | 50 | 14.67 | 33.31 | 5.77 | 24.77 | 319 | 0.20 |
| 59 | 13.42 | 33.28 | 5.70 | 297 | 75 | 11.70 | 33.32 | 4.78 | 25.36 | 262 | 0.27 |
| 68 | 12.70 | 33.31 | 5.20 | 281 | 100 | 10.83 | 33.43 | 4.52 | 25.61 | 239 | 0.33 |
| 82 | 11.66 | 33.37 | 4.72 | 258 | 150 | 9.14 | 33.79 | 3.08 | 26.17 | 185 | 0.44 |
| 98 | 10.88 | 33.42 | 4.55 | 241 | 200 | 8.58 | 34.02 | 2.39 | 26.44 | 160 | 0.53 |
| 112 | 10.09 | 33.55 | 4.02 | 218 | 250 | 7.88 | 34.06 | 2.10 | 26.58 | 147 | 0.60 |
| 134 | 9.44 | 33.69 | 3.42 | 198 | 300 | 7.55 | 34.14 | 1.48 | 26.68 | 136 | 0.68 |
| 162 | 8.98 | 33.86 | 2.89 | 178 | 400 | 6.76 | 34.22 | 0.78 | 26.86 | 120 | 0.81 |
| 193 | 8.66 | 34.01 | 2.43 | 162 | 500 | 6.08 | 34.29 | 0.41 | 27.00 | 106 | 0.93 |
| 239 | 7.96 | 34.05 | 2.17 | 148 | | | | | | | |
| 313 | 7.42 | 34.16 | 1.34 | 134 | | | | | | | |
| 407 | 6.72 | 34.22 | 0.74 | 119 | | | | | | | |
| 532 | 5.91 | 34.31 | 0.36 | 103 | | | | | | | |

ORCA; September 18, 1958; 1510 GCT; 31°52.5'N, 119°35'W; sounding, 1500 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 25°. 9360

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.44 | 33.48 | 5.48 | 414 | 0 | 19.44 | 33.48 | 5.48 | 23.76 | 414 | 0.00 |
| 9 | 19.44 | 33.44 | 5.41 | 416 | 10 | 19.41 | 33.44 | 5.42 | 23.74 | 416 | 0.04 |
| 27 | 19.13 | 33.46 | 5.52 | 408 | 20 | 19.18 | 33.46 | 5.50 | 23.81 | 410 | 0.08 |
| 41 | 15.34 | 33.24 | 6.18 | 338 | 30 | 19.12 | 33.46 | 5.53 | 23.84 | 407 | 0.12 |
| 51 | 13.32 | 33.30 | 5.49 | 294 | 50 | 13.41 | 33.29 | 5.52 | 25.01 | 296 | 0.19 |
| 59 | 12.50 | 33.35 | 4.94 | 274 | 75 | 11.27 | 33.38 | 4.57 | 25.49 | 250 | 0.26 |
| 69 | 11.80 | 33.35 | 4.73 | 262 | 100 | 9.95 | 33.60 | 3.73 | 25.89 | 212 | 0.32 |
| 86 | 10.38 | 33.50 | 4.16 | 226 | 150 | 8.98 | 33.80 | 3.00 | 26.21 | 182 | 0.42 |
| 99 | 9.97 | 33.60 | 3.74 | 212 | 200 | 8.32 | 33.97 | 2.42 | 26.44 | 160 | 0.51 |
| 112 | 9.60 | 33.68 | 3.48 | 201 | 250 | 7.82 | 34.06 | 1.83 | 26.58 | 146 | 0.58 |
| 134 | 9.17 | 33.75 | 3.19 | 189 | 300 | 7.38 | 34.12 | 1.40 | 26.70 | 136 | 0.66 |
| 160 | 8.83 | 33.84 | 2.90 | 177 | 400 | 6.76 | 34.21 | 0.80 | 26.85 | 121 | 0.79 |
| 195 | 8.36 | 33.96 | 2.47 | 161 | 500 | 6.32 | 34.26 | 0.51 | 26.96 | 101 | 0.91 |
| 244 | 7.86 | 34.05 | 1.85 | 147 | | | | | | | |
| 319 | 7.24 | 34.14 | 1.28 | 133 | | | | | | | |
| 415 | 6.63 | 34.22 | 0.70 | 118 | | | | | | | |
| 549 | 6.08 | 34.29 | 0.42 | 106 | | | | | | | |

ORCA; September 12, 1958; 0340, 0435 GCT; 31°31'N, 120°14'W; sounding, 2000+ fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 35°, 38°. 9370

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.23 | 33.17 | 5.68 | 432 | 0 | 19.23 | 33.17 | 5.68 | 23.58 | 432 | 0.00 |
| 8 | 19.20 | 33.21 | 5.51 | 427 | 10 | 19.18 | 33.21 | 5.51 | 23.63 | 427 | 0.04 |
| 28 | 19.06 | 33.18 | 5.52 | 426 | 20 | 19.08 | 33.19 | 5.52 | 23.63 | 427 | 0.08 |
| 37 | 17.42 | 33.40 | 6.07 | 372 | 30 | 19.02 | 33.18 | 5.53 | 23.64 | 426 | 0.13 |
| | | | | | 50 | 15.74 | 33.39 | 6.09 | 24.60 | 335 | 0.20 |
| 48 | 15.83 | 33.40 | 6.09 | 337 | 75 | 14.25 | 33.39 | 5.58 | 24.91 | 305 | 0.28 |
| 56 | 15.44 | 33.36 | 6.07 | 332 | 100 | 11.43 | 33.40 | 4.94 | 25.47 | 252 | 0.36 |
| 64 | 14.90 | - | 5.98 | | 150 | 9.26 | 33.82 | 3.53 | 26.18 | 185 | 0.47 |
| 79 | 13.94 | 33.40 | 5.39 | 298 | 200 | 8.55 | 33.95 | 2.61 | 26.39 | 165 | 0.56 |
| 95 | 11.75 | 33.37 | 5.14 | 259 | 250 | 8.02 | 34.04 | 1.92 | 26.55 | 150 | 0.64 |
| 106 | 11.10 | 33.44 | 4.74 | 243 | 300 | 7.45 | 34.13 | 1.52 | 26.69 | 136 | 0.71 |
| 127 | 9.96 | 33.53 | 4.14 | 217 | 400 | 6.78 | 34.23 | 0.86 | 26.87 | 119 | 0.84 |
| 158 | 9.08 | 33.89 | 3.32 | 177 | 500 | 6.07 | 34.29 | 0.51 | 27.01 | 106 | 0.96 |
| 190 | 8.65 | 33.93 | 2.79 | 168 | | | | | | | |
| 237 | 8.14 | 34.02 | 2.02 | 153 | | | | | | | |
| 310 | 7.39 | 34.14 | 1.46 | 134 | | | | | | | |
| 409 | 6.72 | 34.24 | 0.85 | 118 | | | | | | | |
| 546 | 5.72 | 34.31 | 0.38 | 100 | | | | | | | |

S10

CCOFI 5809

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

93.70 ORCA; September 15, 1958; 1639 GCT; 31°30'N, 120°06'W; sounding, 2200 fm; wind, 300°, force 2; weather, clear; sea, rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.05 | 33.33 | 5.61 | 415 | 0 | 19.05 | 33.33 | 5.61 | 23.76 | 415 | 0.00 |
| 10 | 18.98 | 33.39 | 5.69 | 410 | 10 | 18.98 | 33.39 | 5.69 | 23.82 | 410 | 0.04 |
| 30 | 18.61 | 33.23 | 5.72 | 412 | 20 | 18.86 | 33.33 | 5.70 | 23.82 | 410 | 0.08 |
| 41 | 16.12 | 33.08 | 6.23 | 366 | 30 | 18.61 | 33.23 | 5.72 | 23.79 | 412 | 0.12 |
| 50 | 15.35 | 33.30 | 6.21 | 334 | 50 | 15.35 | 33.30 | 6.21 | 24.61 | 334 | 0.20 |
| 60 | 14.78 | 33.28 | 6.25 | 324 | 75 | 14.17 | 33.29 | 6.00 | 24.86 | 310 | 0.28 |
| 70 | 14.35 | 33.27 | 6.11 | 316 | 100 | 12.00 | 33.37 | 5.12 | 25.35 | 264 | 0.35 |
| 84 | 13.76 | 33.34 | 5.78 | 299 | 150 | 9.45 | 33.59 | 3.78 | 25.96 | 205 | 0.47 |
| 98 | 12.16 | 33.37 | 5.19 | 267 | 200 | 8.66 | 33.84 | 2.76 | 26.29 | 174 | 0.57 |
| 113 | 11.08 | 33.40 | 4.73 | 246 | 250 | 8.08 | 34.03 | 1.95 | 26.52 | 152 | 0.65 |
| 136 | 9.88 | 33.50 | 4.20 | 218 | 300 | 7.61 | 34.11 | 1.41 | 26.66 | 140 | 0.73 |
| 164 | 9.18 | 33.68 | 3.51 | 194 | 400 | 6.73 | 34.21 | 0.70 | 26.86 | 120 | 0.86 |
| 197 | 8.70 | 33.83 | 2.91 | 176 | 500 | 6.18 | 34.26 | 0.50 | 26.97 | 110 | 0.98 |
| 244 | 8.18 | 34.01 | 2.09 | 155 | | | | | | | |
| 320 | 7.41 | 34.14 | 1.28 | 135 | | | | | | | |
| 417 | 6.62 | 34.22 | 0.64 | 118 | | | | | | | |
| 544 | 5.96 | 34.28 | 0.43 | 106 | | | | | | | |

113.30 BLACK DOUGLAS; September 5, 1958; 0737 GCT; 29°22.5'N, 115°17.5'W; sounding, 30 fm; wind, 290°, force 4; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.72 | 33.60 | 5.52 | 388 | 0 | 18.72 | 33.60 | 5.52 | 24.04 | 388 | 0.00 |
| 9 | 18.69 | 33.59 | 5.54 | 388 | 10 | 18.68 | 33.59 | 5.54 | 24.04 | 388 | 0.04 |
| 19 | 15.54 | 33.56 | 5.20 | 319 | 20 | 15.48 | 33.56 | 5.17 | 24.78 | 318 | 0.07 |
| 28 | 13.58 | 33.58 | 4.08 | 278 | | | | | | | |

113.35 BLACK DOUGLAS; September 5, 1958; 1100 GCT; 29°12'N, 115°39'W; sounding, 620 fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.20 | 33.55 | 6.03 | 403 | 0 | 19.20 | 33.55 | 6.03 | 23.88 | 403 | 0.00 |
| 9 | 19.23 | 33.54 | 6.00 | 404 | 10 | 19.22 | 33.54 | 6.00 | 23.87 | 404 | 0.04 |
| 28 | 14.97 | 33.46 | 5.20 | 314 | 20 | 16.40 | 33.49 | 5.46 | 24.51 | 343 | 0.08 |
| 37 | 14.02 | 33.50 | 5.03 | 293 | 30 | 14.86 | 33.46 | 5.18 | 24.84 | 312 | 0.11 |
| 47 | 12.92 | 33.46 | 5.00 | 274 | 50 | 12.76 | 33.51 | 4.84 | 25.31 | 268 | 0.17 |
| 56 | 12.57 | 33.62 | 4.34 | 256 | 75 | 12.15 | 33.86 | 2.89 | 25.69 | 231 | 0.23 |
| 65 | 12.46 | 33.71 | 3.57 | 247 | 100 | 11.76 | 33.87 | 1.62 | 25.78 | 223 | 0.29 |
| 79 | 12.02a) | 33.87 | 2.72 | 229 | 150 | 11.38 | 33.94 | 1.60 | 25.91 | 210 | 0.40 |
| 92 | 11.90 | 33.87 | 1.79 | 225 | 200 | 10.44 | 34.12 | 1.70 | 26.21 | 182 | 0.50 |
| 105 | 11.66 | 33.87 | 1.61 | 221 | 250 | 10.48 | 34.41 | 1.02 | 26.43 | 161 | 0.59 |
| 127 | 11.44 | 33.86 | 1.65 | 218 | 300 | 9.71 | 34.42 | 0.66 | 26.57 | 148 | 0.67 |
| 154 | 11.33 | 33.96 | 1.56 | 208 | 400 | 7.60 | 34.21 | 1.12 | 26.73 | 132 | 0.81 |
| 185 | 10.36 | 34.10 | 1.96 | 188 | 500 | 6.79 | 34.26 | 0.53 | 26.89 | 117 | 0.94 |
| 230 | 10.64 | 34.40 | 1.14 | 165 | | | | | | | |
| 302 | 9.70 | 34.42 | 0.65 | 147 | | | | | | | |
| 393 | 7.65 | 34.21 | 1.13 | 133 | | | | | | | |
| 514 | 6.63 | 34.27 | 0.41 | 114 | | | | | | | |

a) Mean value of 11.96 and 12.08°C.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; September 5, 1958; 1415, 1443 GCT; 29°02'N, 115°58'W; sounding, 1000 fm; wind, 310°, force 4; weather, cloudy; sea, moderate; wire angle, 08°, 04°. 11340

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.50 | 33.52 | 5.41 | 437 | 0 | 20.50 | 33.52 | 5.41 | 23.53 | 437 | 0.00 |
| 9 | 20.52 | 33.49 | 5.42 | 440 | 10 | 20.50 | 33.49 | 5.43 | 23.51 | 439 | 0.04 |
| 28 | 17.06 | 33.48 | 5.94 | 358 | 20 | 17.62 | 33.48 | 5.87 | 24.23 | 370 | 0.08 |
| 37 | 16.28 | 33.47 | 5.95 | 342 | 30 | 17.00 | 33.48 | 5.95 | 24.37 | 356 | 0.12 |
| 47 | 15.62a) | 33.48 | 5.96 | 326 | 50 | 15.30 | 33.48 | 5.92 | 24.76 | 320 | 0.19 |
| 56 | 14.76 | 33.47 | 5.74 | 309 | 75 | 12.30 | 33.43 | 5.22 | 25.34 | 265 | 0.26 |
| 65 | 13.56 | 33.44 | 5.56 | 287 | 100 | 13.26 | 34.14 | 2.60 | 25.68 | 231 | 0.32 |
| 79 | 12.30 | 33.47 | 5.06 | 262 | 150 | 11.68 | 34.26 | 1.24 | 26.10 | 192 | 0.43 |
| 93 | 13.36 | 34.02 | 4.49 | 241 | 200 | 11.59 | 34.48 | 0.85 | 26.28 | 175 | 0.52 |
| 106 | 13.19 | 34.16 | 2.17 | 228 | 250 | 10.35 | 34.41 | 0.87 | 26.45 | 159 | 0.61 |
| 128 | 11.48 | 34.06 | 2.23 | 204 | 300 | 10.04 | 34.44 | 0.87 | 26.53 | 151 | 0.69 |
| 154 | 11.72 | 34.30 | 1.01 | 190 | 400 | 8.28 | 34.42 | 0.72 | 26.80 | 126 | 0.83 |
| 184 | 12.15 | 34.52 | 0.81 | 182 | 500 | 7.17 | 34.33 | 0.75 | 26.89 | 117 | 0.96 |
| 231 | 10.50 | 34.39 | 0.87 | 163 | | | | | | | |
| 307 | 9.98 | 34.45 | 0.87 | 150 | | | | | | | |
| 397 | 8.38 | 34.42 | 0.71 | 127 | | | | | | | |
| 516 | 7.00 | 34.32 | 0.75 | 116 | | | | | | | |

BLACK DOUGLAS; September 6, 1958; 0239 GCT; 29°11'N, 114°55'W; sounding, 40 fm; wind, 290°, force 3; weather, partly cloudy; sea, moderate; wire angle, 02°. 11527

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.10 | 33.60 | 5.58 | 422 | 0 | 20.10 | 33.60 | 5.58 | 23.69 | 422 | 0.00 |
| 10 | 19.67 | 33.56 | 5.65 | 413 | 10 | 19.67 | 33.56 | 5.65 | 23.78 | 413 | 0.04 |
| 19 | 16.71 | 33.56 | 5.74 | 344 | 20 | 16.60 | 33.56 | 5.73 | 24.52 | 342 | 0.08 |
| 33 | 14.70 | 33.60 | 4.68 | 299 | 30 | 15.05 | 33.59 | 4.98 | 24.89 | 307 | 0.11 |
| 57 | 12.79 | 33.62 | 3.11 | 260 | 50 | 13.12 | 33.62 | 3.38 | 25.32 | 266 | 0.17 |

BLACK DOUGLAS; September 6, 1958; 0038 GCT; 29°05'N, 115°08'W; sounding, 52 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 13°. 11530

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.55 | 33.62 | 5.50 | 431 | 0 | 20.55 | 33.62 | 5.50 | 23.59 | 431 | 0.00 |
| 9 | 20.12 | 33.61 | 5.46 | 421 | 10 | 20.10 | 33.61 | 5.46 | 23.70 | 420 | 0.04 |
| 23 | 16.55 | 33.48 | 6.00 | 346 | 20 | 19.00 | 33.57 | 5.63 | 23.95 | 397 | 0.08 |
| 42 | 14.42 | 33.55 | 5.02 | 296 | 30 | 15.50 | 33.50 | 5.65 | 24.73 | 322 | 0.12 |
| 60 | 13.82 | 33.94 | 2.32 | 256 | 50 | 14.17 | 33.68 | 3.88 | 25.16 | 282 | 0.18 |
| 78 | 13.02 | 33.97 | 1.70 | 239 | 75 | 13.21 | 33.96 | 1.82 | 25.57 | 243 | 0.25 |

BLACK DOUGLAS; September 5, 1958; 2139 GCT; 28°55'N, 115°27.5'W; sounding, 600 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 06°. 11535

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.20 | 33.60 | 5.39 | 450 | 0 | 21.20 | 33.60 | 5.39 | 23.39 | 450 | 0.00 |
| 9 | 21.06 | 33.60 | 5.37 | 446 | 10 | 21.06 | 33.60 | 5.37 | 23.43 | 446 | 0.04 |
| 28 | 19.85 | 33.58 | 5.61 | 417 | 20 | 20.74 | 33.60 | 5.44 | 23.52 | 438 | 0.09 |
| 38 | 17.20 | 33.64 | 5.03 | 350 | 30 | 19.50 | 33.59 | 5.56 | 23.84 | 407 | 0.13 |
| 47 | 15.98 | 33.79 | 4.37 | 311 | 50 | 15.60 | 33.74 | 4.44 | 24.89 | 307 | 0.20 |
| 57 | 14.70 | 33.60 | 4.64 | 299 | 75 | 13.12 | 33.66 | 3.95 | 25.36 | 263 | 0.27 |
| 66 | 13.44 | 33.53 | 4.63 | 279 | 100 | 11.58 | 33.78 | 2.98 | 25.74 | 226 | 0.34 |
| 80 | 12.97 | 33.73 | 3.54 | 255 | 150 | 11.39 | 34.18 | 1.51 | 26.09 | 193 | 0.44 |
| 93 | 11.94 | 33.78 | 2.94 | 233 | 200 | 10.66 | 34.30 | 1.37 | 26.31 | 172 | 0.54 |
| 107 | 11.36 | 33.80 | 3.01 | 221 | 250 | 9.83 | 34.27 | 1.45 | 26.44 | 160 | 0.62 |
| 130 | 11.72 | 34.07 | 1.82 | 207 | 300 | 9.77 | 34.42 | 0.70 | 26.56 | 148 | 0.70 |
| 156 | 11.28 | 34.20 | 1.47 | 191 | 400 | 7.48 | 34.22 | 0.91 | 26.75 | 130 | 0.85 |
| 187 | 10.99 | 34.33 | 1.34 | 175 | 500 | 6.64 | 34.25 | 0.56 | 26.90 | 116 | 0.98 |
| 232 | 9.89 | 34.22 | 1.50 | 166 | | | | | | | |
| 303 | 9.74 | 34.42 | 0.55 | 148 | | | | | | | |
| 394 | 7.59 | 34.22 | 0.92 | 131 | | | | | | | |
| 514 | 6.51 | 34.26 | 0.50 | 114 | | | | | | | |

a) Mean value of 15.56 and 15.67°C.

SIO

CCOFI 5809

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 115.40 | BLACK DOUGLAS; September 5, 1958; 1809 GCT; 28°45'N, 115°47'W; sounding, 620 fm; wind, 290°, force 4; weather, clear; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 0 | 21.00 | 33.54a) | 5.29 | 449 | 0 | 21.00 | 33.54 | 5.29 | 23.40 | 449 | 0.00 |
| 10 | 20.90 | 33.53 | 5.45 | 447 | 10 | 20.90 | 33.53 | 5.45 | 23.42 | 447 | 0.04 |
| 28 | 17.69 | 33.52 | 5.95 | 370 | 20 | 19.30 | 33.52 | 5.73 | 23.84 | 407 | 0.09 |
| 37 | 16.18 | 33.50 | 5.56 | 337 | 30 | 17.52 | 33.52 | 5.93 | 24.28 | 365 | 0.13 |
| 47 | 15.14 | 33.51 | 5.33 | 314 | 50 | 14.86 | 33.52 | 5.20 | 24.87 | 309 | 0.19 |
| 56 | 14.35 | 33.53 | 4.87 | 297 | 75 | 12.22 | 33.64 | 4.44 | 25.51 | 248 | 0.26 |
| 66 | 12.82 | 33.63 | 4.47 | 260 | 100 | 11.84 | 33.90 | 2.41 | 25.79 | 222 | 0.32 |
| 80 | 11.97 | 33.64 | 4.42 | 243 | 150 | 11.38 | 34.22 | 1.19 | 26.12 | 190 | 0.43 |
| 94 | 11.80 | 33.83 | 2.94 | 226 | 200 | 10.90 | 34.40 | 1.07 | 26.34 | 169 | 0.52 |
| 107 | 11.86 | 33.94 | 2.25 | 219 | 250 | 10.08 | 34.39 | 0.95 | 26.49 | 155 | 0.60 |
| 129 | 11.71 | 34.13 | 1.71 | 203 | 300 | 9.37 | 34.37 | 1.03 | 26.59 | 146 | 0.68 |
| 156 | 11.29 | 34.26 | 1.14 | 186 | 400 | 8.68 | 34.42 | 0.64 | 26.73 | 132 | 0.82 |
| 187 | 11.14 | 34.39 | 1.14 | 173 | 500 | 7.07 | 34.31 | 0.58 | 26.88 | 118 | 0.96 |
| 231 | 10.40 | 34.40 | 0.92 | 160 | | | | | | | |
| 301 | 9.37 | 34.37 | 1.03 | 146 | | | | | | | |
| 392 | 8.79 | 34.42 | 0.66 | 133 | | | | | | | |
| 512 | 6.84 | 34.29 | 0.56 | 116 | | | | | | | |
| 117.26 | BLACK DOUGLAS; September 6, 1958; 0539 GCT; 28°56'N, 114°41'W; sounding, 41 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 05°. | | | | | | | | | | |
| 0 | 20.28 | 33.60 | 5.47 | 426 | 0 | 20.28 | 33.60 | 5.47 | 23.64 | 426 | 0.00 |
| 9 | 19.92 | 33.57 | 5.58 | 419 | 10 | 19.72 | 33.56 | 5.60 | 23.77 | 414 | 0.04 |
| 19 | 16.95 | 33.51 | 5.88 | 354 | 20 | 16.80 | 33.51 | 5.87 | 24.44 | 350 | 0.08 |
| 33 | 14.82 | 33.50 | 5.40 | 309 | 30 | 15.15 | 33.50 | 5.53 | 24.80 | 316 | 0.11 |
| 57 | 13.26 | 33.69 | 3.58 | 263 | 50 | 13.65 | 33.63 | 4.02 | 25.22 | 275 | 0.17 |
| 117.30 | BLACK DOUGLAS; September 6, 1958; 0758 GCT; 28°48'N, 114°56.5'W; sounding, 55 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 08°. | | | | | | | | | | |
| 0 | 20.06 | 33.57 | 5.44 | 423 | 0 | 20.06 | 33.57 | 5.44 | 23.67 | 423 | 0.00 |
| 9 | 19.96 | 33.53 | 5.61 | 423 | 10 | 19.94 | 33.53 | 5.61 | 23.68 | 422 | 0.04 |
| 23 | 15.65 | 33.55 | 5.73 | 322 | 20 | 16.35 | 33.54 | 5.72 | 24.57 | 337 | 0.08 |
| 42 | 13.86 | 33.58 | 4.91 | 283 | 30 | 14.92 | 33.56 | 5.55 | 24.90 | 306 | 0.11 |
| 61 | 13.04 | 33.79 | 3.06 | 252 | 50 | 13.40 | 33.68 | 3.84 | 25.31 | 267 | 0.17 |
| 80 | 12.86 | 33.90 | 2.65 | 241 | 75 | 12.93 | 33.88 | 2.74 | 25.56 | 243 | 0.23 |
| 117.35 | BLACK DOUGLAS; September 6, 1958; 1136 GCT; 28°38'N, 115°16'W; sounding, 104 fm; wind, 280°, force 7; weather, cloudy; sea, moderate; wire angle, 02°. | | | | | | | | | | |
| 0 | 20.78 | 33.62 | 5.33 | 438 | 0 | 20.78 | 33.62 | 5.33 | 23.52 | 438 | 0.00 |
| 9 | 20.70 | 33.58 | 5.44 | 438 | 10 | 20.70 | 33.58 | 5.44 | 23.52 | 438 | 0.04 |
| 19 | 19.64 | 33.58 | 5.55 | 412 | 20 | 19.53 | 33.58 | 5.60 | 23.82 | 409 | 0.09 |
| 28 | 18.78 | 33.58 | 5.88 | 391 | 30 | 18.60 | 33.57 | 5.88 | 24.05 | 387 | 0.13 |
| 41 | 15.74 | 33.43 | 5.81 | 333 | 50 | 14.50 | 33.42 | 5.77 | 24.88 | 308 | 0.20 |
| 65 | 13.92 | 33.53 | 5.11 | 288 | 75 | 13.08 | 33.53 | 4.80 | 25.26 | 272 | 0.27 |
| 88 | 12.78 | 33.60 | 4.52 | 261 | 100 | 12.92 | 33.87 | 3.48 | 25.54 | 245 | 0.33 |
| 124 | 13.20 | 34.12 | 1.82 | 231 | 150 | 12.01 | 34.07 | 1.64 | 25.88 | 213 | 0.45 |
| 160 | 11.76 | 34.07 | 1.60 | 208 | | | | | | | |

a) Salinity bottle numbers appear to have been listed out of order on the original data sheet; present order assumed to be correct, but these salinity data must be considered doubtful.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |
| BLACK DOUGLAS; September 6, 1958; 1440 GCT; 28°28'N, 115°35.5'W; sounding, 400 fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | 117.40 |
| 0 | 21.55 | 33.73 | 5.16 | 450 | 0 | 21.55 | 33.73 | 5.16 | 23.39 | 450 | 0.00 |
| 9 | 21.58 | 33.71 | 5.35 | 452 | 10 | 21.20 | 33.69 | 5.40 | 23.47 | 443 | 0.04 |
| 28 | 17.30 | 33.55 | 5.76 | 358 | 20 | 20.00 | 33.65 | 5.52 | 23.75 | 416 | 0.09 |
| 37 | 16.20 | 33.55 | 5.59 | 334 | 30 | 16.50 | 33.51 | 5.75 | 24.49 | 345 | 0.13 |
| 47 | 15.45 | 33.67 | 4.98 | 309 | 50 | 15.30 | 33.67 | 4.90 | 24.90 | 306 | 0.19 |
| 56 | 14.96 | 33.68 | 4.59 | 298 | 75 | 12.48 | 33.62 | 4.21 | 25.44 | 254 | 0.26 |
| 65 | 13.64 | 33.64 | 4.20 | 275 | 100 | 13.17 | 34.25 | 1.67 | 25.80 | 221 | 0.32 |
| 78 | 12.26 | 33.62 | 4.22 | 250 | 150 | 11.54 | 34.06 | | 25.96 | 205 | 0.43 |
| 91 | 13.42 | 34.27 | 2.19 | 224 | 200 | 11.07 | 34.32 | 1.48 | 26.25 | 178 | 0.53 |
| 105 | 13.00 | 34.23 | 1.52 | 219 | 250 | 10.58 | 34.36 | 1.04 | 26.37 | 167 | 0.62 |
| 127 | 11.66 | 33.96 | 2.51 | 214 | 300 | 9.80 | 34.39 | 0.78 | 26.53 | 152 | 0.70 |
| 154 | 11.32 | 34.05 | 2.26 | 202 | 400 | 8.32 | 34.35 | 0.48 | 26.74 | 132 | 0.84 |
| 186 | 11.18 | 34.31 | 1.74 | 180 | 500 | 6.80 | 34.29 | 0.36 | 26.91 | 115 | 0.98 |
| 230 | 10.85 | 34.34 | 1.18 | 172 | | | | | | | |
| 303 | 9.76 | 34.39 | 0.77 | 151 | | | | | | | |
| 395 | 8.40 | 34.35 | 0.48 | 133 | | | | | | | |
| 517 | 6.54 | 34.28 | 0.35 | 112 | | | | | | | |
| BLACK DOUGLAS; September 7, 1958; 0236 GCT; 28°40.5'N, 114°25.5'W; sounding, 43 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 10°. | | | | | | | | | | | 118.25 |
| 0 | 20.80 | 33.62 | 5.44 | 438 | 0 | 20.80 | 33.62 | 5.44 | 23.52 | 438 | 0.00 |
| 9 | 20.72 | 33.62 | 5.26 | 436 | 10 | 20.70 | 33.62 | 5.26 | 23.55 | 435 | 0.04 |
| 28 | 16.84 | 33.43 | 6.11 | 357 | 20 | 19.74 | 33.57 | 5.47 | 23.76 | 415 | 0.09 |
| 47 | 14.68 | 33.69 | 4.06 | 292 | 30 | 16.32 | 33.47 | 5.72 | 24.51 | 343 | 0.12 |
| 70 | 12.54 | 33.65 | 3.00 | 253 | 50 | 14.88 | 33.80 | 3.53 | 25.09 | 288 | 0.19 |
| BLACK DOUGLAS; September 6, 1958; 2327 GCT; 28°30.5'N, 114°45.5'W; sounding, 59 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 22°. | | | | | | | | | | | 118.30 |
| 0 | 22.59 | 33.68 | 5.13 | 481 | 0 | 22.59 | 33.68 | 5.13 | 23.07 | 481 | 0.00 |
| 8 | 22.55 | 33.69 | 5.02 | 479 | 10 | 22.52 | 33.69 | 5.03 | 23.10 | 478 | 0.05 |
| 26 | 22.07 | 33.71 | 5.22 | 465 | 20 | 22.26 | 33.71 | 5.15 | 23.18 | 470 | 0.10 |
| 44 | 18.26 | 33.64 | 5.42 | 374 | 30 | 21.90 | 33.71 | 5.23 | 23.28 | 460 | 0.14 |
| 66 | 15.60 | 33.94 | 3.29 | 293 | 50 | 16.98 | 33.66 | 5.05 | 24.52 | 343 | 0.22 |
| 88 | 14.89 | 34.08 | 1.90 | 267 | 75 | 15.30 | 34.00 | 2.68 | 25.16 | 282 | 0.30 |
| BLACK DOUGLAS; September 6, 1958; 1932 GCT; 28°20.5'N, 115°05'W; sounding, 64 fm; wind, 320°, force 5; weather, partly cloudy; sea, slight; wire angle, 08°. | | | | | | | | | | | 118.35 |
| 0 | 22.48 | 33.70 | 5.22 | 476 | 0 | 22.48 | 33.70 | 5.22 | 23.12 | 476 | 0.00 |
| 9 | 22.45 | 33.71 | 5.10 | 474 | 10 | 22.44 | 33.71 | 5.10 | 23.14 | 474 | 0.05 |
| 28 | 21.46 | 33.68 | 5.29 | 451 | 20 | 22.18 | 33.71 | 5.14 | 23.20 | 468 | 0.09 |
| 47 | 17.30 | 33.81 | 4.55 | 339 | 30 | 21.10 | 33.69 | 5.22 | 23.49 | 440 | 0.14 |
| 70 | 15.94 | 34.04 | 2.97 | 293 | 50 | 17.16 | 33.82 | 4.45 | 24.59 | 335 | 0.22 |
| 94 | 14.95 | 34.06 | 2.01 | 270 | 75 | 15.70 | 34.04 | 2.70 | 25.10 | 287 | 0.30 |
| | | | | | 100 | (14.75) | (34.06) | (1.87) | (25.32) | (266) | (0.37) |
| BLACK DOUGLAS; September 6, 1958; 2124 GCT; 28°19'N, 114°53'W; sounding, 59 fm; wind, 320°, force 5; weather, partly cloudy; sea, moderate; wire angle, 07°. | | | | | | | | | | | 119.33 |
| 0 | 22.62 | 33.75 | 5.24 | 476 | 0 | 22.62 | 33.75 | 5.24 | 23.12 | 476 | 0.00 |
| 9 | 22.58 | 33.71 | 5.06 | 478 | 10 | 22.56 | 33.71 | 5.06 | 23.10 | 478 | 0.05 |
| 28 | 22.36 | 33.69 | 5.09 | 474 | 20 | 22.45 | 33.70 | 5.08 | 23.12 | 476 | 0.10 |
| 47 | 22.16 | 33.71 | 5.08 | 466 | 30 | 22.34 | 33.69 | 5.09 | 23.15 | 473 | 0.14 |
| 71 | 18.44 | 33.57 | 5.40 | 384 | 50 | 20.50 | 33.58 | 5.40 | 23.56 | 434 | 0.23 |
| 94 | 13.82 | 33.62 | 3.35 | 280 | 75 | 17.92 | 33.58 | 5.19 | 24.21 | 372 | 0.33 |
| BLACK DOUGLAS; September 7, 1958; 0524 GCT; 28°23'N, 114°14.5'W; sounding, 27 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 02°. | | | | | | | | | | | 120.25 |
| 0 | 21.60 | 33.69 | 5.35 | 454 | 0 | 21.60 | 33.69 | 5.35 | 23.35 | 454 | 0.00 |
| 9 | 21.50 | 33.63 | 5.38 | 455 | 10 | 21.48 | 33.63 | 5.38 | 23.34 | 455 | 0.04 |
| 28 | 17.46 | 33.59 | 5.53 | 359 | 20 | 20.20 | 33.62 | 5.44 | 23.68 | 423 | 0.09 |
| 38 | 16.58 | 33.67 | 4.96 | 334 | 30 | 17.15 | 33.60 | 5.42 | 24.43 | 351 | 0.13 |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| 120.30 | BLACK DOUGLAS; September 7, 1958; 0915 GCT; 28°13'N, 114°34'W; sounding, 50 fm; wind, calm; weather, clear; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 22.47 | 33.75 | 5.09 | 473 | 0 | 22.47 | 33.75 | 5.09 | 23.15 | 473 | 0.00 |
| 9 | 22.49 | 33.72 | 5.06 | 474 | 10 | 22.49 | 33.72 | 5.06 | 23.14 | 474 | 0.05 |
| 24 | 22.46 | 33.75 | 5.08 | 472 | 20 | 22.47 | 33.74 | 5.07 | 23.15 | 473 | 0.09 |
| 43 | 22.35 | 33.71 | 5.10 | 472 | 30 | 22.42 | 33.74 | 5.08 | 23.16 | 472 | 0.14 |
| 62 | 18.54 | 33.61 | 5.50 | 383 | 50 | 21.90 | 33.69 | 5.14 | 23.28 | 461 | 0.24 |
| 81 | 14.24 | 33.62 | 3.97 | 288 | 75 | 15.08 | 33.62 | 4.25 | 24.91 | 305 | 0.33 |
| 120.35 | BLACK DOUGLAS; September 7, 1958; 1538 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 360°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 0 | 22.44 | 33.73 | 5.49 | 473 | 0 | 22.44 | 33.73 | 5.49 | 23.15 | 473 | 0.00 |
| 10 | 22.44 | 33.66 | 5.05 | 478 | 10 | 22.44 | 33.66 | 5.05 | 23.10 | 478 | 0.05 |
| 19 | 22.40 | 33.71 | 5.02 | 473 | 20 | 22.40 | 33.71 | 5.02 | 23.15 | 473 | 0.10 |
| 33 | 21.89 | 33.68 | 5.25 | 462 | 30 | 22.20 | 33.70 | 5.10 | 23.19 | 469 | 0.14 |
| 52 | 18.55 | 33.63 | 5.66 | 381 | 50 | 18.90 | 33.64 | 5.63 | 24.02 | 390 | 0.23 |
| 76 | 14.32 | 33.73 | 2.67 | 281 | 75 | 14.39 | 33.73 | 2.72 | 25.14 | 283 | 0.31 |
| 120.45 | BLACK DOUGLAS; September 8, 1958; 0036 GCT; 27°43'N, 115°33'W; sounding, 1200 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 21°. | | | | | | | | | | |
| 173a) | 11.45 | 34.23 | 1.22 | 191 | | | | | | | |
| 217 | 10.95 | 34.38 | 0.83 | 171 | | | | | | | |
| 288 | 10.41 | 34.42 | 0.49 | 159 | | | | | | | |
| 378 | 8.95 | 34.37 | 0.53 | 140 | | | | | | | |
| 499 | 7.08 | 34.27 | 0.32 | 121 | | | | | | | |
| | | | | | 200 | 11.12 | 34.33 | 0.95 | 26.26 | 178 | |
| | | | | | 250 | 10.68 | 34.40 | 0.63 | 26.39 | 165 | |
| | | | | | 300 | 10.26 | 34.42 | 0.49 | 25.47 | 157 | |
| | | | | | 400 | 8.59 | 34.35 | 0.53 | 26.70 | 136 | |
| | | | | | 500 | (7.07) | (34.27) | (0.31) | (26.86) | (120) | |
| 130.30 | BLACK DOUGLAS; September 9, 1958; 1722 GCT; 26°29'N, 113°29'W; sounding, 44 fm; wind, 270°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 25.94 | 34.19 | 4.81 | 539 | 0 | 25.94 | 34.19 | 4.81 | 22.46 | 539 | 0.00 |
| 10 | 25.51 | 34.16 | 4.87 | 528 | 10 | 25.51 | 34.16 | 4.87 | 22.57 | 528 | 0.05 |
| 19 | 21.56 | 33.82 | 5.47 | 443 | 20 | 21.00 | 33.80 | 5.54 | 23.60 | 430 | 0.10 |
| 33 | 18.80 | 33.96 | 5.74 | 364 | 30 | 18.72 | 33.83 | 5.70 | 24.22 | 371 | 0.14 |
| 57 | 17.85 | 34.28 | 3.49 | 318 | 50 | 18.97 | 34.28 | 3.80 | 24.50 | 344 | 0.21 |
| 130.35 | BLACK DOUGLAS; September 9, 1958; 1440 GCT; 26°18.5'N, 113°48.5'W; sounding, 175 fm; wind, variable, force 1; weather, partly cloudy; sea, rough; wire angle, 07°. | | | | | | | | | | |
| 0 | 25.92 | 34.14 | 4.73 | 542 | 0 | 25.92 | 34.14 | 4.73 | 22.43 | 542 | 0.00 |
| 9 | 24.80 | 34.16 | 5.05 | 508 | 10 | 24.60 | 34.15 | 5.07 | 22.84 | 502 | 0.05 |
| 23 | 21.50 | 34.03 | 5.40 | 426 | 20 | 22.18 | 34.06 | 5.33 | 23.47 | 443 | 0.10 |
| 47 | 16.42 | 33.77 | 5.37 | 323 | 30 | 18.00 | 33.82 | 5.40 | 24.39 | 355 | 0.14 |
| 70 | 15.90 | 34.46 | 2.81 | 261 | 50 | 16.30 | 33.80 | 5.32 | 24.78 | 318 | 0.21 |
| 88 | 15.82 | 34.53 | 1.52 | 254 | 75 | 15.88 | 34.47 | 2.55 | 25.38 | 260 | 0.28 |
| 119 | 14.88 | 34.63 | 0.97 | 228 | 100 | 15.53 | 34.58 | 1.27 | 25.56 | 244 | 0.34 |
| 136 | 14.21 | 34.63 | 0.77 | 213 | 150 | 13.93 | 34.62 | 0.70 | 25.93 | 208 | 0.46 |
| 163 | 13.62 | 34.61 | 0.66 | 203 | 200 | 12.78 | 34.61 | 0.49 | 26.16 | 187 | 0.56 |
| 208 | 12.58 | 34.61 | 0.45 | 183 | 250 | 11.06 | 34.56 | 0.63 | 26.44 | 160 | 0.65 |
| 254 | 10.88 | 34.55 | 0.66 | 158 | | | | | | | |

a) Because of irregularities in cast, all data above 173 meters are too uncertain to be recorded.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

BLACK DOUGLAS; September 9, 1958; 1137 GCT; 26°09'N, 114°07'W; sounding, 1100 fm; wind, calm; weather, clear; sea, rough; wire angle, 00°. 13040

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.40 | 33.87 | 5.00 | 517 | 0 | 24.40 | 33.87 | 5.00 | 22.69 | 517 | 0.00 |
| 10 | 22.98 | 34.02 | 5.18 | 467 | 10 | 22.98 | 34.02 | 5.18 | 23.21 | 467 | 0.05 |
| 28 | 22.35 | 34.09 | 5.22 | 445 | 20 | 22.63 | 34.06 | 5.19 | 23.34 | 455 | 0.10 |
| 38 | 21.03 | 33.98 | 5.40 | 418 | 30 | 22.20 | 34.08 | 5.24 | 23.48 | 441 | 0.14 |
| 47 | 18.85 | 33.82 | 5.72 | 375 | 50 | 18.28 | 33.86 | 5.71 | 24.34 | 359 | 0.22 |
| 56 | 17.49 | 33.93 | 5.56 | 335 | 75 | 15.88 | 33.97 | 4.22 | 25.01 | 296 | 0.30 |
| 65 | 16.84 | 33.94 | 5.27 | 320 | 100 | 14.53 | 34.02 | 2.99 | 25.33 | 265 | 0.37 |
| 79 | 15.29 | 33.99 | 3.62 | 282 | 150 | 10.76 | 33.91 | 2.14 | 26.00 | 202 | 0.49 |
| 92 | 14.61 | 34.00 | 2.99 | 268 | 200 | 10.24 | 34.20 | 1.73 | 26.30 | 173 | 0.59 |
| 105 | 13.66 | 33.93 | 3.01 | 254 | 250 | 9.67 | 34.26 | 1.44 | 26.44 | 160 | 0.67 |
| 127 | 12.88 | 34.14 | 2.14 | 224 | 300 | 8.89 | 34.26 | 1.22 | 26.57 | 148 | 0.75 |
| 153 | 10.60 | 33.90 | - | 201 | 400 | 8.06 | 34.39 | 0.42 | 26.81 | 125 | 0.89 |
| 185 | 10.40 | 34.18 | 1.81 | 176 | 500 | 6.88 | 34.35 | 0.34 | 26.95 | 112 | 1.02 |
| 230 | 9.97 | 34.43u | 1.51 | | | | | | | | |
| 301 | 8.88 | 34.26 | 1.21 | 147 | | | | | | | |
| 392 | 8.17 | 34.39 | 0.43 | 126 | | | | | | | |
| 514 | 6.71 | 34.34 | 0.33 | 110 | | | | | | | |

BLACK DOUGLAS; September 9, 1958; 0828 GCT; 25°59'N, 114°26'W; sounding, 2000 fm; wind, calm; weather, clear; sea, rough; wire angle, 02°. 13045

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.30 | 33.91 | 4.98 | 511 | 0 | 24.30 | 33.91 | 4.98 | 22.75 | 511 | 0.00 |
| 9 | 23.34 | 33.90 | 5.08 | 485 | 10 | 23.26 | 33.89 | 5.08 | 23.04 | 483 | 0.05 |
| 28 | 22.37 | 33.82 | 5.05 | 464 | 20 | 22.78 | 33.85 | 5.06 | 23.15 | 473 | 0.10 |
| 38 | 20.80 | 33.72 | 5.52 | 431 | 30 | 22.00 | 33.79 | 5.14 | 23.32 | 457 | 0.14 |
| 47 | 19.36 | 33.73 | 5.68 | 393 | 50 | 18.91 | 33.73 | 5.70 | 24.09 | 383 | 0.23 |
| 57 | 18.08 | 33.73 | 5.76 | 364 | 75 | 14.88 | 33.46 | 5.88 | 24.84 | 312 | 0.32 |
| 66 | 16.87 | 33.55 | 5.88 | 349 | 100 | 14.32 | 34.07 | 2.00 | 25.42 | 257 | 0.39 |
| 80 | 15.26 | 33.62 | 5.47 | 309 | 150 | 12.67 | 34.40 | 0.94 | 26.02 | 200 | 0.50 |
| 93 | 15.16 | 33.95 | 3.46 | 282 | 200 | 12.43 | 34.64 | 0.28 | 26.25 | 178 | 0.60 |
| 106 | 14.24 | 34.30 | 1.75 | 238 | 250 | 11.60 | 34.64 | 0.22 | 26.41 | 163 | 0.69 |
| 129 | 13.29 | 34.37 | 1.15 | 214 | 300 | 10.92 | 34.61 | 0.22 | 26.50 | 154 | 0.77 |
| 155 | 12.64 | 34.44 | 0.87 | 197 | 400 | 9.03 | 34.46 | 0.30 | 26.71 | 134 | 0.92 |
| 186 | 12.68 | 34.63 | 0.40 | 184 | 500 | 7.66 | 34.39 | 0.31 | 26.86 | 120 | 1.05 |
| 231 | 11.85 | 34.65 | 0.23 | 167 | | | | | | | |
| 303 | 10.89 | 34.61 | 0.22 | 153 | | | | | | | |
| 394 | 9.13 | 34.47 | 0.29 | 135 | | | | | | | |
| 516 | 7.44 | 34.38 | 0.31 | 118 | | | | | | | |

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90.28-O | IX-10 | 0727 | 33°28.5' | 117°47.0' | 230 | 300° | 1 | clear | moderate | 18.28 | 33.42 |
| 90.28-O | 14 | 0320 | 33°28.0' | 117°46.0' | 200 | 320° | 1 | clear | moderate | 20.62 | 33.49 |
| 90.28-O | 17 | 0750 | 33°28.5' | 117°47.0' | 200 | calm | | clear | smooth | 18.86 | 33.37 |
| 90.55-O | 11 | 0640 | 32°33.5' | 119°37.5' | 600+ | 320° | 5 | clear | very rough | 19.14 | 33.55 |
| 90.55-O | 15 | 0110 | 32°34.5' | 119°33.0' | 600 | 300° | 3 | clear | rough | 18.92 | 33.48 |
| 90.55-O | 18 | 0518 | 32°34.0' | 119°38.0' | 500 | 310° | 4 | partly cloudy | moderate | 18.46 | 33.33 |
| 90.65-O | 11 | 1700 | 32°10.5' | 120°18.0' | 2000+ | 320° | 5 | clear | very rough | 18.60 | 33.22 |
| 90.65-O | 15 | 0815 | 32°12.5' | 120°12.0' | 2000 | 300° | 3 | clear | very rough | 18.96 | 33.47 |
| 93.35-O | 13 | 1115 | 32°40.0' | 117°52.0' | 300 | 270° | 2 | partly cloudy | moderate | 21.56 | 33.55 |
| 93.35-O | 16 | 1718 | 32°39.5' | 117°52.5' | 300 | 310° | 3 | clear | slight | 20.66 | 33.46 |
| 93.35-O | 19 | 0950 | 32°39.5' | 117°52.0' | 350 | 320° | 1 | overcast | slight | 21.30 | 33.53 |
| 93.45-O | 13 | 0330 | 32°20.5' | 118°32.0' | 500 | 300° | 6 | clear | very rough | 19.76 | 33.42 |
| 93.45-O | 16 | 0930 | 32°20.5' | 118°33.0' | 425 | 300° | 2 | clear | rough | 20.43 | 33.55 |
| 93.45-O | 19 | 0230 | 32°21.0' | 118°32.0' | 600 | 300° | 3 | cloudy | rough | 21.09 | 33.58 |
| 93.55-O | 12 | 1810 | 31°58.0' | 119°13.0' | 800 | 300° | 6 | partly cloudy | very rough | 19.60 | 33.46 |
| 93.55-O | 16 | 0220 | 31°59.5' | 119°12.5' | 760 | 290° | 3 | clear | rough | 19.97 | 33.30 |
| 93.55-O | 18 | 1905 | 32°02.5' | 119°13.5' | 750 | 320° | 4 | overcast | very rough | 20.05 | 33.34 |
| 93.65-O | 12 | 0910 | 31°38.0' | 119°55.0' | 2000+ | 320° | 5 | partly cloudy | very rough | 19.06 | 33.48 |
| 93.65-O | 15 | 1922 | 31°38.5' | 119°52.0' | 2100 | 320° | 2 | clear | rough | 18.76 | 33.42 |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 110.33-B | IX-5 | 0210 | 29°50.5' | 115°52.0' | 50 | 310° | 3 | partly cloudy | moderate | - | - |
| 110.35-B | 5 | 0045 | 29°46.5' | 116°00.0' | 740 | 310° | 3 | partly cloudy | moderate | 19.60 | 33.40 |
| 110.40-B | 4 | 2203 | 29°36.5' | 116°19.5' | 1200 | 290° | 4 | cloudy | moderate | 21.70 | 33.73 |
| $118^{3}$.36-B | 6 | 1830 | 28°20.0' | 115°11.0' | 30 | 170° | 1 | partly cloudy | slight | 21.34 | 33.75 |
| $120^{7}.26^{5}$-B | 7 | 0650 | 28°12.5' | 114°15.5' | 21 | 280° | 3 | clear | moderate | 21.78 | 33.66 |
| $120^{5}$.31-B | 7 | 1018 | 28°06.0' | 114°33.0' | 42 | calm | | clear | slight | 22.51 | 33.70 |
| $120^{5}.37^{5}$-B | 7 | 1729 | 27°53.0' | 115°01.0' | 20 | 100° | 1 | partly cloudy | slight | 20.26 | 33.97 |
| 120.40-B | 7 | 1915 | 27°56.5' | 115°14.0' | 21 | 300° | 1 | cloudy | slight | 20.90 | 33.64 |
| $121^{3}.30^{5}$-B | 7 | 1145 | 27°58.5' | 114°26.5' | 20 | calm | | clear | slight | 21.06 | 33.58 |
| $121^{2}$.34-B | 7 | 1335 | 27°53.0' | 114°43.0' | 23 | 320° | 1 | clear | slight | 21.76 | 33.66 |
| 123.37-B | 8 | 1410 | 27°24.0' | 114°39.5' | 40 | calm | | partly cloudy | moderate | 21.48 | 33.78 |
| 123.42-B | 8 | 1052 | 27°13.0' | 115°01.0' | 1500 | calm | | clear | moderate | 22.83 | 34.00 |
| 123.45-B | 8 | 0613 | 27°05.0' | 115°15.5' | 2200 | 320° | 1 | partly cloudy | moderate | - | - |
| 127.34-B | 8 | 2000 | 26°55.5' | 114°06.0' | 45 | calm | | cloudy | moderate | 22.20 | 34.14 |
| 127.40-B | 8 | 2309 | 26°43.5' | 114°29.5' | 1500 | 220° | 1 | cloudy | very rough | 23.56 | 33.84 |
| 127.45-B | 9 | 0220 | 26°33.0' | 114°48.5' | 1800 | calm | | partly cloudy | moderate | 23.75 | 33.90 |
| 133.25-B | 10 | 0125 | 26°04.5' | 112°48.0' | 45 | 270° | 1 | cloudy | rough | 26.70 | 34.34 |
| 133.30-B | 9 | 2245 | 25°54.5' | 113°07.5' | 100 | 320° | 1 | partly cloudy | rough | 24.92 | 34.03 |
| 137.23-B | 10 | 0620 | 25°34.0' | 112°18.5' | 42 | 300° | 1 | clear | moderate | 27.17 | 34.36 |
| 137.30-B | 10 | 0953 | 25°20.0' | 112°45.5' | 150 | 300° | 1 | clear | rough | 26.04 | 34.37 |



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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **60.55** | STRANGER; November 1, 1958; 1328 GCT; 37°47.5'N, 123°15'W; sounding, 34 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 3 | 14.24 | 33.33 | 6.11 | 309 | 0 | (14.24) | (33.33) | (6.11) | (24.87) | (309) | (0.00) |
| 13 | 13.62 | 33.35 | 5.92 | 296 | 10 | 13.82 | 33.35 | 5.97 | 24.97 | 300 | 0.03 |
| 32 | 11.16 | 33.48 | 4.15 | 241 | 20 | 12.20 | 33.42 | 5.12 | 25.34 | 264 | 0.06 |
| 51 | 11.14 | 33.52 | 3.71 | 238 | 30 | 11.18 | 33.47 | 4.20 | 25.57 | 242 | 0.08 |
| | | | | | 50 | 11.14 | 33.52 | 3.72 | 25.62 | 238 | 0.13 |
| **60.60** | STRANGER; November 2, 1958; 2259 GCT; 37°37'N, 123°37'W; sounding, 1800 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | |
| 4 | 15.03 | 33.33 | 5.77 | 325 | 0 | 15.0 | (33.33) | (5.77) | (24.71) | (324) | (0.00) |
| 13 | 15.11 | 33.32 | 5.90 | 328 | 10 | 15.09 | 33.32 | 5.88 | 24.68 | 327 | 0.03 |
| 41 | 12.46 | 33.42 | 4.59 | 269 | 20 | 15.06 | 33.32 | 5.90 | 24.69 | 326 | 0.06 |
| 55 | 11.60 | 33.51 | 4.02 | 246 | 30 | 14.94 | 33.32 | 5.85 | 24.71 | 324 | 0.10 |
| 68 | 10.79 | 33.55 | 3.89 | 230 | 50 | 11.90 | 33.48 | 4.21 | 25.46 | 254 | 0.16 |
| 86 | 10.01 | 33.58 | 3.92 | 215 | 75 | 10.43 | 33.56 | 3.91 | 25.77 | 223 | 0.22 |
| 113 | 9.38 | 33.69 | 3.52 | 196 | 100 | 9.80 | 33.66 | 3.86 | 25.96 | 205 | 0.27 |
| 143 | 8.92 | 33.86 | 2.87 | 177 | 150 | 8.82 | 33.89 | 2.77 | 26.30 | 174 | 0.36 |
| 164 | 8.66 | 33.94 | 2.62 | 167 | 200 | 8.28 | 34.03 | 2.40 | 26.49 | 155 | 0.45 |
| 187 | 8.38 | 34.00 | 2.57 | 158 | 250 | 8.01 | 34.12 | 1.74 | 26.60 | 144 | 0.52 |
| 222 | 8.22 | 34.05 | 2.08 | 152 | 300 | 7.55 | 34.19 | 1.32 | 26.72 | 133 | 0.60 |
| 261 | 7.92 | 34.14 | 1.57 | 141 | 400 | 6.58 | 34.23 | 0.85 | 26.90 | 117 | 0.73 |
| 302 | 7.53 | 34.19 | 1.30 | 133 | 500 | 5.80 | 34.25 | 0.63 | 27.00 | 106 | 0.84 |
| 346 | 7.07 | 34.21 | 1.14 | 125 | 600 | 5.27 | 34.32 | 0.42 | 27.10 | 96 | 0.95 |
| 392 | 6.60 | 34.22 | 0.87 | 118 | 700 | 4.80 | 34.35 | 0.39 | 27.20 | 87 | 1.04 |
| 437 | 6.36 | 34.25 | 0.70 | 112 | 800 | 4.44 | 34.40 | 0.42 | 27.28 | 80 | 1.13 |
| 491 | 5.84 | 34.25 | 0.65 | 106 | 1000 | (3.67) | (34.49) | (0.35) | (27.44) | (65) | (1.29) |
| 556 | 5.55 | 34.29 | 0.45 | 100 | | | | | | | |
| 648 | 4.98 | 34.34 | 0.40 | 90 | | | | | | | |
| 744 | 4.66 | 34.37 | 0.38 | 84 | | | | | | | |
| 836 | 4.30 | 34.42 | 0.46 | 77 | | | | | | | |
| 951 | 3.88 | 34.51 | 0.54 | 66 | | | | | | | |
| 996 | 3.69 | 34.49 | 0.46 | 66 | | | | | | | |
| **60.70** | STRANGER; November 3, 1958; 0433 GCT; 37°16.5'N, 124°22'W; sounding, 2160 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 15.02 | 33.29 | 6.02 | 328 | 0 | 15.02 | 33.29 | 6.02 | 24.67 | 328 | 0.00 |
| 11 | 15.02 | 33.33 | 5.98 | 325 | 10 | 15.02 | 33.32 | 6.00 | 24.70 | 326 | 0.03 |
| 38 | 13.76 | 33.29 | 5.74 | 303 | 20 | 14.60 | 33.32 | 5.85 | 24.78 | 318 | 0.06 |
| 57 | 10.86 | 33.33 | 4.90 | 247 | 30 | 14.10 | 33.30 | 5.79 | 24.87 | 309 | 0.10 |
| 70 | 10.01 | 33.42 | 4.34 | 226 | 50 | 11.40 | 33.32 | 5.10 | 25.41 | 257 | 0.15 |
| 92a) | 9.40 | 33.58 | 3.86 | 205 | 75 | 9.82 | 33.46 | 4.20 | 25.80 | 220 | 0.21 |
| 119 | 8.98 | 33.83 | 3.04 | 180 | 100 | 9.23 | 33.66 | 3.67 | 26.05 | 197 | 0.27 |
| 149 | 8.59 | 33.95 | 2.60 | 165 | 150 | 8.58 | 33.96 | 2.59 | 26.39 | 164 | 0.36 |
| 176 | 8.36 | 34.02 | 2.36 | 157 | 200 | 8.16 | 34.08 | 1.94 | 26.56 | 149 | 0.44 |
| 197 | 8.18 | 34.07 | 1.95 | 150 | 250 | 7.54 | 34.16 | 1.61 | 26.70 | 136 | 0.51 |
| 231 | 7.78 | 34.14 | 1.82 | 140 | 300 | 7.07 | 34.19 | 1.14 | 26.79 | 127 | 0.58 |
| 276 | 7.30 | 34.17 | 1.28 | 131 | 400 | 6.48 | 34.25 | 0.72 | 26.92 | 114 | 0.70 |
| 317 | 6.93 | 34.20 | 1.02 | 124 | 500 | 5.81 | 34.25 | 0.56 | 27.00 | 106 | 0.82 |
| 370 | 6.63 | 34.25 | 0.78 | 116 | 600 | 5.27 | 34.31 | 0.44 | 27.12 | 95 | 0.92 |
| 416 | 6.40 | 34.25 | 0.69 | 113 | 700 | 4.74 | 34.37 | 0.35 | 27.24 | 84 | 1.02 |
| 470 | 6.12 | 34.25 | 0.57 | 110 | 800 | 4.32 | 34.39 | 0.35 | 27.29 | 79 | 1.11 |
| 521 | 5.62 | 34.25 | 0.55 | 104 | 1000 | 3.76 | 34.48 | 0.49 | 27.42 | 67 | 1.26 |
| 593 | 5.30 | 34.31 | 0.45 | 96 | | | | | | | |
| 695 | 4.76 | 34.37 | 0.36 | 85 | | | | | | | |
| 795 | 4.33 | 34.39 | 0.34 | 79 | | | | | | | |
| 896 | 4.04 | 34.43 | 0.40 | 74 | | | | | | | |
| 1016 | 3.72 | 34.48 | 0.50 | 67 | | | | | | | |
| 1061 | 3.56 | 34.52 | 0.56 | 62 | | | | | | | |

a) The bathythermograph recorded a lower temperature (about 0.4°C) at this level.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T,3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T,3}$ $10^{-5}$ cm/g | ΔD dyn. m |

60.80

STRANGER; November 3, 1958; 0936 GCT; 36°57.5'N, 125°05'W; sounding, 2240 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.48 | 33.06 | 5.39 | 376 | 0 | 16.48 | 33.06 | 5.39 | 24.17 | 376 | 0.00 |
| 11 | 16.48 | 33.10 | 5.31 | 373 | 10 | 16.48 | 33.10 | 5.32 | 24.20 | 373 | 0.04 |
| 40 | 15.57 | 33.04 | 5.62 | 358 | 20 | 16.47 | 33.10 | 5.31 | 24.20 | 372 | 0.07 |
| 58 | 12.50 | 33.04 | 5.71 | 297 | 30 | 16.45 | 33.10 | 5.32 | 24.21 | 372 | 0.11 |
| 72 | 11.32 | 33.08 | 5.36 | 273 | 50 | 13.60 | 33.03 | 5.69 | 24.78 | 318 | 0.18 |
| 95 | 9.78 | 33.32 | 4.66 | 230 | 75 | 11.02 | 33.11 | 5.25 | 25.32 | 266 | 0.25 |
| 123 | 8.80 | 33.53 | 4.54 | 200 | 100 | 9.58 | 33.36 | 4.63 | 25.76 | 224 | 0.32 |
| 153 | 8.39 | 33.75 | 3.76 | 173 | 150 | 8.40 | 33.72 | 3.82 | 26.22 | 180 | 0.42 |
| 180 | 8.16 | 33.87 | 3.42 | 165 | 200 | 7.95 | 33.92 | 3.13 | 26.46 | 158 | 0.50 |
| 203 | 7.92 | 33.93 | 3.11 | 157 | 250 | 7.08 | 33.98 | 2.47 | 26.62 | 142 | 0.58 |
| 238 | 7.30 | 33.98 | 2.56 | 145 | 300 | 6.41 | 33.99 | 2.12 | 26.72 | 133 | 0.65 |
| 284 | 6.59 | 33.98 | 2.29 | 136 | 400 | 6.02 | 34.15 | 0.93 | 26.90 | 116 | 0.78 |
| 325 | 6.27 | 34.02 | 1.78 | 129 | 500 | 5.50 | 34.19 | 0.70 | 26.99 | 108 | 0.90 |
| 380 | 6.13 | 34.14 | 1.03 | 118 | 600 | 4.82 | 34.23 | 0.43 | 27.10 | 96 | 1.01 |
| 426 | 5.88 | 34.16 | 0.82 | 114 | 700 | 4.60 | 34.36 | 0.35 | 27.23 | 85 | 1.10 |
| 481 | 5.68 | 34.20 | 0.58 | 108 | 800 | 4.28 | 34.36 | 0.33 | 27.26 | 82 | 1.19 |
| 531 | 5.05 | 34.14 | 0.96 | 106 | 1000 | 3.68 | 34.44 | 0.46 | 27.40 | 69 | 1.36 |
| 606 | 4.80 | 34.25 | 0.40 | 95 | | | | | | | |
| 707 | 4.58 | 34.36 | 0.34 | 84 | | | | | | | |
| 808 | 4.26 | 34.36 | 0.33 | 81 | | | | | | | |
| 909 | 3.98 | 34.40 | 0.41 | 75 | | | | | | | |
| 1028 | 3.60 | 34.44 | 0.49 | 68 | | | | | | | |
| 1074 | 3.55 | 34.47 | 0.55 | 66 | | | | | | | |

60.90

STRANGER; November 3, 1958; 1449 GCT; 36°38.5'N, 125°49'W; sounding, 2400 fm; wind, 330°, force 4; weather, cloudy; sea, very rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.99 | 32.99 | 5.45 | 392 | 0 | 16.99 | 32.99 | 5.45 | 24.00 | 392 | 0.00 |
| 12 | 16.99 | 33.01 | 4.90u | 390 | 10 | 16.99 | 33.01 | | 24.01 | 391 | 0.04 |
| 40 | 16.31 | 33.12 | 5.50 | 368 | 20 | 16.95 | 33.04 | | 24.06 | 386 | 0.08 |
| 74 | 12.78 | 33.12 | 5.28 | 296 | 30 | 16.70 | 33.08 | | 24.13 | 379 | 0.12 |
| 87 | 11.00 | 33.19 | 5.14 | 260 | 50 | 15.30 | 33.12 | 5.46 | 24.48 | 346 | 0.19 |
| 96 | 10.38 | 33.33 | 4.86 | 239 | 75 | 12.68 | 33.12 | 5.27 | 25.02 | 295 | 0.27 |
| 124 | 8.89 | 33.51 | 4.70 | 202 | 100 | 10.12 | 33.36 | 4.82 | 25.68 | 232 | 0.34 |
| 155 | 8.58 | 33.80 | 4.39 | 176 | 150 | 8.55 | 33.74 | 4.50 | 26.22 | 180 | 0.44 |
| 182 | 8.18 | 33.89 | 3.72 | 164 | 200 | 7.98 | 33.94 | 3.55 | 26.47 | 157 | 0.52 |
| 205 | 7.91 | 33.95 | 3.50 | 155 | 250 | 7.27 | 33.96 | 3.24 | 26.58 | 146 | 0.60 |
| 241 | 7.38 | 33.96 | 3.31 | 148 | 300 | 6.55 | 33.98 | 2.50 | 26.70 | 136 | 0.68 |
| 287 | 6.69 | 33.96 | 2.70 | 138 | 400 | 5.74 | 34.06 | 1.30 | 26.88 | 118 | 0.81 |
| 329 | 6.22 | 34.04 | 2.04 | 127 | 500 | 5.16 | 34.20 | 0.68 | 27.05 | 102 | 0.92 |
| 387 | 5.83 | 34.07 | 1.34 | 120 | 600 | 4.86 | 34.30 | 0.42 | 27.16 | 92 | 1.03 |
| 433 | 5.26 | 34.05 | 1.16 | 115 | 700 | 4.56 | 34.36 | 0.32 | 27.24 | 84 | 1.12 |
| 490 | 5.17 | 34.14 | 0.78 | 107 | 800 | 4.25 | 34.42 | 0.27 | 27.32 | 76 | 1.21 |
| 542 | 5.13 | 34.22 | 0.49 | 100 | 1000 | 3.68 | 34.48 | 0.50 | 27.42 | 67 | 1.36 |
| 617 | 4.78 | 34.31 | 0.37 | 90 | | | | | | | |
| 720 | 4.50 | 34.37 | 0.30 | 82 | | | | | | | |
| 825 | 4.17 | 34.44 | 0.27 | 74 | | | | | | | |
| 928 | 3.88 | 34.46 | 0.44 | 70 | | | | | | | |
| 1051 | 3.54 | 34.49a) | 0.56 | 64 | | | | | | | |
| 1098 | 3.44 | 34.51a) | 0.59 | 62 | | | | | | | |

a) Salinity bottle numbers appear to be recorded in reverse order on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be listed in correct order.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{-5}T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{-5}T_3$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

60.100 STRANGER; November 3, 1958; 2018 GCT; 36°18.5'N, 126°32.5'W; sounding, 2520 fm; wind, 340°, force 1; weather, partly cloudy; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 17.81 | 33.04 | 5.50 | 407 | 0 | (17.81) | (33.04) | (5.50) | (23.84) | (407) | (0.00) |
| 12 | 17.78 | 33.10 | 5.41 | 402 | 10 | 17.79 | 33.09 | 5.43 | 23.88 | 403 | 0.04 |
| 40 | 16.97 | 33.04 | 5.48 | 388 | 20 | 18.00 | 33.19a) | 5.41 | 23.91 | 400 | 0.08 |
| 69 | 14.42 | 33.04 | 6.06 | 334 | 30 | 18.00 | 33.20a) | 5.46 | 23.92 | 400 | 0.12 |
| 78 | 12.14 | 33.01 | 6.08 | 293 | 50 | 16.44 | 33.04 | 5.57 | 24.16 | 377 | 0.20 |
| 88 | 11.66 | 32.95 | 6.09 | 289 | 75 | 12.92 | 33.03 | 6.08 | 24.90 | 306 | 0.28 |
| 114 | 10.55 | 33.11 | 5.17 | 258 | 100 | 10.92 | 32.98 | 5.83 | 25.24 | 274 | 0.36 |
| 146 | 9.12 | 33.42 | 4.77 | 212 | 150 | 8.97 | 33.47 | 4.74 | 25.96 | 206 | 0.48 |
| 167 | 8.50 | 33.62 | 4.55 | 189 | 200 | 8.35 | 33.88 | 4.26 | 26.36 | 167 | 0.58 |
| 191 | 8.42 | 33.85 | 4.41 | 170 | 250 | 7.48 | 33.94 | 3.69 | 26.54 | 150 | 0.66 |
| 226 | 7.82 | 33.92 | 3.73 | 156 | 300 | 6.68 | 33.94 | 3.17 | 26.65 | 140 | 0.73 |
| 267 | 7.24 | 33.95 | 3.65 | 146 | 400 | 5.60 | 33.98 | 2.03 | 26.82 | 124 | 0.87 |
| 308 | 6.58 | 33.94 | 2.99 | 138 | 500 | 5.24 | 34.14 | 0.93 | 26.98 | 108 | 0.99 |
| 354 | 6.15 | 33.97 | 2.38 | 131 | 600 | 4.91 | 34.26 | 0.52 | 27.12 | 96 | 1.10 |
| 399 | 5.61 | 33.98 | 2.04 | 124 | 700 | 4.44 | 34.28 | 0.45 | 27.19 | 89 | 1.20 |
| 445 | 5.31 | 34.03 | 1.41 | 117 | 800 | 4.04 | 34.29 | 0.44 | 27.24 | 84 | 1.29 |
| 500 | 5.24 | 34.14 | 0.93 | 108 | 1000 | 3.58 | 34.47 | 0.54 | 27.42 | 67 | 1.46 |
| 566 | 5.04 | 34.20 | 0.57 | 101 | | | | | | | |
| 658 | 4.66 | 34.28 | 0.46 | 91 | | | | | | | |
| 756 | 4.15 | 34.28 | 0.44 | 86 | | | | | | | |
| 848 | 3.96 | 34.36 | 0.44 | 78 | | | | | | | |
| 964 | 3.70 | 34.46 | 0.56 | 68 | | | | | | | |
| 1011 | 3.56 | 34.47 | 0.53 | 66 | | | | | | | |

63.52 STRANGER; November 1, 1958; 0555 GCT; 37°22.5'N, 122°38'W; sounding, 40 fm; wind, 090°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.64 | 33.40 | 5.81 | 312 | 0 | 14.64 | 33.40 | 5.81 | 24.84 | 312 | 0.00 |
| 12 | 14.50 | 33.43 | 5.80 | 307 | 10 | 14.53 | 33.43 | 5.80 | 24.88 | 308 | 0.03 |
| 31 | 13.68 | 33.43 | 5.26 | 291 | 20 | 14.26 | 33.43 | 5.71 | 24.95 | 302 | 0.06 |
| 50 | 12.41 | 33.47 | 4.32 | 264 | 30 | 13.71 | 33.43 | 5.27 | 25.06 | 291 | 0.09 |
| 64 | 11.90 | 33.53 | 4.14 | 250 | 50 | 12.41 | 33.47 | 4.32 | 25.34 | 264 | 0.15 |

63.60 STRANGER; October 31, 1958; 2346 GCT; 37°02.5'N, 123°12'W; sounding, 1330 fm; wind, 150°, force 2; weather, cloudy; sea, rough; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 15.46 | 33.23 | 5.87 | 341 | 0 | (15.46) | (33.23) | (5.87) | (24.53) | (341) | (0.00) |
| 12 | 15.38 | 33.24 | 5.83 | 339 | 10 | 15.40 | 33.24 | 5.85 | 24.55 | 340 | 0.03 |
| 41 | 12.34 | 33.25 | 5.33 | 279 | 20 | 15.35 | 33.24 | 5.82 | 24.56 | 338 | 0.07 |
| 55 | 10.82 | 33.22 | 5.02 | 254 | 30 | 15.32 | 33.24 | 5.81 | 24.57 | 337 | 0.10 |
| 69 | 9.72 | 33.38 | 4.70 | 225 | 50 | 11.30 | 33.23 | 5.13 | 25.37 | 262 | 0.16 |
| 89 | 9.08 | 33.45 | 4.56 | 210 | 75 | 9.47 | 33.41 | 4.64 | 25.82 | 219 | 0.22 |
| 116 | 8.56 | 33.66 | 4.09 | 186 | 100 | 8.86 | 33.52 | 4.41 | 26.00 | 202 | 0.28 |
| 147 | 8.26 | 33.85 | 3.59 | 168 | 150 | 8.20 | 33.87 | 3.54 | 26.38 | 165 | 0.37 |
| 169 | 7.90 | 33.96 | 3.37 | 154 | 200 | 7.65 | 34.04 | 2.43 | 26.60 | 145 | 0.44 |
| 192 | 7.79 | 34.04 | 2.48 | 147 | 250 | 6.92 | 34.07 | 2.15 | 26.72 | 133 | 0.52 |
| 228 | 7.20 | 34.04 | 2.32 | 139 | 300 | 6.53 | 34.09 | 1.70 | 26.79 | 127 | 0.58 |
| 270 | 6.73 | 34.09 | 1.98 | 129 | 400 | 5.91 | 34.18 | 0.75 | 26.94 | 113 | 0.71 |
| 311 | 6.44 | 34.09 | 1.62 | 126 | 500 | 5.34 | 34.24 | 0.56 | 27.06 | 101 | 0.82 |
| 358 | 5.94 | 34.09 | 1.33 | 119 | 600 | 4.94 | 34.31 | 0.44 | 27.16 | 92 | 0.92 |
| 405 | 5.90 | 34.18 | 0.74 | 112 | 700 | 4.60 | 34.36 | 0.41 | 27.24 | 84 | 1.01 |
| 451 | 5.62 | 34.21 | 0.71 | 107 | 800 | 4.34 | 34.42 | 0.43 | 27.31 | 77 | 1.10 |
| 508 | 5.29 | 34.25 | 0.54 | 100 | 1000 | 3.73 | 34.48 | 0.53 | 27.43 | 66 | 1.26 |
| 574 | 5.04 | 34.29 | 0.45 | 94 | | | | | | | |
| 668 | 4.68 | 34.34 | 0.42 | 87 | | | | | | | |
| 766 | 4.44 | 34.40 | 0.40 | 80 | | | | | | | |
| 860 | 4.15 | 34.44 | 0.48 | 74 | | | | | | | |
| 979 | 3.81 | 34.47 | 0.51 | 68 | | | | | | | |
| 1025 | 3.64 | 34.49 | 0.54 | 65 | | | | | | | |

a) Bathythermograph feature is reflected in salinity curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T_3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T_3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

STRANGER; October 31, 1958; 1745 GCT; 36°38'N, 123°56'W; sounding, 2080 fm; wind, 140°, force 4; weather, cloudy; sea, very rough; wire angle, 11°. 6370

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.12 | 33.24 | 5.87 | 333 | 0 | 15.12 | 33.24 | 5.87 | 24.62 | 333 | 0.00 |
| 12 | 15.12 | 33.26 | 5.90 | 332 | 10 | 15.12 | 33.25 | 5.89 | 24.62 | 333 | 0.03 |
| 40 | 12.62 | 33.25 | 5.26 | 284 | 20 | 15.12 | 33.26 | 5.90 | 24.63 | 332 | 0.07 |
| 58 | 10.36 | 33.39 | 4.33 | 234 | 30 | 14.95 | 33.26 | 5.87 | 24.66 | 329 | 0.10 |
| 73 | 9.68 | 33.43 | 4.37 | 220 | 50 | 11.07 | 33.34 | 4.60 | 25.49 | 250 | 0.16 |
| 95 | 8.94 | 33.57 | 4.39 | 199 | 75 | 9.62 | 33.44 | 4.37 | 25.82 | 219 | 0.22 |
| 122 | 8.62 | 33.73 | 3.58 | 182 | 100 | 8.82 | 33.61 | 4.34 | 26.08 | 194 | 0.27 |
| 150 | 8.31 | 33.87 | 3.22 | 167 | 150 | 8.31 | 33.87 | 3.22 | 26.37 | 167 | 0.36 |
| 178 | 8.02 | 33.97 | 2.64 | 156 | 200 | 7.81 | 34.03 | 2.28 | 26.57 | 148 | 0.44 |
| 196 | 7.88 | 34.03 | 2.32 | 149 | 250 | 7.21 | 34.06 | 1.99 | 26.67 | 138 | 0.51 |
| 234 | 7.38 | 34.05 | 2.11 | 141 | 300 | 6.87 | 34.13 | 1.50 | 26.78 | 128 | 0.58 |
| 279 | 6.96 | 34.07 | 1.73 | 134 | 400 | 6.25 | 34.19 | 0.86 | 26.90 | 116 | 0.71 |
| 321 | 6.79 | 34.16 | 1.23 | 125 | 500 | 5.69 | 34.27 | 0.54 | 27.04 | 103 | 0.82 |
| 373 | 6.47 | 34.18 | 0.92 | 120 | 600 | 5.16 | 34.33 | 0.52 | 27.15 | 92 | 0.92 |
| 419 | 6.06 | 34.20 | 0.81 | 113 | 700 | 4.69 | 34.36 | 0.46 | 27.23 | 85 | 1.02 |
| 474 | 5.86 | 34.25 | 0.63 | 107 | 800 | 4.34 | 34.42 | 0.52 | 27.31 | 77 | 1.11 |
| 524 | 5.51 | 34.30 | 0.50 | 99 | 1000 | 3.73 | 34.45 | 0.54 | 27.40 | 68 | 1.27 |
| 597 | 5.17 | 34.33 | 0.52 | 92 | | | | | | | |
| 697 | 4.70 | 34.36 | 0.46 | 85 | | | | | | | |
| 797 | 4.35 | 34.42 | 0.52 | 77 | | | | | | | |
| 897 | 4.04 | 34.43 | 0.49 | 73 | | | | | | | |
| 1015 | 3.68 | 34.46 | 0.57 | 68 | | | | | | | |
| 1061 | 3.55 | 34.52 | 0.80 | 62 | | | | | | | |

STRANGER; October 31, 1958; 1202 GCT; 36°19'N, 124°36.5'W; sounding, 2160 fm; wind, 180°, force 5; weather, cloudy; sea, rough; wire angle, 10°. 6380

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.62 | 33.15 | 5.44 | 372 | 0 | 16.62 | 33.15 | 5.44 | 24.21 | 372 | 0.00 |
| 11 | 16.63 | 33.17 | 5.53 | 371 | 10 | 16.63 | 33.16 | 5.52 | 24.22 | 372 | 0.04 |
| 40 | 16.28 | 33.10 | 5.60 | 369 | 20 | 16.63 | 33.17 | 5.53 | 24.22 | 371 | 0.07 |
| 54 | 13.84 | 33.12 | 5.89 | 306 | 30 | 16.63 | 33.17 | 5.53 | 24.22 | 371 | 0.11 |
| 68 | 12.67 | 33.10 | 5.72 | 296 | 50 | 14.70 | 33.12 | 5.81 | 24.62 | 333 | 0.18 |
| 86 | 11.89 | 33.13 | 5.62 | 279 | 75 | 12.50 | 33.13 | 5.67 | 25.06 | 291 | 0.26 |
| 113 | 9.60 | 33.42 | 4.60 | 220 | 100 | 11.07 | 33.30 | 5.04 | 25.46 | 253 | 0.33 |
| 144 | 8.71 | 33.73 | 3.50 | 183 | 150 | 8.60 | 33.78 | 3.36 | 26.24 | 178 | 0.44 |
| 167 | 8.40 | 33.87 | 3.09 | 169 | 200 | 8.10 | 34.00 | 2.47 | 26.50 | 154 | 0.52 |
| 189 | 8.26 | 33.97 | 2.59 | 159 | 250 | 7.40 | 34.08 | 2.04 | 26.66 | 139 | 0.60 |
| 223 | 7.70 | 34.06 | 2.32 | 144 | 300 | 6.75 | 34.13 | 1.66 | 26.79 | 127 | 0.66 |
| 265 | 7.26 | 34.09 | 1.90 | 136 | 400 | 6.13 | 34.22 | 0.76 | 26.95 | 112 | 0.79 |
| 307 | 6.66 | 34.14 | 1.61 | 125 | 500 | 5.65 | 34.25 | 0.47 | 27.03 | 104 | 0.90 |
| 353 | 6.45 | 34.18 | 1.08 | 119 | 600 | 5.12 | 34.29 | 0.38 | 27.12 | 95 | 1.01 |
| 399 | 6.14 | 34.22 | 0.77 | 112 | 700 | 4.68 | 34.35 | 0.36 | 27.22 | 86 | 1.10 |
| 445 | 5.89 | 34.22 | 0.49 | 109 | 800 | 4.37 | 34.40 | 0.40 | 27.30 | 78 | 1.19 |
| 501 | 5.64 | 34.25 | 0.47 | 104 | 1000 | 3.82 | 34.45 | 0.55 | 27.39 | 70 | 1.36 |
| 566 | 5.30 | 34.27 | 0.41 | 98 | | | | | | | |
| 660 | 4.83 | 34.33 | 0.34 | 89 | | | | | | | |
| 759 | 4.48 | 34.38 | 0.38 | 82 | | | | | | | |
| 853 | 4.22 | 34.42 | 0.42 | 76 | | | | | | | |
| 969 | 3.88 | 34.44 | 0.51 | 71 | | | | | | | |
| 1016 | 3.78 | 34.47 | 0.58 | 68 | | | | | | | |

SIO

CCOFI
5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_{3}^{-5}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_{3}^{-5}$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

63.100 STRANGER; November 4, 1958; 0145 GCT; 35°40.5'N, 125°57'W; sounding, 2520 fm; wind, 360°, force 2; weather, clear; sea, moderate; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.92 | 33.08 | 5.38 | 407 | 0 | 17.92 | 33.08 | 5.38 | 23.84 | 407 | 0.00 |
| 11 | 17.88 | 33.10 | 5.01 | 404 | 10 | 17.89 | 33.09 | 5.02 | 23.87 | 405 | 0.04 |
| 40 | 17.86 | 33.08 | 5.24 | 406 | 20 | 17.87 | 33.09 | 5.04 | 23.87 | 405 | 0.08 |
| 77 | 13.30 | 33.00 | 6.04 | 315 | 30 | 17.87 | 33.09 | 5.08 | 23.87 | 405 | 0.12 |
| 86 | 12.71 | 33.12 | 5.79 | 295 | 50 | 17.00 | 33.01 | 5.36 | 24.01 | 391 | 0.20 |
| 114 | 11.32 | 33.24 | 5.26 | 262 | 75 | 13.50 | 33.00 | 6.03 | 24.77 | 319 | 0.29 |
| 145 | 9.06 | 33.42 | 4.47 | 212 | 100 | 12.01 | 33.18 | 5.51 | 25.20 | 278 | 0.37 |
| 167 | 8.60 | 33.59 | 4.27 | 192 | 150 | 8.92 | 33.47 | 4.41 | 25.96 | 205 | 0.49 |
| 190 | 8.28 | 33.78 | 4.25 | 174 | 200 | 8.18 | 33.83 | 4.20 | 26.35 | 168 | 0.58 |
| 226 | 7.85 | 33.93 | 3.56 | 156 | 250 | 7.40 | 33.97 | 3.25 | 26.58 | 147 | 0.66 |
| 268 | 7.01 | 33.98 | 2.98 | 141 | 300 | 6.63 | 33.97 | 2.62 | 26.68 | 137 | 0.74 |
| 308 | 6.56 | 33.97 | 2.49 | 136 | 400 | 5.75 | 34.05 | 1.29 | 26.86 | 120 | 0.87 |
| 354 | 6.26 | 33.99 | 1.85 | 131 | 500 | 5.27 | 34.15 | 0.69 | 27.00 | 107 | 0.99 |
| 401 | 5.74 | 34.05 | 1.28 | 120 | 600 | 5.09 | 34.30 | 0.38 | 27.13 | 94 | 1.10 |
| 447 | 5.48 | 34.11 | 0.96 | 113 | 700 | 4.63 | 34.33 | 0.34 | 27.21 | 86 | 1.20 |
| 503 | 5.26 | 34.16 | 0.68 | 106 | 800 | 4.26 | 34.39 | 0.40 | 27.29 | 79 | 1.29 |
| 568 | 5.22 | 34.29 | 0.40 | 96 | 1000 | 3.62 | 34.46 | 0.52 | 27.42 | 67 | 1.45 |
| 661 | 4.78 | 34.31 | 0.34 | 90 | | | | | | | |
| 759 | 4.40 | 34.36 | 0.35 | 82 | | | | | | | |
| 852 | 4.08 | 34.43 | 0.44 | 74 | | | | | | | |
| 968 | 3.71 | 34.45 | 0.46 | 69 | | | | | | | |
| 1014 | 3.58 | 34.49 | 0.54 | 64 | | | | | | | |

67.60 STRANGER; October 30, 1958; 1750 GCT; 36°29.5'N, 122°48'W; sounding, 1450 fm; wind, 230°, force 2; weather, overcast; sea, slight; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.46 | 33.40 | 5.66 | 329 | 0 | 15.46 | 33.40 | 5.66 | 24.66 | 329 | 0.00 |
| 11 | 15.46 | 33.40 | 5.73 | 329 | 10 | 15.46 | 33.40 | 5.72 | 24.66 | 329 | 0.03 |
| 40 | 15.26 | 33.46 | 5.59 | 321 | 20 | 15.44 | 33.40 | 5.72 | 24.66 | 329 | 0.06 |
| 54 | 12.10 | 33.48 | 4.33 | 257 | 30 | 15.40 | 33.42 | 5.71 | 24.69 | 326 | 0.10 |
| 69 | 10.86 | 33.57 | 3.96 | 230 | 50 | 13.72 | 33.48 | 4.86 | 25.09 | 288 | 0.16 |
| 87 | 10.12 | 33.64 | 3.74 | 212 | 75 | 10.59 | 33.60 | 3.89 | 25.78 | 222 | 0.22 |
| 116 | 9.36 | 33.75 | 3.48 | 192 | 100 | 9.72 | 33.68 | 3.62 | 26.00 | 202 | 0.28 |
| 147 | 9.02 | 33.92 | 2.74 | 174 | 150 | 9.01 | 33.97 | 2.70 | 26.33 | 170 | 0.37 |
| 170 | 8.94 | 34.02 | 2.35 | 165 | 200 | 8.61 | 34.05 | 2.15 | 26.46 | 158 | 0.45 |
| 193 | 8.70 | 34.04 | 2.20 | 160 | 250 | 8.18 | 34.13 | 1.68 | 26.59 | 146 | 0.53 |
| 230 | 8.30 | 34.09 | 1.90 | 151 | 300 | 7.43 | 34.14 | 1.50 | 26.70 | 136 | 0.60 |
| 272 | 8.01 | 34.16 | 1.49 | 141 | 400 | 6.63 | 34.23 | 0.82 | 26.89 | 118 | 0.74 |
| 314 | 7.18 | 34.13 | 1.49 | 132 | 500 | 5.98 | 34.28 | 0.55 | 27.01 | 106 | 0.85 |
| 360 | 6.88 | 34.20 | 1.11 | 123 | 600 | 5.38 | 34.33 | 0.44 | 27.13 | 94 | 0.96 |
| 407 | 6.60 | 34.23 | 0.79 | 117 | 700 | 4.76 | 34.36 | 0.44 | 27.22 | 86 | 1.05 |
| 454 | 6.30 | 34.23 | 0.67 | 113 | 800 | 4.39 | 34.40 | 0.46 | 27.29 | 79 | 1.14 |
| 510 | 5.92 | 34.30 | 0.52 | 103 | 1000 | 3.77 | 34.49 | 0.67 | 27.43 | 66 | 1.30 |
| 576 | 5.54 | 34.33 | 0.45 | 96 | | | | | | | |
| 670 | 4.90 | 34.34 | 0.43 | 89 | | | | | | | |
| 763 | 4.52 | 34.39 | 0.43 | 81 | | | | | | | |
| 864 | 4.18 | 34.42 | 0.50 | 75 | | | | | | | |
| 983 | 3.82 | 34.45 | 0.68 | 70 | | | | | | | |
| 1030 | 3.70 | 34.52 | 0.60 | 64 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; October 30, 1958; 2348 GCT; 36°08'N, 123°29.5'W; sounding, 1900 fm; wind, 200°, force 2; weather, cloudy; sea, slight; wire angle, 05°. 67.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.00 | 33.35 | 5.74 | 344 | 0 | (16.00) | (33.35) | (5.74) | (24.50) | (344) | (0.00) |
| 13 | 15.82 | 33.37 | 5.76 | 339 | 10 | 15.88 | 33.36 | 5.75 | 24.54 | 341 | 0.04 |
| 41 | 15.61 | 33.35 | 5.66 | 336 | 20 | 15.76 | 33.37 | 5.74 | 24.56 | 338 | 0.07 |
| 55 | 12.49 | 33.38 | 4.77 | 272 | 30 | 15.72 | 33.36 | 5.72 | 24.58 | 337 | 0.10 |
| 70 | 11.42 | 33.48 | 4.12 | 246 | 50 | 13.93 | 33.35 | 5.13 | 24.95 | 301 | 0.16 |
| 88 | 10.61 | 33.57 | 3.68 | 225 | 75 | 11.22 | 33.50 | 4.00 | 25.60 | 240 | 0.23 |
| 114 | 9.94 | 33.69 | 3.29 | 205 | 100 | 10.18 | 33.60 | 3.45 | 25.84 | 217 | 0.29 |
| 146 | 9.51 | 33.84 | 2.78 | 187 | 150 | 9.49 | 33.85 | 2.75 | 26.16 | 187 | 0.39 |
| 169 | 9.28 | 33.90 | 2.53 | 180 | 200 | 8.88 | 33.99 | 2.21 | 26.36 | 167 | 0.48 |
| 226 | 8.55 | 34.05 | 1.95 | 157 | 250 | 8.31 | 34.09 | 1.85 | 26.53 | 151 | 0.56 |
| 267 | 8.18 | 34.11 | 1.77 | 147 | 300 | 7.92 | 34.14 | 1.51 | 26.63 | 142 | 0.64 |
| 309 | 7.83 | 34.15 | 1.43 | 140 | 400 | 6.99 | 34.23 | 0.90 | 26.83 | 123 | 0.78 |
| 355 | 7.40 | 34.19 | 1.22 | 131 | 500 | 6.24 | 34.25 | 0.56 | 26.94 | 112 | 0.90 |
| 401 | 6.99 | 34.23 | 0.88 | 122 | 600 | 5.52 | 34.32 | 0.40 | 27.10 | 97 | 1.01 |
| 447 | 6.68 | 34.25 | 0.69 | 117 | 700 | 5.01 | 34.37 | 0.34 | 27.19 | 89 | 1.11 |
| 503 | 6.22 | 34.25 | 0.55 | 111 | 800 | 4.55 | 34.39 | 0.34 | 27.27 | 81 | 1.20 |
| 569 | 5.70 | 34.29 | 0.45 | 102 | 1000 | 3.88 | 34.47 | 0.48 | 27.40 | 69 | 1.37 |
| 663 | 5.20 | 34.36 | 0.35 | 91 | | | | | | | |
| 761 | 4.71 | 34.38 | 0.33 | 83 | | | | | | | |
| 855 | 4.35 | 34.42 | 0.36 | 77 | | | | | | | |
| 971 | 3.98 | 34.47 | 0.44 | 69 | | | | | | | |
| 1018 | 3.82 | 34.47 | 0.50 | 66 | | | | | | | |

STRANGER; October 31, 1958; 0558 GCT; 35°48'N, 124°12.5'W; sounding, 2180 fm; wind, 210°, force 4; weather, cloudy; sea, moderate; wire angle, 07°. 67.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.87 | 33.34 | 5.76 | 342 | 0 | 15.87 | 33.34 | 5.76 | 24.52 | 342 | 0.00 |
| 12 | 15.89 | 33.36 | 5.66 | 341 | 10 | 15.89 | 33.35 | 5.67 | 24.53 | 341 | 0.03 |
| 40 | 15.02 | 33.37 | 5.51 | 323 | 20 | 15.81 | 33.37 | 5.58 | 24.56 | 339 | 0.07 |
| 59 | 11.26 | 33.33 | 4.67 | 254 | 30 | 15.70 | 33.37 | 5.56 | 24.58 | 336 | 0.10 |
| 73 | 10.45 | 33.36 | 4.59 | 238 | 50 | 12.10 | 33.34 | 4.86 | 25.30 | 268 | 0.16 |
| 97 | 9.34 | 33.58 | 3.79 | 204 | 75 | 10.37 | 33.37 | 4.57 | 25.65 | 235 | 0.22 |
| 124 | 8.95 | 33.79 | 3.01 | 183 | 100 | 9.23 | 33.62 | 3.65 | 26.02 | 200 | 0.28 |
| 156 | 8.54 | 33.93 | 2.73 | 166 | 150 | 8.60 | 33.92 | 2.78 | 26.35 | 168 | 0.37 |
| 183 | 8.21 | 33.96 | 2.54 | 159 | 200 | 8.12 | 34.04 | 2.05 | 26.52 | 152 | 0.45 |
| 205 | 8.10 | 34.05 | 2.02 | 151 | 250 | 7.48 | 34.09 | 2.10 | 26.66 | 139 | 0.53 |
| 242 | 7.60 | 34.09 | 2.11 | 141 | 300 | 6.80 | 34.11 | 1.46 | 26.77 | 128 | 0.60 |
| 288 | 6.88 | 34.10 | 1.63 | 130 | 400 | 6.20 | 34.16 | 0.92 | 26.89 | 118 | 0.72 |
| 330 | 6.69 | 34.14 | 1.26 | 125 | 500 | 5.58 | 34.22 | 0.54 | 27.02 | 105 | 0.84 |
| 386 | 6.23 | 34.15 | 0.96 | 119 | 600 | 5.05 | 34.28 | 0.54 | 27.12 | 95 | 0.95 |
| 432 | 6.00 | 34.18 | 0.73 | 114 | 700 | 4.67 | 34.37 | | 27.23 | 84 | 1.04 |
| 488 | 5.65 | 34.22 | 0.55 | 106 | 800 | 4.37 | 34.40 | | 27.29 | 79 | 1.13 |
| 540 | 5.37 | 34.23 | 0.52 | 102 | 1000 | 3.82 | 34.48 | 0.57 | 27.40 | 68 | 1.29 |
| 616 | 4.97 | 34.31 | 0.54 | 92 | | | | | | | |
| 719 | 4.61 | 34.38 | 0.38 | 83 | | | | | | | |
| 822 | 4.31 | 34.40 | 0.54a) | 78 | | | | | | | |
| 926 | 4.03 | 34.43 | 0.54 | 73 | | | | | | | |
| 1048 | 3.70 | 34.49 | 0.59 | 66 | | | | | | | |
| 1102 | 3.60 | 34.49 | 0.70 | 65 | | | | | | | |

a) Alternate value, 0.63 ml/L.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_{-5}^{3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_{-5}^{3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

67.100 STRANGER; November 4, 1958; 0653 GCT; 35°07.5'N, 125°36'W; sounding, 2500 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.24 | 33.10 | 5.27 | 390 | 0 | 17.24 | 33.10 | 5.27 | 24.02 | 390 | 0.00 |
| 12 | 17.24 | 33.11 | 5.31 | 389 | 10 | 17.24 | 33.11 | 5.30 | 24.02 | 390 | 0.04 |
| 40 | 14.87 | 33.16 | 5.70 | 335 | 20 | 16.92 | 33.13 | 5.44 | 24.11 | 381 | 0.08 |
| 73 | 12.67 | 33.17 | 5.20 | 290 | 30 | 16.00 | 33.14 | 5.58 | 24.34 | 359 | 0.11 |
| 86 | 11.90 | 33.21 | 5.33 | 274 | 50 | 14.17 | 33.16 | 5.57 | 24.76 | 320 | 0.18 |
| 95 | 11.04 | 33.26 | 4.94 | 256 | 75 | 12.54 | 33.18 | 5.22 | 25.10 | 288 | 0.26 |
| 123 | 9.25 | 33.50 | 4.29 | 209 | 100 | 10.68 | 33.30 | 4.80 | 25.53 | 246 | 0.33 |
| 155 | 8.73 | 33.74 | 3.61 | 183 | 150 | 8.80 | 33.71 | 3.76 | 26.17 | 186 | 0.43 |
| 181 | 8.39 | 33.91 | 3.15 | 165 | 200 | 8.11 | 33.85 | 3.08 | 26.45 | 159 | 0.52 |
| 202 | 8.09 | 33.95 | 3.57u | 158 | 250 | 7.34 | 33.88 | 2.85 | 26.60 | 145 | 0.60 |
| 238 | 7.49 | 33.98 | 2.92 | 148 | 300 | 6.66 | 34.00 | 2.40 | 26.70 | 135 | 0.67 |
| 284 | 6.83 | 34.00 | 2.56 | 137 | 400 | 5.94 | 34.12 | 1.04 | 26.90 | 117 | 0.80 |
| 324 | 6.39 | 34.01 | 2.11 | 131 | 500 | 5.30 | 34.16 | 0.65 | 27.00 | 107 | 0.92 |
| 380 | 6.06 | 34.09 | 1.36 | 121 | 600 | 5.06 | 34.30 | 0.37 | 27.14 | 94 | 1.03 |
| 426 | 5.76 | 34.15 | 0.86 | 113 | 700 | 4.64 | 34.34 | 0.31 | 27.21 | 86 | 1.12 |
| 482 | 5.39 | 34.15 | 0.71 | 108 | 800 | 4.39 | 34.39 | 0.36 | 27.28 | 80 | 1.21 |
| 533 | 5.20 | 34.22 | 0.54 | 101 | 1000 | 3.78 | 34.45 | 0.55 | 27.40 | 69 | 1.38 |
| 605 | 5.04 | 34.31 | 0.35 | 93 | | | | | | | |
| 708 | 4.62 | 34.34 | 0.30 | 86 | | | | | | | |
| 811 | 4.36 | 34.40 | 0.38 | 79 | | | | | | | |
| 914 | 4.02 | 34.41 | 0.44 | 75 | | | | | | | |
| 1034 | 3.69 | 34.46 | 0.59 | 68 | | | | | | | |
| 1081 | 3.56 | 34.50 | 0.64 | 64 | | | | | | | |

70.90 STRANGER; November 4, 1958; 1951 GCT; 34°54'N, 124°30.5'W; sounding, 2370 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.66 | 33.39 | 5.48 | 356 | 0 | (16.66) | (33.39) | (5.48) | (24.37) | (356) | (0.00) |
| 12 | 16.66 | 33.37 | 5.37 | 357 | 10 | 16.66 | 33.38 | 5.36 | 24.37 | 356 | 0.04 |
| 39 | 16.51 | 33.40 | 5.36 | 352 | 20 | 16.65 | 33.38 | 5.37 | 24.37 | 356 | 0.07 |
| 57 | 13.46 | 33.33 | 5.42 | 294 | 30 | 16.60 | 33.38 | 5.36 | 24.39 | 355 | 0.11 |
| 71 | 10.88 | 33.40 | 4.42 | 242 | 50 | 16.03 | 33.38 | 5.37 | 24.52 | 342 | 0.18 |
| 92 | 9.68 | 33.63 | 3.51 | 206 | 75 | 10.58 | 33.45 | 4.20 | 25.66 | 234 | 0.25 |
| 118 | 9.10 | 33.77 | 2.96 | 186 | 100 | 9.45 | 33.68 | 3.31 | 26.04 | 198 | 0.30 |
| 148 | 8.65 | 33.91 | 2.53 | 169 | 150 | 8.62 | 33.92 | 2.50 | 26.35 | 168 | 0.40 |
| 174 | 8.32 | 34.00 | 2.19 | 158 | 200 | 8.01 | 34.02 | 2.00 | 26.52 | 152 | 0.48 |
| 195 | 8.04 | 34.02 | 2.02 | 152 | 250 | 7.66 | 34.12 | 1.41 | 26.66 | 139 | 0.55 |
| 228 | 7.83 | 34.10 | 1.61 | 143 | 300 | 7.18 | 34.12 | 1.18 | 26.75 | 131 | 0.62 |
| 270 | 7.50 | 34.14 | 1.26 | 136 | 400 | 6.26 | 34.20 | 0.69 | 26.91 | 115 | 0.75 |
| 309 | 7.04 | 34.14 | 1.15 | 130 | 500 | 5.62 | 34.26 | 0.42 | 27.04 | 103 | 0.86 |
| 362 | 6.44 | 34.15 | 0.95 | 122 | 600 | 5.13 | 34.33 | 0.30 | 27.15 | 92 | 0.97 |
| 406 | 6.23 | 34.21 | 0.68 | 114 | 700 | 4.76 | 34.33 | 0.29 | 27.20 | 88 | 1.06 |
| 461 | 5.84 | 34.22 | 0.57 | 109 | 800 | 4.44 | 34.41 | 0.31 | 27.29 | 79 | 1.15 |
| 509 | 5.58 | 34.27 | 0.40 | 102 | 1000 | 3.81 | 34.52 | 0.46 | 27.45 | 64 | 1.31 |
| 579 | 5.22 | 34.33 | 0.32 | 93 | | | | | | | |
| 678 | 4.83 | 34.32 | 0.28 | 90 | | | | | | | |
| 778 | 4.50 | 34.40 | 0.29 | 80 | | | | | | | |
| 876 | 4.22 | 34.43 | 0.39 | 75 | | | | | | | |
| 997 | 3.82 | 34.52 | 0.45 | 64 | | | | | | | |
| 1042 | 3.72 | 34.52 | 0.57 | 63 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; November 4, 1958; 1202 GCT; 34°28'N, 125°13'W; sounding, 2480 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 18°. 70.100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.66 | 33.13 | 5.43 | 375 | 0 | 16.66 | 33.13 | 5.43 | 24.18 | 375 | 0.00 |
| 11 | 16.62 | 33.12 | 5.47 | 375 | 10 | 16.63 | 33.12 | 5.46 | 24.18 | 375 | 0.04 |
| 38 | 15.77 | 33.16 | 5.67 | 353 | 20 | 16.43 | 33.12 | 5.55 | 24.23 | 370 | 0.07 |
| 57 | 13.18 | 33.13 | 5.84 | 303 | 30 | 16.05 | 33.15 | 5.76 | 24.34 | 360 | 0.11 |
| 71 | 12.52 | 33.12 | 5.59 | 292 | 50 | 14.50 | 33.16 | 5.80 | 24.68 | 328 | 0.18 |
| 92 | 11.59 | 33.22 | 5.28 | 268 | 75 | 12.35 | 33.13 | 5.54 | 25.10 | 288 | 0.26 |
| 120 | 9.42 | 33.39 | 4.70 | 220 | 100 | 10.88 | 33.28 | 5.09 | 25.48 | 251 | 0.33 |
| 148 | 8.88 | 33.58 | 3.99 | 197 | 150 | 8.85 | 33.59 | 3.93 | 26.06 | 196 | 0.44 |
| 174 | 8.68 | 33.76 | 3.52 | 180 | 200 | 8.35 | 33.89 | 3.05 | 26.38 | 166 | 0.53 |
| 194 | 8.41 | 33.86 | 3.12 | 170 | 250 | 7.58 | 34.00 | 2.36 | 26.57 | 148 | 0.61 |
| 228 | 7.97 | 33.98 | 2.57 | 154 | 300 | 6.85 | 34.02 | 2.03 | 26.68 | 136 | 0.68 |
| 270 | 7.25 | 34.00 | 2.18 | 143 | 400 | 6.02 | 34.09 | 1.12 | 26.85 | 121 | 0.82 |
| 308 | 6.77 | 34.02 | 1.99 | 135 | 500 | 5.46 | 34.22 | 0.65 | 27.03 | 104 | 0.93 |
| 360 | 6.2 | 34.04 | 1.59 | 126 | 600 | 5.27 | 34.32 | 0.40 | 27.13 | 94 | 1.04 |
| 404 | 6.01 | 34.10 | 1.11 | 120 | 700 | 4.79 | 34.37 | 0.34 | 27.23 | 85 | 1.14 |
| 456 | 5.72 | 34.18 | 0.76 | 110 | 800 | 4.44 | 34.42 | 0.40 | 27.30 | 78 | 1.22 |
| 504 | 5.44 | 34.23 | 0.64 | 103 | 1000 | 3.73 | 34.44 | 0.50 | 27.39 | 70 | 1.39 |
| 575 | 5.34 | 34.31 | 0.42 | 96 | | | | | | | |
| 672 | 4.89 | 34.34 | 0.33 | 89 | | | | | | | |
| 770 | 4.54 | 34.42 | 0.38 | 79 | | | | | | | |
| 867 | 4.22 | 34.43 | 0.47 | 75 | | | | | | | |
| 984 | 3.78 | 34.43 | 0.47 | 71 | | | | | | | |
| 1028 | 3.64 | 34.46 | 0.54 | 67 | | | | | | | |

STRANGER; October 29, 1958; 2245 GCT; 35°29'N, 121°37'W; sounding, 504 fm; wind, 320°, force 2; weather, fog; sea, rough; wire angle, 02°. 73.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 15.97 | 33.43 | 5.67 | 338 | 0 | 16.0 | (33.43) | (5.67) | (24.56) | (338) | (0.00) |
| 17 | 15.66 | 33.39 | 5.99 | 334 | 10 | 15.80 | 33.41 | 5.81 | 24.59 | 336 | 0.03 |
| 45 | 13.10 | 33.39 | 4.77 | 283 | 20 | 15.63 | 33.39 | 5.99 | 24.62 | 334 | 0.07 |
| 60 | 12.07 | 33.45 | 4.73 | 259 | 30 | 15.58 | 33.38 | 5.99 | 24.62 | 333 | 0.10 |
| 74 | 10.92 | 33.57 | 4.15 | 230 | 50 | 12.79 | 33.41 | 4.75 | 25.23 | 275 | 0.16 |
| 92 | 10.40 | 33.64 | 3.56 | 216 | 75 | 10.89 | 33.57 | 4.14 | 25.71 | 229 | 0.22 |
| 121 | 10.06 | 33.73 | 3.18 | 205 | 100 | 10.30 | 33.66 | 3.42 | 25.88 | 213 | 0.28 |
| 152 | 9.57 | 33.85 | 3.07 | 187 | 150 | 9.60 | 33.84 | 3.08 | 26.14 | 188 | 0.38 |
| 183 | 8.84 | 33.91 | 2.93 | 182 | 200 | 8.80 | 33.99 | 2.40 | 26.38 | 166 | 0.47 |
| 206 | 8.80 | 34.02 | 2.33 | 163 | 250 | 8.40 | 34.10 | 2.00 | 26.53 | 151 | 0.55 |
| 242 | 8.46 | 34.09 | 2.08 | 153 | 300 | 7.99 | 34.16 | 1.57 | 26.64 | 141 | 0.63 |
| 285 | 8.10 | 34.14 | 1.67 | 144 | 400 | 7.09 | 34.22 | 1.07 | 26.81 | 124 | 0.77 |
| 326 | 7.75 | 34.20 | 1.44 | 134 | 500 | 6.21 | 34.30 | 0.58 | 27.00 | 107 | 0.89 |
| 373 | 7.27 | 34.21 | 1.27 | 128 | 600 | 5.63 | 34.34 | 0.44 | 27.10 | 97 | 1.00 |
| 421 | 6.93 | 34.23 | 0.91 | 121 | 700 | 5.02 | 34.39 | 0.42 | 27.21 | 87 | 1.09 |
| 468 | 6.41 | 34.27 | 0.70 | 112 | 800 | (4.56) | (34.44) | | (27.31) | (77) | (1.18) |
| 526 | 6.02 | 34.31 | 0.49 | 104 | | | | | | | |
| 583 | 5.72 | 34.33a) | 0.44 | 98 | | | | | | | |
| 679 | 5.14 | 34.38a) | 0.42 | 88 | | | | | | | |
| 780 | 4.65 | 34.43a) | 0.42 | 80 | | | | | | | |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta^{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta^{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

73.60 STRANGER; October 29, 1958; 1850 GCT; 35°20'N, 121°52.5'W; sounding, 1008 fm; wind, calm; weather, fog; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.68 | 33.45 | 5.70 | 330 | 0 | 15.68 | 33.45 | 5.70 | 24.65 | 330 | 0.00 |
| 11 | 15.66 | 33.42 | 5.69 | 331 | 10 | 15.66 | 33.42 | 5.69 | 24.64 | 331 | 0.03 |
| 40 | 14.83 | 33.42 | 5.40 | 305 | 20 | 15.65 | 33.42 | 5.69 | 24.64 | 331 | 0.07 |
| 54 | 13.30 | 33.45 | 5.07 | 282 | 30 | 15.60 | 33.42 | 5.69 | 24.65 | 330 | 0.10 |
| 69 | 11.52 | 33.49 | 4.32 | 246 | 50 | 13.78 | 33.44 | 5.17 | 25.05 | 292 | 0.16 |
| 87 | 10.32 | 33.55 | 3.70 | 221 | 75 | 11.02 | 33.51 | 4.07 | 25.64 | 236 | 0.23 |
| 115 | 9.62 | 33.69 | 3.43 | 201 | 100 | 9.97 | 33.63 | 3.57 | 25.91 | 210 | 0.28 |
| 146 | 9.04 | 33.80 | 3.08 | 183 | 150 | 9.00 | 33.81 | 3.02 | 26.20 | 182 | 0.38 |
| 170 | 8.74 | 33.94 | 2.83 | 168 | 200 | 8.47 | 34.03 | 2.40 | 26.47 | 157 | 0.47 |
| 192 | 8.58 | 34.00 | 2.49 | 161 | 250 | 7.93 | 34.15 | 1.91 | 26.64 | 141 | 0.54 |
| 228 | 8.16 | 34.13 | 2.16 | 145 | 300 | 7.42 | 34.15 | 1.50 | 26.71 | 134 | 0.62 |
| 270 | 7.72 | 33.95r | 1.71 | | 400 | 6.73 | 34.27 | 0.87 | 26.91 | 115 | 0.75 |
| 311 | 7.36 | 34.15 | 1.43 | 133 | 500 | 6.00 | 34.31 | 0.60 | 27.03 | 104 | 0.86 |
| 358 | 7.09 | 34.20 | 1.19 | 126 | 600 | 5.50 | 34.32 | 0.46 | 27.10 | 97 | 0.97 |
| 404 | 6.69 | 34.28 | 0.85 | 114 | 700 | 4.95 | 34.36 | 0.42 | 27.20 | 88 | 1.06 |
| 452 | 6.31 | 34.29 | 0.74 | 109 | 800 | 4.54 | 34.41 | 0.50 | 27.28 | 80 | 1.16 |
| 508 | 5.96 | 34.31 | 0.58 | 103 | 1000 | 3.94 | 34.51 | 0.70 | 27.43 | 66 | 1.32 |
| 575 | 5.63 | 34.31 | - | 100 | | | | | | | |
| 671 | 5.09 | 34.36 | 0.39 | 90 | | | | | | | |
| 770 | 4.66 | 34.38 | 0.46 | 83 | | | | | | | |
| 865 | 4.30 | 34.47 | 0.61 | 73 | | | | | | | |
| 985 | 3.98 | 34.51 | 0.70 | 67 | | | | | | | |
| 1032 | 3.82 | 34.51 | 0.70 | 66 | | | | | | | |

73.70 STRANGER; October 29, 1958; 1245 GCT; 34°59.5'N, 122°36.5'W; sounding, 2160 fm; wind, 350°, force 5; weather, overcast; sea, rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.86 | 33.40 | 5.57 | 360 | 0 | (16.86) | (33.40) | (5.57) | (24.34) | (360) | (0.00) |
| 12 | 16.86 | 33.43 | 5.65 | 357 | 10 | 16.85 | 33.42 | 5.62 | 24.36 | 358 | 0.04 |
| 26 | 16.82 | 33.39 | 5.55 | 360 | 20 | 16.85 | 33.39 | 5.59 | 24.35 | 359 | 0.07 |
| 41 | 12.68 | 33.14 | 5.80 | 293 | 30 | 16.81 | 33.39 | 5.54 | 24.35 | 359 | 0.11 |
| 70 | 11.04 | 33.53 | 3.91 | 237 | 50 | 11.89 | 33.23 | 5.33 | 25.27 | 271 | 0.17 |
| 89 | 10.38 | 33.58 | 3.77 | 220 | 75 | 10.84 | 33.55 | 3.86 | 25.69 | 231 | 0.23 |
| 116 | 9.26 | 33.73 | 3.67 | 192 | 100 | 9.72 | 33.60 | 3.77 | 25.93 | 208 | 0.29 |
| 148 | 8.74 | 33.87 | 3.10 | 173 | 150 | 8.72 | 33.89 | 3.04 | 26.32 | 172 | 0.38 |
| 169 | 8.61 | 34.00 | 2.22 | 162 | 200 | 8.32 | 34.10 | 1.89 | 26.54 | 150 | 0.47 |
| 191 | 8.39 | 34.07 | 1.99 | 153 | 250 | 7.63 | 34.12 | 1.71 | 26.66 | 140 | 0.54 |
| 228 | 8.06 | 34.14 | 1.72 | 144 | 300 | 6.79 | 34.07 | 1.71 | 26.74 | 132 | 0.61 |
| 268 | 7.28 | 34.09 | 1.70 | 137 | 400 | 6.08 | 34.15 | 0.92 | 26.90 | 117 | 0.74 |
| 310 | 6.64 | 34.07 | 1.71 | 130 | 500 | 5.42 | 34.21 | 0.61 | 27.02 | 105 | 0.86 |
| 357 | 6.28 | 34.14 | 1.26 | 120 | 600 | 5.09 | 34.33 | 0.49 | 27.16 | 92 | 0.96 |
| 403 | 6.05 | 34.15 | 0.88 | 117 | 700 | 4.74 | 34.35 | 0.46 | 27.22 | 86 | 1.05 |
| 449 | 5.67 | 34.18 | 0.70 | 110 | 800 | 4.45 | 34.41 | 0.48 | 27.29 | 79 | 1.14 |
| 506 | 5.40 | 34.22 | 0.60 | 104 | 1000 | 3.80 | 34.47 | 0.71 | 27.40 | 68 | 1.30 |
| 570 | 5.19 | 34.32 | 0.50 | 94 | | | | | | | |
| 663 | 4.85 | 34.34 | 0.48 | 89 | | | | | | | |
| 762 | 4.56 | 34.40 | 0.46 | 81 | | | | | | | |
| 855 | 4.28 | 34.43 | 0.57 | 76 | | | | | | | |
| 972 | 3.88 | 34.47 | 0.62 | 69 | | | | | | | |
| 1018 | 3.76 | 34.46 | 0.75 | 68 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

STRANGER; October 29, 1958; 0605 GCT; 34°39'N, 123°20'W; sounding, 2240 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 03°. 73.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.00 | 33.48 | 5.16 | 357 | 0 | 17.00 | 33.48 | 5.16 | 24.37 | 357 | 0.00 |
| 11 | 16.98 | 33.45 | 6.30r | 358 | 10 | 16.97 | 33.45 | 5.17 | 24.36 | 358 | 0.04 |
| 40 | 15.15 | 33.46 | 5.42 | 318 | 20 | 16.96 | 33.45 | 5.17 | 24.36 | 358 | 0.07 |
| 59 | 10.37 | 33.57 | 3.63 | 221 | 30 | 16.92 | 33.45 | 5.18 | 24.37 | 357 | 0.11 |
| 73 | 9.79 | 33.60 | 3.56 | 210 | 50 | 10.86 | 33.56 | 4.83 | 25.70 | 230 | 0.16 |
| 96 | 9.16 | 33.74 | 2.96 | 189 | 75 | 9.72 | 33.61 | 3.50 | 25.94 | 208 | 0.22 |
| 123 | 8.81 | 33.87 | 2.67 | 175 | 100 | 9.09 | 33.76 | 2.90 | 26.14 | 187 | 0.27 |
| 155 | 8.48 | 33.95 | 2.33 | 164 | 150 | 8.57 | 33.93 | 2.39 | 26.38 | 166 | 0.36 |
| 184 | 8.19 | 34.04 | 2.00 | 153 | 200 | 7.98 | 34.04 | 1.89 | 26.54 | 150 | 0.44 |
| 206 | 7.91 | 34.04 | 1.86 | 149 | 250 | 7.20 | 34.07 | 1.58 | 26.68 | 137 | 0.51 |
| 242 | 7.26 | 34.06 | 1.66 | 139 | 300 | 6.83 | 34.13 | 1.10 | 26.78 | 128 | 0.58 |
| 289 | 6.94 | 34.13 | 1.19 | 129 | 400 | 6.00 | 34.14 | 0.66 | 26.90 | 116 | 0.71 |
| 331 | 6.60 | 34.13 | 0.95 | 125 | 500 | 5.40 | 34.23 | 0.46 | 27.04 | 103 | 0.82 |
| 387 | 6.09 | 34.14 | 0.68 | 118 | 600 | 5.00 | 34.34 | 0.38 | 27.18 | 90 | 0.92 |
| 433 | 5.64 | 34.16 | 0.62 | 111 | 700 | 4.72 | 34.37 | 0.36 | 27.23 | 85 | 1.02 |
| 490 | 5.43 | 34.22 | 0.50 | 104 | 800 | 4.31 | 34.41 | 0.31 | 27.31 | 77 | 1.10 |
| 542 | 5.26 | 34.24 | 0.38 | 101 | 1000 | 3.74 | (34.47) | 0.60 | (27.42) | (67) | (1.26) |
| 617 | 4.93 | 34.36 | 0.38 | 88 | | | | | | | |
| 721 | 4.66 | 34.37 | 0.35 | 84 | | | | | | | |
| 826 | 4.21 | 34.42 | 0.32 | 76 | | | | | | | |
| 929 | 3.93 | 34.46 | 0.53 | 70 | | | | | | | |
| 1051 | 3.62 | 34.52u | 0.64 | | | | | | | | |
| 1098 | 3.50 | 34.46u | 0.78 | | | | | | | | |

STRANGER; November 5, 1958; 0141 GCT; 34°16.5'N, 124°03'W; sounding, 2120 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 26°. 73.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.58 | 33.39 | 5.80 | 354 | 0 | (16.58) | (33.39) | (5.80) | (24.40) | (354) | (0.00) |
| 11 | 16.59 | 33.38 | 5.51 | 355 | 10 | 16.59 | 33.39 | 5.53 | 24.39 | 355 | 0.04 |
| 37 | 16.33 | 33.35 | 5.56 | 351 | 20 | 16.52 | 33.37 | 5.51 | 24.40 | 354 | 0.07 |
| 69 | 11.64 | 33.28 | 4.96 | 264 | 30 | 16.44 | 33.36 | 5.52 | 24.41 | 353 | 0.11 |
| 81 | 10.38 | 33.48 | 4.26 | 228 | 50 | 13.50 | 33.29 | 5.21 | 24.99 | 298 | 0.17 |
| 89 | 9.91 | 33.45 | 4.40 | 222 | 75 | 11.12 | 33.34 | 4.68 | 25.49 | 250 | 0.24 |
| 115 | 8.67 | 33.62 | 3.88 | 191 | 100 | 9.00 | 33.48 | 4.35 | 25.95 | 207 | 0.30 |
| 144 | 8.32 | 33.86 | 3.57 | 168 | 150 | 8.27 | 33.88 | 3.51 | 26.38 | 166 | 0.39 |
| 169 | 8.08 | 33.95 | 3.01 | 158 | 200 | 7.70 | 34.01 | 2.65 | 26.56 | 148 | 0.47 |
| 188 | 7.81 | 33.99 | 2.86 | 151 | 250 | 7.27 | 34.10 | 1.84 | 26.70 | 136 | 0.54 |
| 221 | 7.54 | 34.04 | 2.15 | 144 | 300 | 6.83 | 34.11 | 1.44 | 26.76 | 129 | 0.61 |
| 262 | 7.13 | 34.11 | 1.72 | 133 | 400 | 6.17 | 34.22 | 0.70 | 26.95 | 112 | 0.74 |
| 299 | 6.84 | 34.11 | 1.45 | 129 | 500 | 5.63 | 34.26 | 0.58 | 27.04 | 103 | 0.85 |
| 349 | 6.35 | 34.16 | 1.01 | 120 | 600 | 5.15 | 34.31 | 0.52 | 27.14 | 93 | 0.95 |
| 391 | 6.20 | 34.22 | 0.71 | 113 | 700 | 4.67 | 34.38 | 0.52 | 27.24 | 84 | 1.05 |
| 443 | 5.90 | 34.24 | 0.67 | 108 | 800 | 4.37 | 34.43 | 0.52 | 27.32 | 76 | 1.14 |
| 491 | 5.66 | 34.26 | 0.59 | 103 | 1000 | 3.72 | 34.49 | 0.70 | 27.43 | 66 | 1.29 |
| 561 | 5.26 | 34.29 | 0.54 | 97 | | | | | | | |
| 658 | 4.83 | 34.36 | 0.50 | 87 | | | | | | | |
| 755 | 4.50 | 34.41 | 0.54 | 79 | | | | | | | |
| 853 | 4.18 | 34.45 | 0.50 | 73 | | | | | | | |
| 968 | 3.78 | 34.49 | 0.64 | 66 | | | | | | | |
| 1012 | 3.70 | 34.49 | 0.73 | 66 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_{-5}^{3}$<br>10 cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_{-5}^{3}$<br>10 cm/g | ΔD<br>dyn. m |

77.55 STRANGER; October 28, 1958; 0745 GCT; 34°54.5'N, 121°13'W; sounding, 260 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.55 | 33.38 | 5.46 | 333 | 0 | 15.55 | 33.38 | 5.46 | 24.63 | 333 | 0.00 |
| 11 | 15.54 | 33.40 | 5.73 | 331 | 10 | 15.54 | 33.40 | 5.71 | 24.64 | 331 | 0.03 |
| 29 | 15.42 | 33.42 | 5.78 | 327 | 20 | 15.49 | 33.41 | 5.75 | 24.66 | 329 | 0.07 |
| 38 | 15.40 | 33.40 | 5.56 | 328 | 30 | 15.41 | 33.40 | 5.70 | 24.68 | 327 | 0.10 |
| 46 | 14.44 | 33.42 | 5.59 | 306 | 50 | 13.60 | 33.41 | 5.23 | 25.06 | 291 | 0.16 |
| 55 | 12.81 | 33.40 | 4.81 | 276 | 75 | 11.03 | 33.56 | 3.95 | 25.67 | 233 | 0.23 |
| 63 | 12.42 | 33.44 | 4.66 | 266 | 100 | 10.14 | 33.72 | 3.27 | 25.95 | 206 | 0.28 |
| 74 | 11.04 | 33.55 | 3.99 | 234 | 150 | 9.56 | 33.91 | 2.45 | 26.20 | 183 | 0.38 |
| 91 | 10.44 | 33.64 | 3.55 | 217 | 200 | 8.92 | 34.04 | 2.29 | 26.40 | 164 | 0.47 |
| 99 | 10.18 | 33.71 | 3.31 | 207 | 250 | 8.00 | 34.06 | 2.15 | 26.56 | 148 | 0.55 |
| 116 | 9.78 | 33.82 | 2.82 | 193 | 300 | 7.32 | 34.11 | 1.88 | 26.70 | 136 | 0.62 |
| 138 | 9.62 | 33.87 | 2.51 | 187 | 400 | 6.71 | 34.20 | 1.61 | 26.85 | 121 | 0.75 |
| 164 | 9.44 | 33.95 | 2.38 | 178 | 500 | (6.06) | (34.29) | | (27.01) | (106) | (0.87) |
| 202 | 8.87 | 34.04 | 2.18 | 163 | | | | | | | |
| 265 | 7.70 | 34.07 | 2.14 | 144 | | | | | | | |
| 349 | 6.99 | 34.16 | 1.39 | 127 | | | | | | | |
| 464 | 6.31 | 34.27 | 0.67 | 110 | | | | | | | |

77.60 STRANGER; October 28, 1958; 1155 GCT; 34°45'N, 121°34'W; sounding, 410 fm; wind, 320°, force 4; weather, overcast; sea, very rough; wire angle, 03°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.92 | 33.26 | 371 | 0 | 16.92 | 33.26 | 24.22 | 371 | 0.00 |
| 11 | 16.94 | 33.25 | 372 | 10 | 16.92 | 33.25 | 24.21 | 372 | 0.04 |
| 40 | 16.65 | 33.22 | 368 | 20 | 16.92 | 33.24 | 24.21 | 372 | 0.07 |
| 73 | 11.56 | 33.28 | 263 | 30 | 16.90 | 33.24 | 24.21 | 372 | 0.11 |
| 87 | 10.67 | 33.55 | 227 | 50 | 14.51 | 33.23 | 24.74 | 322 | 0.18 |
| 96 | 9.86 | 33.50 | 218 | 75 | 11.54 | 33.28 | 25.37 | 262 | 0.25 |
| 124 | 9.00 | 33.73 | 188 | 100 | 9.63 | 33.51 | 25.87 | 214 | 0.31 |
| 156 | 8.76 | 33.95 | 168 | 150 | 8.80 | 33.93 | 26.33 | 170 | 0.41 |
| 184 | 8.30 | 34.00 | 157 | 200 | 8.20 | 34.03 | 26.51 | 154 | 0.49 |
| 206 | 8.18 | 34.05 | 152 | 250 | 8.07 | 34.18 | 26.65 | 140 | 0.57 |
| 242 | 8.14 | 34.16 | 143 | 300 | 7.47 | 34.24 | 26.77 | 128 | 0.64 |
| 290 | 7.57 | 34.23 | 130 | 400 | 7.00 | 34.28 | 26.88 | 118 | 0.76 |
| 332 | 7.28 | 34.25 | 125 | 500 | 6.30 | 34.33 | 27.01 | 106 | 0.88 |
| 389 | 7.03 | 34.27 | 120 | 600 | 5.52 | 34.33 | 27.10 | 97 | 0.99 |
| 436 | 6.82 | 34.33 | 113 | 700 | 4.87 | 34.38 | 27.22 | 86 | 1.09 |
| 492 | 6.38 | 34.33 | 107 | | | | | | |
| 544 | 5.93 | 34.31 | 103 | | | | | | |
| 620 | 5.38 | 34.34 | 94 | | | | | | |
| 726 | 4.79 | 34.40 | 83 | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| STRANGER; October 28, 1958; 1734 GCT; 34°27.5'N, 122°12'W; sounding, 2120 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 03°. | | | | | | | | | | | | 77.70 |
| 0 | 17.30 | 33.24 | 5.62 | 382 | 0 | 17.30 | 33.24 | 5.62 | 24.10 | 382 | 0.00 | |
| 11 | 17.30 | 33.22 | 5.63 | 382 | 10 | 17.29 | 33.22 | 5.63 | 24.10 | 382 | 0.04 | |
| 25 | 17.29 | 33.28 | 5.68 | 378 | 20 | 17.29 | 33.26 | 5.66 | 24.13 | 379 | 0.08 | |
| 40 | 16.77 | 33.42 | 5.64 | 356 | 30 | 16.86 | 33.41 | 5.66 | 24.35 | 359 | 0.11 | |
| 69 | 11.21 | 33.18 | 5.42 | 264 | 50 | 12.32 | 33.21 | 5.50 | 25.17 | 281 | 0.18 | |
| 88 | 9.92 | 33.39 | 4.88 | 227 | 75 | 11.20 | 33.35 | 5.06 | 25.48 | 251 | 0.24 | |
| 117 | 9.16 | 33.71 | 3.57 | 192 | 100 | 9.11 | 33.51 | 4.90 | 25.95 | 206 | 0.30 | |
| 149 | 8.73 | 33.87 | 3.07 | 173 | 150 | 8.70 | 33.88 | 3.02 | 26.31 | 172 | 0.40 | |
| 171 | 8.46 | 33.97 | 2.62 | 162 | 200 | 7.98 | 34.04 | 2.47 | 26.55 | 150 | 0.48 | |
| 193 | 8.09 | 34.04 | 2.49 | 151 | 250 | 7.24 | 34.06 | 2.23 | 26.67 | 138 | 0.55 | |
| 230 | 7.38 | 34.04 | 2.43 | 142 | 300 | 6.67 | 34.10 | 1.58 | 26.78 | 128 | 0.62 | |
| 271 | 7.12 | 34.09 | 1.75 | 134 | 400 | 5.99 | 34.19 | 0.91 | 26.94 | 112 | 0.75 | |
| 312 | 6.52 | 34.11 | 1.50 | 125 | 500 | 5.60 | 34.29 | 0.69 | 27.06 | 101 | 0.86 | |
| 359 | 6.31 | 34.17 | 1.01 | 118 | 600 | 5.18 | 34.36 | 0.36 | 27.18 | 90 | 0.96 | |
| 404 | 5.95 | 34.20 | 0.87 | 111 | 700 | 4.73 | 34.41 | 0.32 | 27.26 | 82 | 1.05 | |
| 451 | 6.10 | 34.31 | 0.75 | 105 | 800 | 4.43 | 34.43 | 0.36 | 27.32 | 77 | 1.14 | |
| 507 | 5.57 | 34.29 | 0.67 | 100 | 1000 | 3.82 | 34.50 | 0.65 | 27.41 | 68 | 1.29 | |
| 574 | 5.30 | 34.34 | 0.40 | 93 | | | | | | | | |
| 668 | 4.83 | 34.39 | 0.32 | 85 | | | | | | | | |
| 770 | 4.51 | 34.43 | 0.33 | 78 | | | | | | | | |
| 865 | 4.26 | 34.44 | 0.43 | 75 | | | | | | | | |
| 985 | 3.85 | 34.48 | 0.59 | 68 | | | | | | | | |
| 1033 | 3.74 | 34.47 | 0.75 | 68 | | | | | | | | |
| STRANGER; October 29, 1958; 0003 GCT; 34°07.5'N, 122°54.5'W; sounding, 2300 fm; wind, 350°, force 4; weather, partly cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | | | 77.80 |
| 2 | 16.96 | 33.42 | 5.49 | 360 | 0 | (16.96) | (33.42) | (5.49) | (24.33) | (360) | (0.00) | |
| 12 | 16.93 | 33.42 | 5.56 | 360 | 10 | 16.93 | 33.42 | 5.52 | 24.34 | 360 | 0.04 | |
| 40 | 16.64 | 33.39 | 5.58 | 355 | 20 | 16.87 | 33.42 | 5.56 | 24.35 | 359 | 0.07 | |
| 55 | 11.03 | 33.40 | 4.28 | 245 | 30 | 16.80 | 33.43 | 5.57 | 24.36 | 358 | 0.11 | |
| 68 | 9.91 | 33.48 | 4.14 | 220 | 50 | 12.00 | 33.39 | 4.51 | 25.38 | 261 | 0.17 | |
| 87 | 8.98 | 33.51 | 4.37 | 204 | 75 | 9.70 | 33.50 | 4.17 | 25.85 | 216 | 0.23 | |
| 114 | 9.00 | 33.81 | 2.97 | 182 | 100 | 8.73 | 33.57 | 3.90 | 26.06 | 196 | 0.28 | |
| 146 | 8.58 | 33.96 | 2.43 | 164 | 150 | 8.52 | 33.97 | 2.40 | 26.42 | 162 | 0.37 | |
| 167 | 8.34 | 34.01 | 2.31 | 157 | 200 | 7.91 | 34.04 | 1.97 | 26.56 | 149 | 0.45 | |
| 190 | 8.02 | 34.04 | 2.00 | 151 | 250 | 7.41 | 34.16 | 1.50 | 26.72 | 133 | 0.52 | |
| 224 | 7.56 | 34.06 | 1.84 | 143 | 300 | 6.99 | 34.17 | 1.10 | 26.79 | 126 | 0.59 | |
| 266 | 7.37 | 34.18 | 1.32 | 131 | 400 | 6.05 | 34.23 | 0.69 | 26.96 | 110 | 0.71 | |
| 307 | 6.90 | 34.17 | 1.08 | 125 | 500 | 5.56 | 34.27 | 0.61 | 27.06 | 101 | 0.82 | |
| 353 | 6.13 | 34.15 | 0.98 | 117 | 600 | 5.12 | 34.32 | 0.34 | 27.15 | 93 | 0.92 | |
| 399 | 6.06 | 34.23 | 0.70 | 111 | 700 | 4.62 | 34.34 | 0.33 | 27.21 | 86 | 1.02 | |
| 446 | 5.84 | 34.23 | 0.59 | 108 | 800 | 4.29 | 34.39 | 0.45 | 27.30 | 78 | 1.11 | |
| 501 | 5.56 | 34.28 | 0.61 | 101 | 1000 | 3.72 | 34.47 | 0.63 | 27.41 | 68 | 1.27 | |
| 567 | 5.28 | 34.31 | 0.37 | 95 | | | | | | | | |
| 661 | 4.79 | 34.34 | 0.32 | 88 | | | | | | | | |
| 760 | 4.40 | 34.35 | 0.36 | 83 | | | | | | | | |
| 854 | 4.14 | 34.46 | 0.54 | 72 | | | | | | | | |
| 971 | 3.78 | 34.47 | 0.56 | 69 | | | | | | | | |
| 1018 | 3.69 | 34.47 | 0.68 | 67 | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

77.90 STRANGER; November 5, 1958; 0650 GCT; 33°44'N, 123°38'W; sounding, 2240 fm; wind, 010°, force 6; weather, clear; sea, very rough; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.75 | 33.15 | 5.48 | 398 | 0 | 17.75 | 33.15 | 5.48 | 23.94 | 398 | 0.00 |
| 11 | 17.76 | 33.17 | 5.62 | 396 | 10 | 17.76 | 33.17 | 5.61 | 23.95 | 397 | 0.04 |
| 38 | 17.37 | 33.18 | 5.48 | 387 | 20 | 17.76 | 33.18 | 5.62 | 23.96 | 396 | 0.08 |
| 69 | 12.98 | 33.04 | 6.04 | 306 | 30 | 17.58 | 33.18 | 5.56 | 24.01 | 391 | 0.12 |
| 83 | 12.52 | 33.04 | 5.83 | 297 | 50 | 15.05 | 33.09 | 5.89 | 24.51 | 343 | 0.19 |
| 91 | 12.18 | 33.08 | 5.59 | 288 | 75 | 12.76 | 33.04 | 5.99 | 24.94 | 302 | 0.27 |
| 115 | 10.22 | 33.35 | 4.75 | 235 | 100 | 11.60 | 33.16 | 5.30 | 25.25 | 273 | 0.35 |
| 143 | 8.98 | 33.57 | 4.02 | 199 | 150 | 8.87 | 33.62 | 4.67 | 26.08 | 194 | 0.46 |
| 167 | 8.70 | 33.78 | 3.41 | 180 | 200 | 8.31 | 33.93 | 2.80 | 26.41 | 163 | 0.55 |
| 187 | 8.44 | 33.90 | 3.04 | 167 | 250 | 7.61 | 34.02 | 2.14 | 26.58 | 147 | 0.63 |
| 219 | 8.10 | 33.96 | 2.44 | 157 | 300 | 7.28 | 34.13 | 1.57 | 26.72 | 133 | 0.70 |
| 260 | 7.48 | 34.04 | 2.05 | 143 | 400 | 6.19 | 34.15 | 1.20 | 26.88 | 118 | 0.84 |
| 298 | 7.30 | 34.13 | 1.58 | 134 | 500 | 5.53 | 34.20 | 0.69 | 27.00 | 106 | 0.95 |
| 350 | 6.74 | 34.13 | 1.32 | 126 | 600 | 5.03 | 34.27 | 0.63 | 27.11 | 96 | 1.06 |
| 394 | 6.21 | 34.14 | 1.21 | 119 | 700 | 4.56 | 34.33 | 0.49 | 27.22 | 86 | 1.16 |
| 447 | 6.00 | 34.19 | 0.88 | 113 | 800 | 4.23 | 34.38 | 0.50 | 27.30 | 78 | 1.25 |
| 495 | 5.58 | 34.20 | 0.81 | 107 | 1000 | 3.75 | 34.48 | 0.68 | 27.43 | 66 | 1.40 |
| 565 | 5.22 | 34.25 | 0.66 | 99 | | | | | | | |
| 643 | 4.79 | 34.31a) | 0.57 | 89 | | | | | | | |
| 762 | 4.34 | 34.36a) | 0.40 | 81 | | | | | | | |
| 861 | 4.10 | 34.43a) | 0.61 | 74 | | | | | | | |
| 981 | 3.80 | 34.47a) | 0.66 | 68 | | | | | | | |
| 1027 | 3.68 | 34.52a) | 0.75 | 63 | | | | | | | |

80.51 STRANGER; October 27, 1958; 2235 GCT; 34°26.5'N, 120°32.5'W; sounding, 57 fm; wind, 320°, force 5; weather, clear; sea, very rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 17.84 | 33.43 | 5.50 | 379 | 0 | (17.84) | (33.43) | (5.50) | (24.13) | (379) | (0.00) |
| 12 | 16.85 | 33.40 | 5.59 | 359 | 10 | 17.66 | 33.43 | 5.51 | 24.17 | 375 | 0.04 |
| 34 | 14.97 | 33.35 | 5.69 | 323 | 20 | 15.23 | 33.36 | 5.78 | 24.67 | 328 | 0.07 |
| 50 | 13.40 | 33.37 | 5.24 | 290 | 30 | 15.08 | 33.35 | 5.79 | 24.71 | 324 | 0.10 |
| 74 | 12.29 | 33.44 | 4.54 | 264 | 50 | 13.40 | 33.37 | 5.24 | 25.07 | 290 | 0.17 |
| | | | | | 75 | (12.27) | (33.44) | (4.53) | (25.36) | (263) | (0.24) |

80.55 STRANGER; October 27, 1958; 2005 GCT; 34°22'N, 120°46'W; sounding, 320 fm; wind, 340°, force 5; weather, clear; sea, very rough; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 17.58 | 33.41 | 5.41 | 375 | 0 | 17.6 | (33.41) | (5.41) | (24.16) | (376) | (0.00) |
| 13 | 16.60 | 33.41 | 5.64 | 353 | 10 | 16.70 | 33.41 | 5.63 | 24.38 | 355 | 0.04 |
| 32 | 13.54 | 33.40 | 5.15 | 290 | 20 | 16.40 | 33.41 | 5.63 | 24.46 | 348 | 0.07 |
| 45 | 12.49 | 33.42 | 4.69 | 269 | 30 | 14.85 | 33.40 | 5.41 | 25.00 | 296 | 0.10 |
| 54 | 12.05 | 33.44 | 4.42 | 260 | 50 | 12.27 | 33.43 | 4.55 | 25.34 | 264 | 0.16 |
| 63 | 11.67 | 33.46 | 4.30 | 252 | 75 | 11.37 | 33.53 | 4.16 | 25.59 | 241 | 0.22 |
| 72 | 11.44 | 33.53 | 4.18 | 242 | 100 | 10.50 | 33.58 | 3.79 | 25.78 | 223 | 0.28 |
| 88 | 11.01 | 33.53 | 4.08 | 235 | 150 | 9.94 | 33.68 | 3.30 | 25.95 | 206 | 0.39 |
| 101 | 10.50 | 33.58 | 3.79 | 222 | 200 | 9.22 | 33.88 | 2.83 | 26.23 | 180 | 0.49 |
| 113 | 10.51 | 33.59 | 3.72 | 222 | 250 | 8.61 | 34.07 | 2.15 | 26.47 | 157 | 0.38 |
| 134 | 10.30 | 33.66 | 3.38 | 213 | 300 | 7.92 | 34.14 | 1.45 | 26.64 | 141 | 0.65 |
| 158 | 9.76 | 33.69 | 3.27 | 202 | 400 | 6.82 | 34.21 | 0.78 | 26.85 | 121 | 0.79 |
| 191 | 9.34 | 33.84 | 2.94 | 185 | 500 | 6.01 | 34.27 | 0.52 | 27.00 | 107 | 0.91 |
| 238 | 8.76 | 34.04 | 2.35 | 161 | | | | | | | |
| 313 | 7.72 | 34.16 | 1.25 | 137 | | | | | | | |
| 407 | 6.78 | 34.22 | 0.76 | 120 | | | | | | | |
| 543 | 5.62 | 34.30 | 0.42 | 100 | | | | | | | |

a) Salinity bottle numbers from 643 to 1027 meters, inclusive, were listed out of order on the data sheet. Since standard handling and titrating procedures were used, present order is assumed to be correct.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

STRANGER; October 27, 1958; 1645 GCT; 34°09.5'N, 121°07'W; sounding, 1040 fm; wind, 360°, force 6; weather, clear; sea, very rough; wire angle, 11°. 80.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.57 | 33.22 | 5.26 | 389 | 0 | 17.57 | 33.22 | 5.26 | 24.03 | 389 | 0.00 |
| 11 | 17.56 | 33.26 | 5.37 | 385 | 10 | 17.56 | 33.25 | 5.36 | 24.06 | 386 | 0.04 |
| 30 | 17.13 | 33.24 | 5.44 | 377 | 20 | 17.56 | 33.26 | 5.36 | 24.07 | 385 | 0.07 |
| 44 | 16.86 | 33.35 | 5.58 | 363 | 30 | 17.13 | 33.24 | 5.44 | 24.16 | 377 | 0.12 |
| 53 | 14.31 | 33.12 | 5.80 | 326 | 50 | 16.36 | 33.31 | 5.64 | 24.39 | 355 | 0.19 |
| 62 | 13.32 | 33.04 | 5.93 | 313 | 75 | 12.01 | 33.09 | 5.34 | 25.12 | 285 | 0.27 |
| 71 | 12.29 | 33.06 | 5.53 | 292 | 100 | 10.52 | 33.38 | 4.63 | 25.63 | 237 | 0.34 |
| 89 | 11.22 | 33.27 | 4.76 | 258 | 150 | 8.98 | 33.68 | 4.00 | 26.10 | 192 | 0.44 |
| 103 | 10.28 | 33.40 | 4.59 | 232 | 200 | 8.11 | 33.93 | 3.17 | 26.44 | 160 | 0.53 |
| 116 | 9.72 | 33.44 | 4.50 | 220 | 250 | 7.63 | 34.00 | 2.40 | 26.57 | 148 | 0.61 |
| 138 | 9.26 | 33.57 | 4.32 | 204 | 300 | 7.23 | 34.03 | 1.93 | 26.65 | 140 | 0.69 |
| 165 | 8.62 | 33.82 | 3.51 | 176 | 400 | 6.39 | 34.14 | 1.09 | 26.84 | 122 | 0.82 |
| 199 | 8.14 | 33.93 | 3.19 | 160 | 500 | 5.67 | 34.20 | 0.69 | 26.98 | 108 | 0.94 |
| 247 | 7.66 | 34.00 | 2.42 | 149 | | | | | | | |
| 323 | 7.00 | 34.05 | 1.72 | 136 | | | | | | | |
| 420 | 6.23 | 34.16 | 0.94 | 118 | | | | | | | |
| 552 | 5.18 | 34.22 | 0.52 | 101 | | | | | | | |

STRANGER; October 27, 1958; 1118 GCT; 33°48'N, 121°50.5'W; sounding, 1920 fm; wind, 320°, force 5; weather, cloudy; sea, rough; wire angle, 08°. 80.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 17.94 | 33.26 | 5.32 | 394 | 0 | (17.94) | (33.26) | (5.32) | (23.98) | (394) | (0.00) |
| 13 | 17.92 | 33.24 | 5.52 | 394 | 10 | 17.93 | 33.24 | 5.48 | 23.98 | 394 | 0.04 |
| 32 | 17.87 | 33.24 | 5.32 | 393 | 20 | 17.89 | 33.24 | 5.42 | 23.98 | 394 | 0.08 |
| 41 | 17.83 | 33.30 | 5.34 | 389 | 30 | 17.88 | 33.24 | 5.35 | 23.98 | 394 | 0.12 |
| 51 | 16.46 | 33.31 | 5.72 | 358 | 50 | 17.00 | 33.31 | 5.60 | 24.24 | 369 | 0.19 |
| 60 | 13.84 | 33.18 | - | 312 | 75 | 12.98 | 33.37 | 5.77 | 25.08 | 289 | 0.28 |
| 69 | 13.58 | 33.26 | 5.96 | 301 | 100 | 12.25 | 33.44 | 5.25 | 25.36 | 263 | 0.35 |
| 83 | 12.90 | 33.33 | 5.57 | 283 | 150 | 9.00 | 33.70 | 3.92 | 26.12 | 190 | 0.46 |
| 96 | 12.50 | 33.44 | 5.33 | 268 | 200 | 8.32 | 33.91 | 3.51 | 26.40 | 164 | 0.55 |
| 110 | 11.24 | 33.42 | 5.06 | 247 | 250 | 7.53 | 33.99 | 2.61 | 26.57 | 148 | 0.63 |
| 132 | 9.62 | 33.50 | 4.41 | 215 | 300 | 6.91 | 34.03 | 2.08 | 26.69 | 136 | 0.70 |
| 159 | 8.79 | 33.78 | 3.78 | 181 | 400 | 6.00 | 34.11 | 1.16 | 26.87 | 119 | 0.84 |
| 191 | 8.42 | 33.89 | 3.61 | 167 | 500 | 5.47 | 34.20 | 0.74 | 27.02 | 105 | 0.96 |
| 236 | 7.73 | 33.98 | 2.79 | 151 | | | | | | | |
| 311 | 6.78 | 34.04 | 1.96 | 134 | | | | | | | |
| 405 | 5.97 | 34.11 | 1.12 | 118 | | | | | | | |
| 529 | 5.34 | 34.22 | 0.65 | 103 | | | | | | | |

STRANGER; October 27, 1958; 0559 GCT; 33°29'N, 122°32'W; sounding, 2100 fm; wind, 360°, force 4; weather, partly cloudy; sea, moderate; wire angle, 04°. 80.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.75 | 33.31 | 5.23 | 386 | 0 | 17.75 | 33.31 | 5.23 | 24.06 | 386 | 0.00 |
| 12 | 17.76 | 33.27 | 5.12 | 389 | 10 | 17.76 | 33.28 | 5.10 | 24.04 | 388 | 0.04 |
| 31 | 17.68 | 33.30 | 5.32 | 385 | 20 | 17.72 | 33.28 | 5.22 | 24.05 | 387 | 0.08 |
| 40 | 17.71 | 33.30 | 5.28 | 386 | 30 | 17.69 | 33.30 | 5.30 | 24.06 | 386 | 0.12 |
| 49 | 17.68 | 33.31 | 5.18 | 385 | 50 | 17.67 | 33.31 | 5.18 | 24.07 | 385 | 0.19 |
| 59 | 15.56 | 33.41 | 5.64 | 331 | 75 | 14.30 | 33.48 | 5.53 | 24.97 | 300 | 0.28 |
| 68 | 14.88 | 33.46 | 5.71 | 313 | 100 | 12.80 | 33.41 | 5.11 | 25.22 | 276 | 0.35 |
| 82 | 14.01 | 33.48 | 5.46 | 294 | 150 | 9.60 | 33.58 | 4.48 | 25.92 | 209 | 0.47 |
| 96 | 13.08 | 33.42 | 5.19 | 280 | 200 | 8.63 | 33.90 | 3.15 | 26.33 | 170 | 0.57 |
| 110 | 11.92 | 33.40 | 4.88 | 260 | 250 | 8.17 | 34.06 | 2.42 | 26.53 | 151 | 0.65 |
| 132 | 10.44 | 33.50 | 4.53 | 227 | 300 | 7.83 | 34.15 | 1.60 | 26.65 | 140 | 0.73 |
| 159 | 9.22 | 33.62 | 4.45 | 199 | 400 | 7.16 | 34.29 | 0.79 | 26.86 | 120 | 0.86 |
| 191 | 8.73 | 33.86 | 3.33 | 174 | 500 | 6.21 | 34.33 | 0.50 | 27.02 | 105 | 0.98 |
| 238 | 8.24 | 34.04 | 2.53 | 153 | | | | | | | |
| 313 | 7.77 | 34.16 | 1.42 | 138 | | | | | | | |
| 408 | 7.08 | 34.30 | 0.74 | 119 | | | | | | | |
| 532 | 5.84 | 34.33 | 0.45 | 101 | | | | | | | |

SIO

CCOFI
5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

80.90 STRANGER; October 27, 1958; 0011 GCT; 33°05'N, 123°20'W; sounding, 2300 fm; wind, 050°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.48 | 33.34 | 5.05 | 401 | 0 | 18.48 | 33.34 | 5.05 | 23.90 | 401 | 0.00 |
| 11 | 18.36 | 33.33 | 5.07 | 399 | 10 | 18.37 | 33.33 | 5.06 | 23.93 | 399 | 0.04 |
| 30 | 18.34 | 33.35 | 5.06 | 397 | 20 | 18.35 | 33.34 | 5.06 | 23.94 | 398 | 0.08 |
| 40 | 18.41 | 33.34 | 5.03 | 399 | 30 | 18.34 | 33.35 | 5.06 | 23.95 | 397 | 0.12 |
| 49 | 18.38 | 33.35 | 5.36 | 398 | 50 | 18.35 | 33.34 | 5.38 | 23.94 | 398 | 0.20 |
| 59 | 15.45 | 33.37 | 5.70 | 331 | 75 | 14.68 | 33.38 | 5.69 | 24.82 | 314 | 0.29 |
| 68 | 14.88 | 33.35 | 5.71 | 321 | 100 | 13.54 | 33.49 | 5.40 | 25.13 | 284 | 0.36 |
| 82 | 14.48 | 33.46 | 5.66 | 305 | 150 | 9.73 | 33.55 | 3.99 | 25.88 | 213 | 0.49 |
| 96 | 13.78 | 33.49 | 5.42 | 288 | 200 | 8.73 | 34.01 | 2.78 | 26.41 | 163 | 0.58 |
| 110 | 12.84 | 33.48 | 5.33 | 271 | 250 | 8.00 | 34.05 | 2.22 | 26.55 | 150 | 0.66 |
| 133 | 10.36 | 33.48 | 4.49 | 227 | 300 | 7.32 | 34.11 | 1.76 | 26.70 | 136 | 0.74 |
| 160 | 9.45 | 33.61 | 3.70 | 203 | 400 | 6.53 | 34.20 | 0.88 | 26.87 | 119 | 0.87 |
| 192 | 8.85 | 34.00 | 2.90 | 165 | 500 | 5.90 | 34.28 | 0.54 | 27.02 | 105 | 0.99 |
| 239 | 8.15 | 34.03 | 2.33 | 153 | | | | | | | |
| 313 | 7.16 | 34.13 | 1.64 | 132 | | | | | | | |
| 407 | 6.48 | 34.21 | 0.84 | 117 | | | | | | | |
| 530 | 5.68 | 34.31 | 0.47 | 100 | | | | | | | |

82.47 STRANGER; October 25, 1958; 1829 GCT; 34°15'N, 119°58'W; sounding, 311 fm; wind, 260°, force 2; weather, partly cloudy; sea, slight; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.61 | 33.50 | 5.50 | 392 | 0 | 18.61 | 33.50 | 5.50 | 24.00 | 392 | 0.00 |
| 11 | 18.60 | 33.51 | 5.42 | 392 | 10 | 18.60 | 33.51 | 5.43 | 24.00 | 392 | 0.04 |
| 31 | 15.53 | 33.33 | 5.69 | 335 | 20 | 18.17 | 33.48 | 5.47 | 24.09 | 383 | 0.08 |
| 40 | 14.33 | 33.31 | 5.68 | 312 | 30 | 15.72 | 33.34 | 5.68 | 24.56 | 339 | 0.11 |
| 49 | 13.82 | 33.29 | 5.50 | 304 | 50 | 13.78 | 33.29 | 5.49 | 24.94 | 303 | 0.18 |
| 59 | 13.07 | 33.43 | 5.07 | 279 | 75 | 11.73 | 33.48 | 4.26 | 25.48 | 251 | 0.25 |
| 68 | 11.84 | 33.47 | 4.32 | 254 | 100 | 11.17 | 33.55 | 3.95 | 25.64 | 236 | 0.31 |
| 82 | 11.60 | 33.50 | 4.17 | 247 | 150 | 10.13 | 33.77 | 3.01 | 25.99 | 203 | 0.42 |
| 96 | 11.26 | 33.54 | 4.00 | 239 | 200 | 9.57 | 33.92 | 2.38 | 26.20 | 183 | 0.52 |
| 110 | 10.90 | 33.60 | 3.78 | 228 | 250 | 8.98 | 34.06 | 1.60 | 26.42 | 162 | 0.61 |
| 132 | 10.38 | 33.71 | 3.38 | 211 | 300 | 8.40 | 34.12 | 1.27 | 26.55 | 150 | 0.69 |
| 160 | 10.02 | 33.80 | 2.89 | 199 | 400 | 7.49 | 34.19 | 0.68 | 26.74 | 132 | 0.83 |
| 192 | 9.64 | 33.89 | 2.49 | 186 | 500 | 6.72 | 34.24 | 0.27 | 26.88 | 118 | 0.96 |
| 238 | 9.07 | 34.05 | 1.69 | 165 | | | | | | | |
| 312 | 8.28 | 34.13 | 1.20 | 148 | | | | | | | |
| 407 | 7.40 | 34.20 | 0.63 | 130 | | | | | | | |
| 531 | 6.49 | 34.25 | 0.18 | 114 | | | | | | | |

83.40 STRANGER; October 24, 1958; 1515 GCT; 34°13'N, 119°22'W; sounding, 12 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.61 | 33.56 | 5.28 | 412 | 0 | 19.61 | 33.56 | 5.28 | 23.79 | 412 | 0.00 |
| 12 | 19.60 | 33.51 | 5.32 | 416 | 10 | 19.60 | 33.52 | 5.31 | 23.76 | 415 | 0.04 |

83.43 STRANGER; October 24, 1958; 1644 GCT; 34°08'N, 119°34'W; sounding, 128 fm; wind, 260°, force 3; weather, cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.43 | 33.53 | 5.78 | 386 | 0 | 18.43 | 33.53 | 5.78 | 24.06 | 386 | 0.00 |
| 11 | 18.15 | 33.48 | 5.42 | 383 | 10 | 18.16 | 33.48 | 5.42 | 24.09 | 383 | 0.04 |
| 31 | 17.34 | 33.46 | 5.64 | 366 | 20 | 18.05 | 33.47 | 5.44 | 24.11 | 381 | 0.08 |
| 49 | 16.44 | 33.42 | 5.53 | 349 | 30 | 17.80 | 33.47 | 5.49 | 24.17 | 376 | 0.11 |
| 72 | 12.48 | 33.44 | 5.20 | 267 | 50 | 16.40 | 33.42 | 5.52 | 24.46 | 348 | 0.19 |
| 96 | 11.38 | 33.50 | 3.62 | 243 | 75 | 12.27 | 33.45 | 5.07 | 25.35 | 263 | 0.26 |
| 119 | 10.44 | 33.61 | 4.12 | 219 | 100 | 11.26 | 33.52 | 3.65 | 25.60 | 239 | 0.33 |
| 157 | 9.82 | 33.82 | 2.82 | 194 | 150 | 10.20 | 33.81 | 2.90 | 26.01 | 201 | 0.44 |
| 193 | 9.26 | 33.99 | 2.14 | 173 | 200 | (9.19) | (34.05) | (2.00) | (26.35) | (168) | (0.53) |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m | |

STRANGER; October 25, 1958; 2215 GCT; 33°52'N, 120°07.5'W; sounding, 80 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 02°. 83.51

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.46 | 33.55 | 5.37 | 409 | 0 | 19.46 | 33.55 | 5.37 | 23.82 | 409 | 0.00 | |
| 12 | 19.27 | 33.52 | 5.43 | 407 | 10 | 19.32 | 33.53 | 5.43 | 23.84 | 407 | 0.04 | |
| 32 | 15.09 | 33.34 | 5.85 | 326 | 20 | 19.00 | 33.49 | 5.50 | 23.89 | 402 | 0.08 | |
| 50 | 13.40 | 33.35 | 5.18 | 291 | 30 | 15.60 | 33.35 | 5.85 | 24.59 | 336 | 0.12 | |
| 71 | 11.23 | 33.52 | 4.13 | 239 | 50 | 13.40 | 33.35 | 5.18 | 25.06 | 291 | 0.18 | |
| 93 | 11.05 | 33.55 | 4.02 | 234 | 75 | 11.19 | 33.53 | 4.13 | 25.62 | 238 | 0.25 | |
| | | | | | 100 | (11.02) | (33.56) | (4.02) | (25.67) | (233) | (0.31) | |

STRANGER; October 26, 1958; 0052 GCT; 33°44'N, 120°24.5'W; sounding, 500 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 00°. 83.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18.82 | 33.49 | 5.48 | 398 | 0 | (18.82) | (33.49) | (5.48) | (23.93) | (398) | (0.00) |
| 13 | 18.46 | 33.52 | 5.58 | 388 | 10 | 18.58 | 33.51 | 5.53 | 24.01 | 391 | 0.04 |
| 32 | 16.87 | 33.46 | 5.77 | 356 | 20 | 17.75 | 33.49 | 5.69 | 24.20 | 373 | 0.08 |
| 41 | 15.28 | 33.40 | 5.75 | 325 | 30 | 16.99 | 33.47 | 5.76 | 24.36 | 358 | 0.11 |
| 51 | 14.64 | 33.36 | 5.55 | 315 | 50 | 14.68 | 33.36 | 5.56 | 24.78 | 316 | 0.18 |
| 60 | 13.97 | 33.37 | 5.47 | 301 | 75 | 12.19 | 33.41 | 4.88 | 25.34 | 264 | 0.25 |
| 70 | 12.63 | 33.39 | 5.12 | 274 | 100 | 10.40 | 33.59 | 3.85 | 25.81 | 220 | 0.32 |
| 83 | 11.50 | 33.44 | 4.47 | 250 | 150 | 9.60 | 33.83 | 2.84 | 26.11 | 190 | 0.42 |
| 97 | 10.56 | 33.56 | 3.98 | 225 | 200 | 9.15 | 34.05 | 2.22 | 26.38 | 166 | 0.51 |
| 111 | 10.06 | 33.68 | 3.46 | 208 | 250 | 8.72 | 34.16 | 1.81 | 26.52 | 152 | 0.59 |
| 135 | 9.80 | 33.78 | 3.08 | 196 | 300 | 8.02 | 34.21 | 1.41 | 26.68 | 138 | 0.67 |
| 161 | 9.44 | 33.88 | 2.66 | 184 | 400 | 7.18 | 34.23 | 1.01 | 26.81 | 125 | 0.80 |
| 193 | 9.19 | 34.03 | 2.24 | 169 | 500 | 6.43 | 34.28 | 0.66 | 26.94 | 112 | 0.93 |
| 238 | 8.84 | 34.14 | 1.92 | 155 | | | | | | | |
| 311 | 7.88 | 34.22 | 1.33 | 135 | | | | | | | |
| 404 | 7.16 | 34.23 | 1.00 | 124 | | | | | | | |
| 527 | 6.22 | 34.29 | 0.57 | 108 | | | | | | | |

STRANGER; October 26, 1958; 0330 GCT; 33°35'N, 120°42.5'W; sounding, 680 fm; wind, 190°, force 1; weather, partly cloudy; sea, slight; wire angle, 02°. 83.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.72 | 33.33 | 5.42 | 384 | 0 | 17.72 | 33.33 | 5.42 | 24.08 | 384 | 0.00 |
| 11 | 17.46 | 33.35 | 5.40 | 377 | 10 | 17.47 | 33.35 | 5.40 | 24.15 | 377 | 0.04 |
| 30 | 16.83 | 33.35 | 5.66 | 363 | 20 | 17.11 | 33.35 | 5.54 | 24.25 | 368 | 0.08 |
| 40 | 16.56 | 33.37 | 5.67 | 355 | 30 | 16.83 | 33.35 | 5.66 | 24.31 | 363 | 0.11 |
| 49 | 15.45 | 33.28 | 5.86 | 338 | 50 | 14.96 | 33.26 | 5.87 | 24.66 | 329 | 0.18 |
| 59 | 14.16 | 33.25 | 5.86 | 313 | 75 | 12.88 | 33.40 | 5.26 | 25.20 | 278 | 0.26 |
| 69 | 13.62 | 33.35 | 5.66 | 295 | 100 | 10.41 | 33.58 | 3.91 | 25.79 | 221 | 0.32 |
| 82 | 11.57 | 33.45 | 4.53 | 250 | 150 | 9.50 | 33.83 | 2.93 | 26.14 | 188 | 0.42 |
| 96 | 10.56 | 33.53 | 4.03 | 227 | 200 | 9.19 | 33.94 | 2.58 | 26.28 | 175 | 0.52 |
| 110 | 10.16 | 33.66 | 3.58 | 211 | 250 | 8.60 | 34.13 | 1.95 | 26.52 | 152 | 0.60 |
| 132 | 9.82 | 33.78 | 3.06 | 197 | 300 | 8.08 | 34.21 | 1.47 | 26.68 | 138 | 0.68 |
| 160 | 9.34 | 33.86 | 2.86 | 183 | 400 | 6.95 | 34.23 | 1.04 | 26.84 | 122 | 0.81 |
| 192 | 9.24 | 33.92 | 2.66 | 177 | 500 | 6.40 | 34.29 | 0.60 | 26.95 | 110 | 0.93 |
| 238 | 8.69 | 34.11 | 2.06 | 155 | | | | | | | |
| 312 | 7.98 | 34.22 | 1.36 | 136 | | | | | | | |
| 406 | 6.86 | 34.23 | 1.02 | 121 | | | | | | | |
| 531 | 6.28 | 34.33 | 0.48 | 106 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

83.70 STRANGER; October 26, 1958; 0829 GCT; 33°13'N, 121°25.5'W; sounding, 2000 fm; wind, 240°, force 1; weather, cloudy; sea, slight; wire angle, 01°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.84 | 33.31 | 5.44 | 388 | 0 | 17.84 | 33.31 | 5.44 | 24.04 | 388 | 0.00 |
| 11 | 17.83 | 33.30 | 5.51 | 388 | 10 | 17.83 | 33.30 | 5.51 | 24.04 | 388 | 0.04 |
| 31 | 17.68 | 33.40 | 5.51 | 378 | 20 | 17.76 | 33.33 | 5.51 | 24.07 | 385 | 0.08 |
| 40 | 17.72 | 33.44 | 5.45 | 376 | 30 | 17.68 | 33.40 | 5.46 | 24.14 | 379 | 0.12 |
| 50 | 15.93 | 33.35 | 5.88 | 342 | 50 | 15.93 | 33.35 | 5.88 | 24.52 | 342 | 0.19 |
| 59 | 14.34 | 33.33 | 6.03 | 311 | 75 | 13.80 | 33.47 | 5.73 | 25.07 | 290 | 0.27 |
| 69 | 13.82 | 33.40 | 5.73 | 290 | 100 | 11.40 | 33.49 | 5.07 | 25.54 | 245 | 0.34 |
| 82 | 13.22 | 33.49 | 5.78 | 278 | 150 | 9.12 | 33.73 | 4.25 | 26.12 | 190 | 0.44 |
| 97 | 11.72 | 33.48 | 5.12 | 251 | 200 | 8.40 | 33.96 | 2.97 | 26.42 | 162 | 0.53 |
| 110 | 10.64 | 33.51 | 4.93 | 230 | 250 | 7.82 | 34.09 | 2.25 | 26.62 | 143 | 0.61 |
| 133 | 9.62 | 33.60 | 4.52 | 207 | 300 | 7.19 | 34.16 | 1.71 | 26.75 | 130 | 0.68 |
| 161 | 8.88 | 33.80 | 4.04 | 181 | 400 | 6.41 | 34.20 | 0.96 | 26.89 | 117 | 0.81 |
| 193 | 8.50 | 33.93 | 3.11 | 165 | 500 | 5.89 | 34.25 | 0.65 | 27.00 | 107 | 0.93 |
| 240 | 7.92 | 34.07 | 2.32 | 147 | | | | | | | |
| 315 | 6.99 | 34.18 | 1.56 | 126 | | | | | | | |
| 410 | 6.36 | 34.20 | 0.91 | 116 | | | | | | | |
| 533 | 5.68 | 34.29 | 0.57 | 102 | | | | | | | |

83.80 STRANGER; October 26, 1958; 1225 GCT; 32°52'N, 122°05'W; sounding, 2200 fm; wind, 130°, force 2; weather, partly cloudy; sea, smooth; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.11 | 33.40 | 5.41 | 388 | 0 | 18.11 | 33.40 | 5.41 | 24.04 | 388 | 0.00 |
| 12 | 18.09 | 33.33 | 5.36 | 392 | 10 | 18.10 | 33.33 | 5.37 | 24.00 | 392 | 0.04 |
| 31 | 17.87 | 33.40 | 5.40 | 383 | 20 | 18.00 | 33.35 | 5.37 | 24.03 | 389 | 0.08 |
| 55 | 14.52 | 33.26 | 5.89 | 320 | 30 | 17.88 | 33.40 | 5.39 | 24.09 | 383 | 0.12 |
| 64 | 12.78 | 33.22 | 5.59 | 289 | 50 | 15.80 | 33.31 | 5.77 | 24.51 | 343 | 0.19 |
| 74 | 12.05 | 33.35 | 4.97 | 266 | 75 | 12.00 | 33.37 | 4.88 | 25.35 | 264 | 0.26 |
| 82 | 11.46 | 33.48 | 4.41 | 247 | 100 | 10.06 | 33.51 | 4.64 | 25.80 | 220 | 0.33 |
| 96 | 10.30 | 33.49 | 4.71 | 226 | 150 | 8.92 | 33.87 | 3.20 | 26.26 | 177 | 0.43 |
| 110 | 9.65 | 33.58 | 4.33 | 209 | 200 | 8.25 | 34.02 | 2.48 | 26.49 | 155 | 0.51 |
| 128 | 9.24 | 33.68 | 3.96 | 195 | 250 | 7.68 | 34.08 | 2.43 | 26.64 | 141 | 0.59 |
| 146 | 8.98 | 33.85 | 3.33 | 178 | 300 | 7.25 | 34.15 | 1.57 | 26.74 | 131 | 0.66 |
| 168 | 8.76 | 33.95 | 2.60 | 167 | 400 | 6.89 | 34.29 | 0.72 | 26.90 | 117 | 0.79 |
| 190 | 8.39 | 34.01 | 2.47 | 158 | 500 | 6.21 | 34.36 | 0.57 | 27.05 | 102 | 0.90 |
| 237 | 7.72 | 34.06 | 2.44 | 145 | | | | | | | |
| 311 | 7.18 | 34.17 | 1.36 | 129 | | | | | | | |
| 407 | 6.86 | 34.31 | 0.69 | 115 | | | | | | | |
| 531 | 5.92 | 34.37 | 0.54 | 98 | | | | | | | |

83.90 STRANGER; October 26, 1958; 1850 GCT; 32°30'N, 122°47'W; sounding, 2000 fm; wind, 200°, force 2; weather, overcast; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.68 | 33.46 | 5.30 | 374 | 0 | 17.68 | 33.46 | 5.30 | 24.19 | 374 | 0.00 |
| 12 | 17.67 | 33.40 | 5.30 | 378 | 10 | 17.67 | 33.41 | 5.30 | 24.15 | 377 | 0.04 |
| 31 | 17.64 | 33.39 | 5.26 | 378 | 20 | 17.65 | 33.40 | 5.28 | 24.14 | 378 | 0.08 |
| 40 | 17.65 | 33.42 | 5.33 | 376 | 30 | 17.64 | 33.40 | 5.27 | 24.14 | 378 | 0.11 |
| 50 | 16.82 | 33.33 | 5.50 | 364 | 50 | 16.82 | 33.33 | 5.50 | 24.30 | 364 | 0.19 |
| 59 | 14.32 | 33.21 | 5.73 | 319 | 75 | 13.23 | 33.31 | 5.34 | 25.07 | 290 | 0.27 |
| 69 | 13.57 | 33.27 | 5.48 | 300 | 100 | 11.11 | 33.49 | 4.15 | 25.59 | 240 | 0.34 |
| 82 | 12.28 | 33.35 | 5.20 | 271 | 150 | 8.98 | 33.73 | 3.76 | 26.14 | 188 | 0.44 |
| 96 | 11.37 | 33.48 | 4.78 | 245 | 200 | 8.35 | 33.98 | 2.39 | 26.44 | 160 | 0.53 |
| 110 | 10.42 | 33.49 | 4.36 | 228 | 250 | 7.80 | 34.04 | 1.89 | 26.57 | 148 | 0.61 |
| 132 | 9.31 | 33.64 | 4.15 | 199 | 300 | 7.53 | 34.11 | 1.52 | 26.66 | 139 | 0.68 |
| 158 | 8.86 | 33.79 | 3.56 | 181 | 400 | 6.54 | 34.22 | 0.81 | 26.89 | 117 | 0.82 |
| 191 | 8.50 | 33.96 | 2.54 | 163 | 500 | 5.80 | 34.18 | 0.52 | 27.03 | 104 | 0.93 |
| 236 | 7.85 | 34.02 | 2.00 | 150 | | | | | | | |
| 310 | 7.50 | 34.13 | 1.47 | 137 | | | | | | | |
| 405 | 6.52 | 34.23 | 0.79 | 116 | | | | | | | |
| 528 | 5.62 | 34.29 | 0.46 | 101 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

STRANGER; October 24, 1958; 0937 GCT; 33°50'N, 118°37.5'W; sounding, 240 fm; wind, calm; weather, cloudy; sea, moderate; wire angle, 03°. 87.35

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.52 | 33.48 | 5.31 | 415 | 0 | 19.52 | 33.48 | 5.31 | 23.75 | 415 | 0.00 | |
| 12 | 18.98 | 33.37 | 5.55 | 411 | 10 | 19.04 | 33.38 | 5.53 | 23.80 | 411 | 0.04 | |
| 31 | 16.96 | 33.40 | 5.59 | 362 | 20 | 18.30 | 33.38 | 5.57 | 23.98 | 394 | 0.08 | |
| 51 | 14.00 | 33.34 | 5.55 | 304 | 30 | 17.10 | 33.40 | 5.59 | 24.28 | 365 | 0.12 | |
| 74 | 12.76 | 33.42 | 4.89 | 274 | 50 | 14.08 | 33.34 | 5.56 | 24.91 | 305 | 0.19 | |
| 97 | 12.02 | 33.52 | 4.31 | 253 | 75 | 12.74 | 33.42 | 4.86 | 25.25 | 273 | 0.26 | |
| 120 | 11.22 | 33.55 | 4.15 | 237 | 100 | 11.93 | 33.53 | 4.27 | 25.48 | 251 | 0.33 | |
| 157 | 10.42 | 33.72 | 3.27 | 201 | 150 | 10.58 | 33.68 | 3.43 | 25.84 | 217 | 0.44 | |
| 193 | 9.76 | 33.88 | 2.64 | 188 | 200 | 9.67 | 33.90 | 2.56 | 26.17 | 186 | 0.55 | |
| 239 | 9.30 | 34.04 | 2.19 | 169 | 250 | 9.20 | 34.08 | 2.10 | 26.38 | 165 | 0.64 | |
| 285 | 8.91 | 34.18 | 1.75 | 153 | 300 | 8.75 | 34.20 | 1.61 | 26.56 | 149 | 0.72 | |
| 384 | 7.84 | 34.28 | 0.97 | 130 | | | | | | | | |

STRANGER; October 24, 1958; 0645 GCT; 33°40'N, 118°58.5'W; sounding, 400 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 03°. 87.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.32 | 33.63 | 5.19 | 425 | 0 | 20.32 | 33.63 | 5.19 | 23.66 | 425 | 0.00 | |
| 11 | 20.31 | 33.67 | 5.08 | 421 | 10 | 20.31 | 33.66 | 5.09 | 23.68 | 422 | 0.04 | |
| 31 | 16.91 | 33.37 | 6.02 | 363 | 20 | 20.23 | 33.67 | 5.09 | 23.70 | 420 | 0.08 | |
| 40 | 16.15 | 33.37 | 5.92 | 346 | 30 | 17.02 | 33.37 | 6.01 | 24.28 | 365 | 0.12 | |
| 50 | 15.06 | 33.30 | 5.83 | 328 | 50 | 15.06 | 33.30 | 5.83 | 24.67 | 328 | 0.19 | |
| 59 | 14.04 | 33.37 | 5.47 | 302 | 75 | 12.10 | 33.42 | 4.87 | 25.37 | 262 | 0.27 | |
| 69 | 13.14 | 33.40 | 5.18 | 282 | 100 | 11.28 | 33.65 | 3.86 | 25.69 | 231 | 0.33 | |
| 82 | 11.80 | 33.44 | 4.74 | 255 | 150 | 9.73 | 33.80 | 3.25 | 26.08 | 194 | 0.44 | |
| 96 | 11.46 | 33.63 | 3.94 | 235 | 200 | 8.83 | 33.98 | 2.64 | 26.36 | 167 | 0.53 | |
| 110 | 10.62 | 33.68 | 3.76 | 217 | 250 | 8.39 | 34.16 | 2.09 | 26.58 | 147 | 0.61 | |
| 132 | 10.14 | 33.80 | 3.26 | 200 | 300 | 8.00 | 34.15 | 1.70 | 26.63 | 142 | 0.68 | |
| 159 | 9.40 | 33.80 | 3.24 | 189 | 400 | 7.00 | 34.25 | 0.96 | 26.85 | 121 | 0.82 | |
| 192 | 8.90 | 33.94 | 2.76 | 171 | 500 | 6.54 | 34.32 | 0.62 | 26.97 | 110 | 0.94 | |
| 238 | 8.44 | 34.16 | 2.21 | 148 | | | | | | | | |
| 313 | 7.90 | 34.15 | 1.60 | 140 | | | | | | | | |
| 407 | 6.96 | 34.26 | 0.93 | 120 | | | | | | | | |
| 531 | 6.42 | 34.33 | 0.56 | 108 | | | | | | | | |

STRANGER; October 24, 1958; 0307, 0341 GCT; 33°30'N, 119°19'W; sounding, 850 fm; wind, 310°, force 1; weather, cloudy; sea, moderate; wire angle, 04, 02°. 87.45

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 17.40 | 33.46 | 5.61 | 367 | 0 | (17.40) | (33.46) | (5.61) | (24.26) | (367) | (0.00) | |
| 12 | 17.19 | 33.43 | 5.48 | 365 | 10 | 17.22 | 33.43 | 5.50 | 24.28 | 365 | 0.04 | |
| 31 | 15.23 | 33.40 | 5.39 | 324 | 20 | 16.80 | 33.41 | 5.43 | 24.36 | 357 | 0.07 | |
| | | | | | 30 | 15.33 | 33.40 | 5.39 | 24.70 | 325 | 0.11 | |
| 51 | 12.38 | 33.40 | 4.74 | 269 | 50 | 12.49 | 33.40 | 4.81 | 25.28 | 270 | 0.17 | |
| 60 | 11.50 | 33.42 | 4.45 | 251 | 75 | 10.88 | 33.55 | 4.07 | 25.69 | 231 | 0.23 | |
| 69 | 11.14 | 33.53 | 4.21 | 237 | 100 | 10.15 | 33.59 | 3.78 | 25.85 | 216 | 0.29 | |
| 83 | 10.55 | 33.57 | 3.92 | 224 | 150 | 9.34 | 33.87 | 2.66 | 26.20 | 182 | 0.39 | |
| 96 | 10.28 | 33.58 | 3.86 | 219 | 200 | 8.86 | 34.00 | 2.30 | 26.38 | 165 | 0.48 | |
| 110 | 9.82 | 33.65 | 3.48 | 206 | 250 | 8.40 | 34.16 | 1.43 | 26.58 | 147 | 0.55 | |
| 132 | 9.52 | 33.76 | 3.11 | 193 | 300 | 8.00 | 34.24 | 1.09 | 26.70 | 135 | 0.63 | |
| 159 | 9.24 | 33.93 | 2.54 | 177 | 400 | 7.30 | 34.27 | 0.69 | 26.83 | 123 | 0.76 | |
| 191 | 8.94 | 33.98 | 2.38 | 168 | 500 | 6.69 | 34.31 | 0.47 | 26.94 | 113 | 0.88 | |
| 237 | 8.50 | 34.14 | 1.58 | 150 | | | | | | | | |
| 311 | 7.92 | 34.25 | 1.04 | 133 | | | | | | | | |
| 406 | 7.23 | 34.27 | 0.68 | 123 | | | | | | | | |
| 530 | 6.46 | 34.32 | 0 41 | 109 | | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| 87.55 | STRANGER; October 23, 1958; 2120 GCT; 33°09'N, 120°03'W; sounding, 700 fm; wind, 310°, force 2; weather, overcast; sea, very rough; wire angle, 03°. | | | | | | | | | | |
| 4 | 18.55 | 33.51 | 5.22 | 390 | 0 | 18.6 | (33.51) | (5.22) | (24.00) | (392) | (0.00) |
| 13 | 18.45 | 33.51 | 5.52 | 388 | 10 | 18.49 | 33.51 | 5.40 | 24.04 | 388 | 0.04 |
| 32 | 15.33 | 33.40 | 5.66 | 326 | 20 | 18.23 | 33.51 | 5.59 | 24.10 | 382 | 0.08 |
| 41 | 13.60 | 33.37 | 5.38 | 294 | 30 | 16.70 | 33.45 | 5.66 | 24.42 | 352 | 0.11 |
| 51 | 12.68 | 33.41 | 5.06 | 273 | 50 | 12.78 | 33.40 | 5.09 | 25.22 | 276 | 0.18 |
| 60 | 11.80 | 33.40 | 4.59 | 258 | 75 | 10.65 | 33.53 | 4.08 | 25.70 | 230 | 0.24 |
| 69 | 11.04 | 33.49 | 4.27 | 238 | 100 | 9.51 | 33.62 | 4.05 | 25.98 | 204 | 0.30 |
| 82 | 10.27 | 33.57 | 3.95 | 220 | 150 | 8.74 | 33.87 | 3.40 | 26.29 | 174 | 0.39 |
| 95 | 9.64 | 33.60 | 4.12 | 207 | 200 | 8.30 | 34.02 | 2.17 | 26.48 | 156 | 0.47 |
| 109 | 9.33 | 33.72 | 3.83 | 193 | 250 | 7.94 | 34.12 | 1.64 | 26.62 | 143 | 0.55 |
| 131 | 8.91 | 33.80 | 3.75 | 181 | 300 | 7.76 | 34.16 | 1.41 | 26.68 | 138 | 0.62 |
| 159 | 8.70 | 33.89 | 3.10 | 171 | 400 | 7.09 | 34.23 | 0.78 | 26.82 | 124 | 0.76 |
| 190 | 8.40 | 34.00 | 2.31 | 159 | 500 | 6.41 | 34.31 | 0.51 | 26.98 | 109 | 0.88 |
| 237 | 7.96 | 34.11 | 1.71 | 144 | | | | | | | |
| 311 | 7.71 | 34.18 | 1.37 | 135 | | | | | | | |
| 405 | 7.02 | 34.24 | 0.73 | 122 | | | | | | | |
| 529 | 6.20 | 34.34 | 0.47 | 104 | | | | | | | |
| 87.60 | STRANGER; October 23, 1958; 1820 GCT; 33°00'N, 120°21'W; sounding, 500 fm; wind, 320°, force 2; weather, overcast; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 0 | 18.09 | 33.48 | 5.54 | 382 | 0 | 18.09 | 33.48 | 5.54 | 24.10 | 382 | 0.00 |
| 11 | 18.08 | 33.46 | 5.63 | 383 | 10 | 18.08 | 33.48 | 5.61 | 24.10 | 382 | 0.04 |
| 30 | 18.01 | 33.48 | 5.96 | 380 | 20 | 18.06 | 33.47 | 5.81 | 24.11 | 381 | 0.08 |
| 40 | 17.31 | 33.46 | 5.72 | 365 | 30 | 18.01 | 33.48 | 5.96 | 24.12 | 380 | 0.11 |
| 49 | 16.37 | 33.40 | 5.60 | 348 | 50 | 16.29 | 33.40 | 5.60 | 24.49 | 345 | 0.19 |
| 58 | 14.54 | 33.37 | 5.80 | 312 | 75 | 13.74 | 33.45 | 5.70 | 25.07 | 290 | 0.27 |
| 67 | 14.28 | 33.40 | 5.80 | 305 | 100 | 12.03 | 33.48 | 5.32 | 25.43 | 256 | 0.34 |
| 81 | 13.18 | 33.48 | 5.53 | 277 | 150 | 9.38 | 33.70 | 3.88 | 26.06 | 196 | 0.45 |
| 94 | 12.42 | 33.48 | 5.40 | 264 | 200 | 8.49 | 34.01 | 2.30 | 26.44 | 160 | 0.54 |
| 108 | 11.14 | 33.48 | 5.13 | 240 | 250 | 7.89 | 34.13 | 1.93 | 26.63 | 142 | 0.62 |
| 129 | 9.72 | 33.60 | 4.35 | 208 | 300 | 7.39 | 34.17 | 1.55 | 26.74 | 132 | 0.69 |
| 157 | 9.26 | 33.73 | 3.69 | 192 | 400 | 6.76 | 34.27 | 0.96 | 26.90 | 116 | 0.82 |
| 188 | 8.66 | 33.96 | 2.43 | 166 | 500 | 6.09 | 34.33 | 0.68 | 27.03 | 104 | 0.93 |
| 233 | 8.02 | 34.11 | 2.06 | 146 | | | | | | | |
| 307 | 7.34 | 34.18 | 1.49 | 131 | | | | | | | |
| 400 | 6.76 | 34.27 | 0.96 | 116 | | | | | | | |
| 524 | 5.96 | 34.34 | 0.60 | 101 | | | | | | | |
| 87.70 | STRANGER; October 23, 1958; 0843 GCT; 32°36'N, 121°00'W; sounding, 2150 fm; wind, 310°, force 1; weather, overcast; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 3 | 18.03 | 33.42 | 5.36 | 384 | 0 | (18.03) | (33.42) | (5.36) | (24.08) | (384) | (0.00) |
| 12 | 18.05 | 33.42 | 5.43 | 385 | 10 | 18.05 | 33.42 | 5.39 | 24.07 | 385 | 0.04 |
| 32 | 17.97 | 33.50 | 5.42 | 378 | 20 | 18.02 | 33.45 | 5.45 | 24.10 | 382 | 0.08 |
| 41 | 18.02 | 33.48 | 5.32 | 380 | 30 | 17.99 | 33.46 | 5.44 | 24.14 | 378 | 0.11 |
| 51 | 15 52 | 33.33 | 5.92 | 335 | 50 | 15.60 | 33.33 | 5.91 | 24.58 | 337 | 0.19 |
| 60 | 15.22 | 33.35 | 5.91 | 328 | 75 | 14.31 | 33.37 | 5.79 | 24.88 | 308 | 0.27 |
| 70 | 14.72 | 33.36 | 5.81 | 316 | 100 | 11.72 | 33.48 | 5.03 | 25.48 | 252 | 0.34 |
| 83 | 14.11 | 33.48 | 5.62 | 296 | 150 | 9.26 | 33.71 | 4.00 | 26.09 | 193 | 0.45 |
| 97 | 11.98 | 33.48a) | 5.04 | 255 | 200 | 8.40 | 33.96 | 2.52 | 26.42 | 162 | 0.54 |
| 111 | 11.04 | 33.48 | 4.92 | 239 | 250 | 7.60 | 34.06 | 2.03 | 26.61 | 144 | 0.62 |
| 134 | 9.86 | 33.57 | 4.48 | 213 | 300 | 7.04 | 34.11 | 1.66 | 26.74 | 132 | 0.69 |
| 162 | 8.89 | 33.82 | 3.59 | 179 | 400 | 6.13 | 34.20 | 0.89 | 26.92 | 114 | 0.82 |
| 194 | 8.52 | 33.94 | 2.61 | 165 | 500 | 5.60 | 34.26 | 0.41 | 27.05 | 102 | 0.93 |
| 241 | 7.74 | 34.04 | 2.10 | 146 | | | | | | | |
| 317 | 6.88 | 34.13 | 1.52 | 128 | | | | | | | |
| 410 | 6.02 | 34.21 | 0.79 | 112 | | | | | | | |
| 532 | 5.54 | 34.27 | 0.37 | 101 | | | | | | | |

a) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

87.80

STRANGER; October 23, 1958; 0348 GCT; 32°18'N, 121°42'W; sounding, 2100 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.20 | 33.51 | 5.38 | 382 | 0 | 18.20 | 33.51 | 5.38 | 24.10 | 382 | 0.00 |
| 11 | 18.18 | 33.51 | 5.40 | 382 | 10 | 18.19 | 33.51 | 5.39 | 24.10 | 382 | 0.04 |
| 31 | 18.15 | 33.55 | 5.35 | 378 | 20 | 18.18 | 33.53 | 5.39 | 24.12 | 380 | 0.08 |
| 40 | 18.24 | 33.58 | 5.30 | 378 | 30 | 18.18 | 33.54 | 5.38 | 24.14 | 379 | 0.11 |
| 50 | 15.09 | 33.56 | 5.15 | 310 | 50 | 15.09 | 33.56 | 5.15 | 24.86 | 310 | 0.18 |
| 59 | 12.39 | 33.53 | 4.17 | 259 | 75 | 10.89 | 33.62 | 3.50 | 25.73 | 227 | 0.25 |
| 68 | 11.44 | 33.58 | 3.65 | 239 | 100 | 9.37 | 33.79 | 2.99 | 26.14 | 189 | 0.30 |
| 82 | 10.27 | 33.68 | 3.32 | 212 | 150 | 8.69 | 34.00 | 2.32 | 26.40 | 164 | 0.39 |
| 95 | 9.53 | 33.77 | 3.05 | 193 | 200 | 8.19 | 34.09 | 1.82 | 26.55 | 149 | 0.47 |
| 109 | 9.16 | 33.83 | 2.89 | 183 | 250 | 7.40 | 34.14 | 1.75 | 26.71 | 134 | 0.54 |
| 131 | 8.82 | 33.93 | 2.64 | 171 | 300 | 7.02 | 34.19 | 1.26 | 26.80 | 126 | 0.61 |
| 159 | 8.63 | 34.02 | 2.17 | 161 | 400 | 6.33 | 34.30 | 0.57 | 26.98 | 109 | 0.73 |
| 191 | 8.32 | 34.08 | 1.82 | 152 | 500 | 5.65 | 34.33 | 0.42 | 27.09 | 98 | 0.84 |
| 238 | 7.47 | 34.13 | 1.77 | 137 | | | | | | | |
| 312 | 6.98 | 34.20 | 1.10 | 124 | | | | | | | |
| 409 | 6.26 | 34.31 | 0.52 | 107 | | | | | | | |
| 533 | 5.44 | 34.33 | 0.40 | 96 | | | | | | | |

87.90

STRANGER; October 22, 1958; 2241 GCT; 32°00'N, 122°23'W; sounding, 2780 fm; wind, calm; weather, overcast; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.90 | 33.28 | 5.30 | 392 | 0 | 17.90 | 33.28 | 5.30 | 24.01 | 392 | 0.00 |
| 11 | 17.84 | 33.24 | 5.48 | 393 | 10 | 17.85 | 33.25 | 5.47 | 23.99 | 393 | 0.04 |
| 31 | 17.77 | 33.30 | 5.44 | 387 | 20 | 17.80 | 33.26 | 5.47 | 24.01 | 391 | 0.08 |
| 40 | 17.79 | 33.30 | 5.30 | 388 | 30 | 17.78 | 33.29 | 5.46 | 24.04 | 388 | 0.12 |
| 49 | 15.42 | 33.38 | 5.86 | 330 | 50 | 15.38 | 33.38 | 5.85 | 24.66 | 329 | 0.19 |
| 58 | 15.00 | 33.44 | 5.79 | 317 | 75 | 14.49 | 33.52 | 5.68 | 24.97 | 300 | 0.27 |
| 67 | 14.75 | 33.48 | 5.62 | 309 | 100 | 11.88 | 33.48 | 5.02 | 25.45 | 254 | 0.34 |
| 81 | 14.25 | 33.55 | 5.70 | 293 | 150 | 9.41 | 33.67 | 3.92 | 26.03 | 198 | 0.45 |
| 94 | 12.00 | 33.46 | 5.11 | 257 | 200 | 8.57 | 33.91 | 3.00 | 26.35 | 168 | 0.55 |
| 107 | 11.41 | 33.52 | 4.91 | 243 | 250 | 7.95 | 34.05 | 2.25 | 26.56 | 148 | 0.63 |
| 129 | 10.15 | 33.55 | 4.58 | 219 | 300 | 7.30 | 34.09 | 1.86 | 26.68 | 138 | 0.70 |
| 156 | 9.24 | 33.71 | 3.78 | 193 | 400 | 6.34 | 34.22 | 0.89 | 26.92 | 115 | 0.83 |
| 187 | 8.72 | 33.86 | 3.24 | 174 | 500 | 5.80 | 34.32 | 0.50 | 27.06 | 101 | 0.94 |
| 232 | 8.15 | 34.04 | 2.44 | 152 | | | | | | | |
| 306 | 7.22 | 34.09 | 1.79 | 136 | | | | | | | |
| 400 | 6.34 | 34.22 | 0.89 | 115 | | | | | | | |
| 523 | 5.72 | 34.34 | 0.45 | 98 | | | | | | | |

90.28

STRANGER; October 21, 1958; 0515 GCT; 33°28.5'N, 117°46.5'W; sounding, 400 fm; wind, 210°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.68 | 33.51 | 5.43 | 443 | 0 | 20.68 | 33.51 | 5.43 | 23.46 | 443 | 0.00 |
| 11 | 20.67 | 33.48 | 5.20 | 445 | 10 | 20.67 | 33.48 | 5.19 | 23.44 | 444 | 0.04 |
| 31 | 16.02 | 33.27 | 5.85 | 351 | 20 | 20.08 | 33.43 | 5.30 | 23.56 | 434 | 0.09 |
| 50 | 14.16 | 33.29 | 5.74 | 311 | 30 | 16.17 | 33.27 | 5.83 | 24.40 | 354 | 0.13 |
| 74 | 13.04 | 33.49 | 4.60 | 274 | 50 | 14.16 | 33.29 | 5.74 | 24.85 | 311 | 0.19 |
| 97 | 12.35 | 33.68 | 3.10 | 248 | 75 | 13.03 | 33.49 | 4.59 | 25.24 | 274 | 0.27 |
| 121 | 11.56 | 33.78 | 2.83 | 226 | 100 | 12.25 | 33.70 | 3.96 | 25.55 | 245 | 0.33 |
| 157 | 10.75 | 33.86 | 2.79 | 206 | 150 | 10.87 | 33.85 | 2.80 | 25.92 | 208 | 0.45 |
| 193 | 10.10 | 33.97 | 2.21a) | 187 | 200 | 9.98 | 33.98 | 2.21 | 26.18 | 185 | 0.55 |
| 239 | 9.21 | 34.05 | 2.12 | 168 | 250 | 9.07 | 34.06 | 2.11 | 26.39 | 165 | 0.64 |
| 285 | 8.54 | 34.09 | 1.75 | 154 | 300 | 8.38 | 34.11 | 1.62 | 26.54 | 150 | 0.72 |
| 382 | 7.68 | 34.23 | 0.99 | 132 | | | | | | | |

a) Alternate value, 2.08 ml/L, not used in interpolation.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

90.30 STRANGER; October 21, 1958; 0742, 0815 GCT; 33°24.5'N, 117°55'W; sounding, 350 fm; wind, 210°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°, 01°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.76 | 33.58a) | 5.38 | 440 | 0 | 20.76 | 33.58 | 5.38 | 23.50 | 440 | 0.00 |
| 11 | 20.74 | 33.60 | 5.40 | 438 | 10 | 20.74 | 33.60 | 5.40 | 23.52 | 438 | 0.04 |
| 30 | 19.51 | 33.40 | 5.63 | 422 | 20 | 20.21 | 33.51 | 5.52 | 23.60 | 430 | 0.09 |
| 39 | 16.46 | 33.30 | 5.99 | 358 | 30 | 19.51 | 33.40 | 5.63 | 23.69 | 422 | 0.13 |
| 49 | 15.01 | 33.29 | 6.28 | 328 | 50 | 14.92 | 33.29 | 6.28 | 24.70 | 326 | 0.20 |
| 58 | 14.04 | 33.32 | 6.08 | 306 | 75 | 13.40 | 33.55 | 4.82 | 25.21 | 277 | 0.28 |
| | | | | | 100 | 11.84 | 33.64 | 3.93 | 25.58 | 242 | 0.35 |
| 67 | 14.01 | 33.51 | 5.23 | 292 | 150 | 10.86 | 33.86 | 2.93 | 25.92 | 208 | 0.46 |
| 81 | 12.68 | 33.57 | 4.49 | 262 | 200 | 9.67 | 33.98 | 2.80 | 26.23 | 180 | 0.56 |
| 95 | 11.98 | 33.61 | 4.05 | 246 | 250 | 8.72 | 34.06 | 2.35 | 26.44 | 160 | 0.65 |
| 108 | 11.64 | 33.69 | 3.66 | 234 | 300 | 8.36 | 34.18 | 1.94 | 26.60 | 145 | 0.72 |
| 131 | 11.30 | 33.78 | 2.90 | 221 | 400 | 7.30 | 34.31 | 1.06 | 26.86 | 120 | 0.86 |
| 158 | 10.70 | 33.89 | 2.96 | 203 | 500 | 6.39 | 34.35 | 0.57 | 27.01 | 106 | 0.98 |
| 190 | 9.95 | 33.96 | 2.89 | 186 | | | | | | | |
| 236 | 8.86 | 34.04 | 2.48 | 163 | | | | | | | |
| 311 | 8.24 | 34.20 | 1.85 | 142 | | | | | | | |
| 405 | 7.23 | 34.32 | 0.98 | 119 | | | | | | | |
| 530 | 6.10 | 34.36 | 0.44 | 101 | | | | | | | |

90.37 STRANGER; October 21, 1958; 1200, 1233 GCT; 33°10.5'N, 118°23.5'W; sounding, 780 fm; wind, 180°, force 3; weather, partly cloudy; sea, moderate; wire angle, 02°, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.23 | 33.59 | 4.86 | 451 | 0 | 21.23 | 33.59 | 4.86 | 23.38 | 451 | 0.00 |
| 11 | 21.22 | 33.60 | 5.05 | 450 | 10 | 21.22 | 33.60 | 5.00 | 23.38 | 451 | 0.04 |
| 31 | 17.62 | 33.39a) | 5.68 | 377 | 20 | 21.20 | 33.60 | 5.10 | 23.39 | 450 | 0.09 |
| 40 | 15.41 | 33.32 | 5.70 | 334 | 30 | 18.10 | 33.42 | 5.64 | 24.05 | 387 | 0.13 |
| | | | | | 50 | 14.60 | 33.34 | 5.52 | 24.80 | 316 | 0.20 |
| 68 | 13.26 | 33.40 | 4.93 | 285 | 75 | 12.62 | 33.40 | 4.81 | 25.25 | 273 | 0.28 |
| 82 | 12.44 | 33.42 | 4.60 | 268 | 100 | 11.17 | 33.54 | 4.17 | 25.63 | 237 | 0.34 |
| 96 | 11.28 | 33.52 | 4.25 | 240 | 150 | 9.85 | 33.83 | 2.87 | 26.08 | 194 | 0.45 |
| 109 | 10.87 | 33.57 | 3.85 | 230 | 200 | 8.85 | 34.00 | 2.40 | 26.38 | 166 | 0.54 |
| 132 | 10.18 | 33.69 | 3.27 | 209 | 250 | 8.18 | 34.12 | 1.80 | 26.58 | 147 | 0.62 |
| 158 | 9.72 | 33.89 | 2.73 | 187 | 300 | 7.88 | 34.14 | 1.53 | 26.64 | 141 | 0.70 |
| 189 | 9.01 | 33.96 | 2.48 | 172 | 400 | 7.23 | 34.24 | 0.95 | 26.82 | 124 | 0.84 |
| 235 | 8.33 | 34.11 | 1.95 | 150 | 500 | 6.60 | 34.30 | 0.55 | 26.94 | 112 | 0.96 |
| 309 | 7.84 | 34.15 | 1.49 | 140 | | | | | | | |
| 403 | 7.20 | 34.25 | 0.91 | 124 | | | | | | | |
| 525 | 6.42 | 34.31 | 0.46 | 110 | | | | | | | |

90.45 STRANGER; October 21, 1958; 1658, 1716 GCT; 32°55.5'N, 118°56.5'W; sounding, 1105 fm; wind, 160°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.46 | 33.76b) | 5.20 | 419 | 0 | 20.46 | 33.76 | 5.20 | 23.72 | 419 | 0.00 |
| 11 | 20.45 | 33.75 | 5.14 | 419 | 10 | 20.45 | 33.75 | 5.15 | 23.72 | 419 | 0.04 |
| 29 | 20.42 | 33.73 | 5.19 | 420 | 20 | 20.43 | 33.74 | 5.16 | 23.70 | 420 | 0.08 |
| 43 | 18.33 | 33.49 | 5.56 | 386 | 30 | 20.42 | 33.73 | 5.20 | 23.70 | 420 | 0.13 |
| 52 | 15.70 | 33.32 | 5.93 | 340 | 50 | 16.15 | 33.34 | 5.90 | 24.46 | 348 | 0.20 |
| 61 | 14.24 | 33.34 | 5.87 | 308 | 75 | 13.42 | 33.38 | 5.45 | 25.08 | 289 | 0.28 |
| 70 | 13.78 | 33.37 | 5.62 | 297 | 100 | 10.73 | 33.48 | 4.49 | 25.66 | 234 | 0.35 |
| | | | | | 150 | 9.25 | 33.76 | 3.08 | 26.12 | 190 | 0.46 |
| 89 | 11.40 | 33.41 | 4.70 | 250 | 200 | 8.61 | 34.02 | 2.22 | 26.44 | 160 | 0.55 |
| 101 | 10.62 | 33.48 | 4.44 | 232 | 250 | 8.04 | 34.17 | 1.84 | 26.64 | 141 | 0.62 |
| 114 | 10.23 | 33.66 | 3.78 | 212 | 300 | 7.82 | 34.25 | 1.27 | 26.73 | 132 | 0.69 |
| 135 | 9.92 | 33.70 | 3.58 | 204 | 400 | 7.00 | 34.30 | 0.72 | 26.89 | 118 | 0.82 |
| 161 | 9.08 | 33.83 | 2.94 | 182 | 500 | 6.26 | 34.35 | 0.47 | 27.03 | 104 | 0.94 |
| 194 | 8.68 | 34.00 | 2.28 | 163 | | | | | | | |
| 243 | 8.09 | 34.14 | 1.89 | 144 | | | | | | | |
| 317 | 7.78 | 34.27 | 1.11 | 130 | | | | | | | |
| 412 | 6.88 | 34.30 | 0.68 | 116 | | | | | | | |
| 546 | 6.00 | 34.38 | 0.37 | 99 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

b) Salinity bottle number was not recorded on the data sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| STRANGER; October 21, 1958; 2011 GCT; 32°45.5'N, 119°16'W; sounding, 235 fm; wind, 140°, force 4; weather, partly cloudy; sea, rough; wire angle, 14°. | | | | | | | | | | | | 90.50 |
| 2 | 19.16 | 33.57 | 5.25 | 400 | 0 | (19.16) | (33.57) | (5.25) | (23.91) | (400) | (0.00) | |
| 12 | 19.08 | 33.55 | 5.27 | 400 | 10 | 19.09 | 33.55 | 5.27 | 23.92 | 400 | 0.04 | |
| 31 | 18.48 | 33.51 | 5.43 | 389 | 20 | 19.02 | 33.54 | 5.29 | 23.92 | 399 | 0.08 | |
| 49 | 14.23 | 33.33 | 5.80 | 309 | 30 | 18.60 | 33.51 | 5.41 | 24.01 | 391 | 0.12 | |
| 71 | 12.35 | 33.40 | 4.89 | 268 | 50 | 14.20 | 33.33 | 5.80 | 24.88 | 308 | 0.19 | |
| 93 | 11.36 | 33.51 | 4.34 | 242 | 75 | 12.19 | 33.42 | 4.76 | 25.35 | 264 | 0.26 | |
| 115 | 10.12 | 33.69 | 3.70 | 208 | 100 | 11.00 | 33.56 | 4.16 | 25.68 | 232 | 0.32 | |
| 149 | 9.30 | 33.83 | 3.07 | 185 | 150 | 9.26 | 33.83 | 3.03 | 26.18 | 185 | 0.43 | |
| 184 | 8.68 | 34.01 | 2.37 | 162 | 200 | 8.48 | 34.06 | 2.15 | 26.48 | 156 | 0.51 | |
| 228 | 8.20 | 34.13 | 1.87 | 146 | 250 | 8.02 | 34.14 | 1.72 | 26.62 | 143 | 0.59 | |
| 272 | 7.82 | 34.14 | 1.58 | 140 | 300 | 7.60 | 34.15 | 1.41 | 26.68 | 137 | 0.66 | |
| 365 | 7.17 | 34.18 | 1.06 | 128 | | | | | | | | |
| STRANGER; October 21, 1958; 2324 GCT; 32°34'N, 119°34.5'W; sounding, 600 fm; wind, 180°, force 1; weather, cloudy; sea, very rough; wire angle, 10°. | | | | | | | | | | | | 90.55 |
| 2 | 19.26 | 33.64 | 5.22 | 398 | 0 | (19.26) | (33.64) | (5.22) | (23.94) | (398) | (0.00) | |
| 12 | 19.10 | 33.53 | 5.22 | 402 | 10 | 19.12 | 33.56 | 5.22 | 23.90 | 402 | 0.04 | |
| 31 | 19.00 | 33.53 | 5.15 | 400 | 20 | 19.05 | 33.53 | 5.20 | 23.90 | 402 | 0.08 | |
| 40 | 18.08 | 33.48 | 5.45 | 382 | 30 | 19.01 | 33.53 | 5.17 | 23.92 | 400 | 0.12 | |
| 50 | 13.74 | 33.39 | 5.51 | 295 | 50 | 13.74 | 33.39 | 5.51 | 25.02 | 295 | 0.19 | |
| 59 | 13.54 | 33.35 | 5.43 | 294 | 75 | 11.80 | 33.44 | 4.85 | 25.43 | 256 | 0.26 | |
| 68 | 12.46 | 33.41 | 4.99 | 270 | 100 | 10.71 | 33.50 | 4.32 | 25.68 | 232 | 0.32 | |
| 82 | 11.35 | 33.45 | 4.75 | 246 | 150 | 9.21 | 33.76 | 3.08 | 26.13 | 189 | 0.43 | |
| 96 | 10.90 | 33.48 | 4.44 | 237 | 200 | 8.50 | 34.04 | 1.98 | 26.47 | 157 | 0.51 | |
| 109 | 10.22 | 33.57 | 4.09 | 219 | 250 | 7.77 | 34.12 | 1.61 | 26.64 | 140 | 0.59 | |
| 132 | 9.64 | 33.66 | 3.44 | 203 | 300 | 7.24 | 34.20 | 1.16 | 26.78 | 128 | 0.66 | |
| 158 | 9.01 | 33.80 | 2.87 | 183 | 400 | 6.69 | 34.29 | 0.68 | 26.92 | 114 | 0.79 | |
| 191 | 8.62 | 34.02 | 2.06 | 161 | 500 | 6.22 | 34.32 | 0.54 | 27.01 | 106 | 0.90 | |
| 236 | 7.92 | 34.10 | 1.74 | 144 | | | | | | | | |
| 309 | 7.16 | 34.22 | 1.07 | 125 | | | | | | | | |
| 402 | 6.65 | 34.30 | 0.65 | 113 | | | | | | | | |
| 523 | 6.12 | 34.33 | 0.52 | 104 | | | | | | | | |
| STRANGER; October 22, 1958; 0239 GCT; 32°24'N, 119°56'W; sounding, 675 fm; wind, 170°, force 3; weather, cloudy; sea, very rough; wire angle, 08°. | | | | | | | | | | | | 90.60 |
| 2 | 19.21 | 33.49 | 5.26 | 408 | 0 | (19.21) | (33.49) | (5.26) | (23.84) | (408) | (0.00) | |
| 12 | 19.03 | 33.48 | 5.17 | 404 | 10 | 19.06 | 33.48 | 5.19 | 23.86 | 405 | 0.04 | |
| 31 | 17.22 | 33.41 | 5.72 | 366 | 20 | 19.00 | 33.48 | 5.18 | 23.88 | 403 | 0.08 | |
| 45 | 14.09 | 33.30 | 5.85 | 309 | 30 | 18.40 | 33.45 | 5.35 | 24.04 | 388 | 0.12 | |
| 55 | 12.94 | 33.33 | 5.19 | 284 | 50 | 13.54 | 33.31 | 5.58 | 25.00 | 297 | 0.19 | |
| 64 | 11.88 | 33.42 | 4.39 | 258 | 75 | 11.03 | 33.48 | 3.94 | 25.60 | 240 | 0.26 | |
| 73 | 11.13 | 33.48 | 3.95 | 240 | 100 | 10.22 | 33.62 | 3.83 | 25.85 | 216 | 0.31 | |
| 92 | 10.42 | 33.54 | 3.91 | 224 | 150 | 8.97 | 33.86 | 2.60 | 26.26 | 178 | 0.41 | |
| 106 | 10.01 | 33.71 | 3.74 | 205 | 200 | 8.28 | 34.10 | 1.91 | 26.55 | 150 | 0.50 | |
| 119 | 9.52 | 33.72 | 3.15 | 196 | 250 | 7.69 | 34.11 | 1.60 | 26.64 | 141 | 0.57 | |
| 143 | 9.06 | 33.84 | 2.71 | 181 | 300 | 7.18 | 34.15 | 1.28 | 26.76 | 130 | 0.64 | |
| 170 | 8.60 | 33.96 | 2.35 | 165 | 400 | 6.29 | 34.25 | 0.62 | 26.95 | 112 | 0.77 | |
| 207 | 8.20 | 34.11 | 1.83 | 148 | 500 | 5.78 | 34.30 | 0.30 | 27.05 | 102 | 0.88 | |
| 258 | 7.56 | 34.11 | 1.56 | 139 | | | | | | | | |
| 338 | 6.76 | 34.23 | 1.00 | 119 | | | | | | | | |
| 437 | 6.06 | 34.26 | 0.50 | 108 | | | | | | | | |
| 573 | 5.50 | 34.34 | 0.28 | 96 | | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

90.70 STRANGER; October 22, 1958; 0737 GCT; 32°04'N, 120°38'W; sounding, 2100 fm; wind, 230°, force 2; weather, overcast; sea, very rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.05 | 33.34 | 5.26 | 391 | 0 | 18.05 | 33.34 | 5.26 | 24.01 | 391 | 0.00 |
| 11 | 18.04 | 33.34 | 5.29 | 391 | 10 | 18.03 | 33.34 | 5.28 | 24.01 | 391 | 0.04 |
| 30 | 17.96 | 33.33 | 5.09 | 389 | 20 | 18.00 | 33.34 | 5.20 | 24.02 | 390 | 0.08 |
| 45 | 16.15 | 33.30 | 5.75 | 351 | 30 | 17.96 | 33.33 | 5.09 | 24.03 | 389 | 0.12 |
| 54 | 14.69 | 33.26 | 5.85 | 324 | 50 | 15.33 | 33.28 | 5.82 | 24.60 | 335 | 0.19 |
| 63 | 13.94 | 33.24 | 5.84 | 310 | 75 | 13.80 | 33.35 | 5.40 | 24.98 | 299 | 0.27 |
| 72 | 14.09 | 33.31 | 5.53 | 308 | 100 | 10.70 | 33.46 | 4.78 | 25.64 | 236 | 0.34 |
| 91 | 11.76 | 33.41 | 4.99 | 256 | 150 | 8.92 | 33.76 | 3.53 | 26.18 | 184 | 0.44 |
| 105 | 10.33 | 33.48 | 4.68 | 227 | 200 | 8.20 | 33.98 | 2.57 | 26.46 | 158 | 0.53 |
| 119 | 9.70 | 33.58 | 4.31 | 210 | 250 | 7.69 | 34.07 | 1.99 | 26.61 | 144 | 0.61 |
| 142 | 9.03 | 33.71 | 3.70 | 190 | 300 | 7.04 | 34.10 | 1.56 | 26.73 | 132 | 0.68 |
| 170 | 8.62 | 33.87 | 3.20 | 172 | 400 | 6.21 | 34.16 | 0.85 | 26.88 | 118 | 0.81 |
| 207 | 8.13 | 34.00 | 2.43 | 155 | 500 | 5.81 | 34.29 | 0.44 | 27.04 | 103 | 0.92 |
| 260 | 7.57 | 34.09 | 1.86 | 141 | | | | | | | |
| 339 | 6.50 | 34.11 | 1.26 | 125 | | | | | | | |
| 439 | 6.08 | 34.23 | 0.58 | 111 | | | | | | | |
| 577 | 5.48 | 34.34 | 0.36 | 96 | | | | | | | |

90.80 STRANGER; October 22, 1958; 1218 GCT; 31°44'N, 121°17'W; sounding, 2100 fm; wind, 240°, force 1; weather, overcast; sea, rough; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.82 | 33.40 | 5.28 | 381 | 0 | 17.82 | 33.40 | 5.28 | 24.12 | 381 | 0.00 |
| 11 | 17.86 | 33.44 | 5.24 | 380 | 10 | 17.86 | 33.43 | 5.26 | 24.13 | 380 | 0.04 |
| 30 | 17.79 | 33.47 | 5.33 | 376 | 20 | 17.82 | 33.46 | 5.30 | 24.16 | 377 | 0.08 |
| 39 | 17.79 | 33.42 | 5.24 | 379 | 30 | 17.79 | 33.47 | 5.33 | 24.17 | 376 | 0.11 |
| 49 | 14.93 | 33.31 | 5.74 | 324 | 50 | 14.90 | 33.31 | 5.74 | 24.71 | 324 | 0.18 |
| 57 | 14.66 | 33.40 | 5.76 | 313 | 75 | 13.20 | 33.39 | 5.49 | 25.13 | 284 | 0.26 |
| 66 | 13.74 | 33.35 | 5.65 | 298 | 100 | 10.54 | 33.42 | 4.60 | 25.65 | 235 | 0.33 |
| 80 | 12.96 | 33.40 | 5.40 | 278 | 150 | 8.79 | 33.87 | 2.93 | 26.29 | 174 | 0.43 |
| 93 | 10.88 | 33.41 | 4.72 | 242 | 200 | 8.15 | 34.01 | 2.29 | 26.50 | 154 | 0.51 |
| 106 | 10.44 | 33.48 | 4.36 | 229 | 250 | 7.55 | 34.10 | 1.70 | 26.66 | 139 | 0.59 |
| 127 | 9.52 | 33.58 | 3.69 | 207 | 300 | 7.18 | 34.16 | 1.20 | 26.76 | 130 | 0.66 |
| 154 | 8.72 | 33.92 | 2.83 | 169 | 400 | 6.58 | 34.29 | 0.61 | 26.95 | 112 | 0.78 |
| 186 | 8.34 | 33.98 | 2.41 | 160 | 500 | 5.89 | 34.32 | 0.40 | 27.05 | 102 | 0.90 |
| 231 | 7.76 | 34.07 | 1.97 | 145 | | | | | | | |
| 305 | 7.12 | 34.18 | 1.13 | 128 | | | | | | | |
| 399 | 6.58 | 34.29 | 0.60 | 112 | | | | | | | |
| 522 | 5.78 | 34.33 | 0.36 | 100 | | | | | | | |

90.90 STRANGER; October 22, 1958; 1722 GCT; 31°24'N, 121°58'W; sounding, 2700 fm; wind, 240°, force 2; weather, overcast; sea, rough; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.68 | 33.44 | 5.60 | 399 | 0 | 18.68 | 33.44 | 5.60 | 23.93 | 399 | 0.00 |
| 12 | 18.68 | 33.42 | 5.35 | 400 | 10 | 18.70 | 33.44 | 5.36 | 23.92 | 400 | 0.04 |
| 31 | 18.67 | 33.44 | 5.42 | 400 | 20 | 18.70 | 33.44 | 5.36 | 23.92 | 400 | 0.08 |
| 54 | 18.71 | 33.44 | 5.85 | 400 | 30 | 18.70 | 33.44 | 5.41 | 23.92 | 400 | 0.12 |
| 64 | 18.70 | 33.44 | 5.47 | 400 | 50 | 18.70 | 33.44 | 5.81 | 23.92 | 400 | 0.20 |
| 73 | 16.04 | 33.35 | 6.01 | 345 | 75 | 15.80 | 33.35 | 6.01 | 24.54 | 340 | 0.29 |
| 82 | 15.20 | 33.35 | 6.54u | 327 | 100 | 13.95 | 33.49 | 5.98 | 25.04 | 293 | 0.37 |
| 95 | 14.38 | 33.46 | 6.00 | 302 | 150 | 9.92 | 33.60 | 4.67 | 25.89 | 212 | 0.50 |
| 109 | 13.08 | 33.52 | 5.88 | 273 | 200 | 8.94 | 33.87 | 3.42 | 26.26 | 176 | 0.60 |
| 128 | 11.22 | 33.49 | 5.48 | 241 | 250 | 8.29 | 34.08 | 2.41 | 26.53 | 152 | 0.68 |
| 145 | 10.18 | 33.57 | 4.71 | 218 | 300 | 7.61 | 34.11 | 2.16 | 26.65 | 140 | 0.76 |
| 167 | 9.37 | 33.70 | 4.60 | 196 | 400 | 6.58 | 34.17 | 1.27 | 26.85 | 122 | 0.90 |
| 191 | 9.04 | 33.83 | 3.85 | 181 | 500 | 5.79 | 34.26 | 0.86 | 27.02 | 105 | 1.02 |
| 236 | 8.47 | 34.07 | 2.53 | 155 | | | | | | | |
| 311 | 7.49 | 34.11 | 2.08 | 138 | | | | | | | |
| 405 | 6.52 | 34.18 | 1.20 | 120 | | | | | | | |
| 529 | 5.60 | 34.29 | 0.78 | 101 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

STRANGER; October 20, 1958; 1603, 1623 GCT; 32°55'N, 117°22'W; sounding, 290 fm; wind, 180°, force 3; weather, cloudy; sea, moderate; wire angle, 00°, 00°. 93.27

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.49 | 33.49a) | 5.18 | 439 | 0 | 20.49 | 33.49 | 5.18 | 23.50 | 439 | 0.00 |
| 11 | 20.48 | 33.47 | 5.18 | 440 | 10 | 20.48 | 33.47 | 5.18 | 23.49 | 440 | 0.04 |
| 30 | 16.72 | 33.47 | 5.57 | 351 | 20 | 19.80 | 33.47 | 5.33 | 23.67 | 424 | 0.09 |
| | | | | | 30 | 16.72 | 33.47 | 5.57 | 24.43 | 351 | 0.12 |
| 50 | 15.15 | 33.47 | 5.43 | 318 | 50 | 15.15 | 33.47 | 5.43 | 24.78 | 318 | 0.19 |
| 74 | 13.46 | 33.58 | 4.42 | 276 | 75 | 13.42 | 33.58 | 4.41 | 25.22 | 275 | 0.27 |
| 97 | 12.46 | 33.64 | 4.04 | 253 | 100 | 12.33 | 33.64 | 3.97 | 25.49 | 250 | 0.34 |
| 120 | 11.58 | 33.68 | 3.45 | 234 | 150 | 11.12 | 33.85 | 2.64 | 25.87 | 214 | 0.45 |
| 157 | 11.00 | 33.90 | 2.52 | 207 | 200 | 9.67 | 33.94 | 2.70 | 26.20 | 182 | 0.55 |
| 194 | 9.79 | 33.93 | 2.71 | 185 | 250 | 8.92 | 34.11 | 2.10 | 26.45 | 159 | 0.64 |
| 239 | 9.01 | 34.09 | 2.20 | 161 | 300 | 8.38 | 34.17 | 1.58 | 26.59 | 146 | 0.72 |
| 285 | 8.56 | 34.15 | 1.68 | 150 | | | | | | | |
| 335 | 7.94 | 34.22 | 1.39 | 136 | | | | | | | |

HORIZON; October 13, 1958; 2202, 2232 GCT;b) 32°50'N, 117°32'W; sounding, 450 fm; wind, 300°, force 2; weather, fog; sea, moderate; wire angle, 14°, 18°. 93.30

| | | | | |
|---|---|---|---|---|
| 529 | 6.25 | 34.26 | 0.25 | 111 |
| 539 | 6.08 | 34.26 | 0.26 | 108 |
| 548 | 6.00 | 34.27 | 0.16 | 107 |
| 558 | 5.94 | 34.31u | 0.15 | |
| 568 | 5.82 | 34.29 | 0.23u | 104 |
| 578 | 5.78 | 34.29 | 0.13 | 102 |
| 588 | 5.65 | 34.32 | 0.17 | 99 |
| 598 | 5.58 | 34.31 | 0.19 | 98 |
| 608 | 5.49 | 34.32 | 0.22 | 97 |
| 618 | 5.47 | 34.31 | 0.18 | 98 |
| 628 | 5.42 | 34.34 | 0.22 | |
| | | | | |
| 628 | 5.40 | 34.33 | 0.21 | 94 |
| 640 | 5.38 | 34.34 | 0.23 | 93 |
| 649 | 5.23 | 34.34 | - | 93 |
| 659 | 5.16 | 34.38 | 0.20 | 89 |
| 669 | 5.04 | 34.38 | 0.24 | 88 |
| 679 | 4.96 | 34.38 | 0.23 | 85 |
| 689 | 4.92 | 34.40 | 0.26 | 85 |
| 699 | 4.91 | 34.41 | 0.23 | 84 |
| 709 | 4.85 | 34.40 | 0.23 | 83 |
| 719 | 4.86 | 34.42 | 0.26 | 82 |
| 728 | 4.82 | 34.40 | 0.25 | 83 |
| 739 | 4.81 | 34.38u | 0.23 | |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

b) Test cast.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **93.30** | STRANGER; October 20, 1958; 1315 GCT; 32°50'N, 117°31.5'W; sounding, 565 fm; wind, 240°, force 2; weather, cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 3 | 21.51 | 33.53 | 4.96 | 462 | 0 | (21.51) | (33.53) | (4.96) | (23.26) | (462) | (0.00) |
| 13 | 21.49a) | 33.55 | 5.31 | 461 | 10 | 21.50 | 33.54 | 5.20 | 23.27 | 462 | 0.05 |
| 32 | 14.80 | 33.40 | 5.97 | 316 | 20 | 20.31 | 33.54 | 5.56 | 23.32 | 456 | 0.09 |
| 41 | 13.87 | 33.51 | 5.56 | 289 | 30 | 16.55 | 33.42 | 5.91 | 24.43 | 351 | 0.13 |
| 50 | 13.33 | 33.55 | 4.85 | 275 | 50 | 13.33 | 33.55 | 4.85 | 25.23 | 275 | 0.20 |
| 59 | 12.68 | 33.54 | 4.53 | 264 | 75 | 12.42 | 33.62 | 4.05 | 25.46 | 253 | 0.26 |
| 68 | 12.60 | 33.59 | 4.42 | 258 | 100 | 12.17 | 33.73 | 3.12 | 25.60 | 240 | 0.32 |
| 82 | 12.25 | 33.66 | 3.65 | 247 | 150 | 11.41 | 33.88 | 2.62 | 25.84 | 216 | 0.44 |
| 96 | 12.16 | 33.71 | 3.14 | 242 | 200 | 10.28 | 33.96 | 2.70 | 26.11 | 191 | 0.54 |
| 109 | 12.10 | 33.78 | 3.01 | 236 | 250 | 9.12 | 34.07 | 2.65 | 26.40 | 164 | 0.63 |
| 131 | 11.74 | 33.84 | 2.82 | 224 | 300 | 8.30 | 34.15 | 2.01 | 26.58 | 146 | 0.72 |
| 159 | 11.28 | 33.89 | 2.54 | 213 | 400 | 7.28 | 34.25 | 1.27 | 26.80 | 125 | 0.86 |
| 191 | 10.54 | 33.94 | 2.69 | 196 | 500 | 6.61 | 34.33 | 0.72 | 26.97 | 110 | 0.98 |
| 238 | 9.35 | 34.05 | 2.71 | 170 | | | | | | | |
| 311 | 8.15 | 34.17 | 1.88 | 142 | | | | | | | |
| 406 | 7.24 | 34.25 | 1.24 | 124 | | | | | | | |
| 530 | 6.40 | 34.36 | 0.53 | 105 | | | | | | | |
| **93.40** | STRANGER; October 20, 1958; 0720 GCT; 32°30'N, 118°12'W; sounding, 940 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 00°. | | | | | | | | | | |
| 5 | 21.13 | 33.58 | 5.15 | 449 | 0 | 21.1 | (33.58) | (5.15) | (23.41) | (448) | (0.00) |
| 15 | 21.12 | 33.60 | 5.08 | 447 | 10 | 21.12 | 33.59 | 5.11 | 23.41 | 448 | 0.04 |
| 34 | 15.83 | 33.39 | 5.85 | 338 | 20 | 20.95 | 33.60 | 5.10 | 23.46 | 444 | 0.09 |
| 48 | 14.77 | 33.36 | 5.68 | 318 | 30 | 17.00 | 33.43 | 5.77 | 24.34 | 360 | 0.13 |
| 58 | 14.16 | 33.39 | 5.48 | 303 | 50 | 14.65 | 33.36 | 5.64 | 24.81 | 315 | 0.20 |
| 75 | 12.76 | 33.42 | 4.83 | 274 | 75 | 12.76 | 33.42 | 4.83 | 25.24 | 274 | 0.27 |
| 94 | 11.22 | 33.48 | 4.34 | 242 | 100 | 10.88 | 33.52 | 4.17 | 25.66 | 234 | 0.34 |
| 108 | 10.52 | 33.58 | 3.93 | 222 | 150 | 9.40 | 33.76 | 3.15 | 26.11 | 191 | 0.44 |
| 121 | 10.06 | 33.61 | 3.73 | 214 | 200 | 8.75 | 34.10 | 2.32 | 26.47 | 157 | 0.53 |
| 144 | 9.50 | 33.74 | 3.23 | 195 | 250 | 8.05 | 34.13 | 1.77 | 26.61 | 144 | 0.61 |
| 171 | 9.00 | 33.87 | 2.74 | 178 | 300 | 7.60 | 34.20 | 1.30 | 26.72 | 133 | 0.68 |
| 207 | 8.68 | 34.11 | 2.23 | 155 | 400 | 6.98 | 34.29 | 0.71 | 26.89 | 118 | 0.81 |
| 259 | 7.93 | 34.14 | 1.68 | 142 | 500 | 6.37 | 34.34 | 0.43 | 27.01 | 106 | 0.93 |
| 339 | 7.36 | 34.26 | 0.97 | 125 | | | | | | | |
| 438 | 6.76 | 34.31 | 0.58 | 113 | | | | | | | |
| 578 | 5.82 | 34.38 | 0.32 | 97 | | | | | | | |
| **93.50** | STRANGER; October 20, 1958; 0101 GCT; 32°09'N, 118°46'W; sounding, 730 fm; wind, 310°, force 6; weather, partly cloudy; sea, high; wire angle, 07°. | | | | | | | | | | |
| 3 | 20.31 | 33.55 | 5.23 | 430 | 0 | (20.31) | (33.55) | (5.23) | (23.60) | (430) | (0.00) |
| 13 | 20.32 | 33.55 | 5.16 | 430 | 10 | 20.32 | 33.55 | 5.20 | 23.60 | 430 | 0.04 |
| 31 | 20.28 | 33.53 | 5.14 | 432 | 20 | 20.30 | 33.54 | 5.15 | 23.59 | 431 | 0.09 |
| 42 | 17.14 | 33.37 | 5.67 | 368 | 30 | 20.30 | 33.54 | 5.15 | 23.59 | 431 | 0.13 |
| 51 | 16.09 | 33.33 | 5.86 | 348 | 50 | 16.20 | 33.33 | 5.84 | 24.44 | 350 | 0.21 |
| 59 | 14.60 | 33.29 | 5.62 | 320 | 75 | 13.56 | 33.31 | 5.44 | 24.99 | 297 | 0.29 |
| 68 | 13.99 | 33.31 | 5.44 | 306 | 100 | 11.55 | 33.38 | 4.91 | 25.44 | 255 | 0.36 |
| 80 | 13.20 | 33.31 | 5.45 | 290 | 150 | 9.42 | 33.72 | 3.25 | 26.07 | 195 | 0.47 |
| 93 | 12.08 | 33.36 | 5.03 | 266 | 200 | 8.69 | 33.96 | 2.43 | 26.38 | 166 | 0.56 |
| 107 | 11.00 | 33.42 | 4.81 | 243 | 250 | 8.18 | 34.13 | 1.66 | 26.58 | 146 | 0.64 |
| 127 | 10.02 | 33.59 | 3.81 | 215 | 300 | 7.61 | 34.18 | 1.42 | 26.71 | 134 | 0.72 |
| 152 | 9.39 | 33.73 | 3.22 | 194 | 400 | 6.55 | 34.24 | 0.80 | 26.91 | 116 | 0.85 |
| 181 | 8.94 | 33.83 | 2.87 | 180 | 500 | 6.02 | 34.33 | 0.42 | 27.05 | 102 | 0.96 |
| 224 | 8.39 | 34.08 | 1.82 | 154 | | | | | | | |
| 294 | 7.68 | 34.18 | 1.44 | 136 | | | | | | | |
| 384 | 6.68 | 34.23 | 0.90 | 118 | | | | | | | |
| 502 | 6.02 | 34.34 | 0.39 | 102 | | | | | | | |

a) Alternate value, 20.80°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

93.60

STRANGER; October 19, 1958; 1907, 1927 GCT; 31°49'N, 119°31'W; sounding, 2100 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 15°, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.85 | 33.62 | 5.32 | 414 | 0 | 19.85 | 33.62 | 5.32 | 23.77 | 414 | 0.00 |
| 11 | 19.87 | 33.60 | 5.12 | 415 | 10 | 19.87 | 33.60 | 5.13 | 23.76 | 415 | 0.04 |
| 30 | 18.41 | 33.62 | 5.67 | 380 | 20 | 19.61 | 33.60 | 5.20 | 23.82 | 409 | 0.08 |
| 43 | 12.84 | 33.53 | 4.97 | 268 | 30 | 18.41 | 33.62 | 5.67 | 24.12 | 380 | 0.12 |
| 52 | 11.85 | 33.49 | 4.32 | 252 | 50 | 11.88 | 33.49 | 4.33 | 25.45 | 254 | 0.18 |
| 61 | 11.78 | 33.55 | 4.13 | 246 | 75 | 10.41 | 33.64 | 3.51 | 25.84 | 216 | 0.24 |
| 70 | 10.87 | 33.60 | 3.74 | 227 | 100 | 9.54 | 33.76 | 3.00 | 26.08 | 194 | 0.30 |
| 88 | 9.80 | 33.70 | 3.15 | 202 | 150 | 8.75 | 33.98 | 2.27 | 26.38 | 166 | 0.39 |
| 102 | 9.49 | 33.78 | 2.98 | 192 | 200 | 8.10 | 34.11 | 1.76 | 26.58 | 146 | 0.47 |
| | | | | | 250 | 7.59 | 34.20 | | 26.72 | 133 | 0.54 |
| 111 | 9.28 | 33.79 | 2.92 | 188 | 300 | 7.25 | 34.19 | | 26.78 | 129 | 0.61 |
| 133 | 8.92 | 33.89 | 2.50 | 174 | 400 | 6.50 | 34.26 | 0.57 | 26.92 | 114 | 0.73 |
| 158 | 8.66 | 34.03 | 2.14 | 160 | 500 | 5.75 | 34.31 | 0.37 | 27.07 | 100 | 0.84 |
| 192 | 8.20 | 34.09 | 1.84 | 149 | | | | | | | |
| 241 | 7.62 | 34.20 | 1.32 | 133 | | | | | | | |
| 317 | 7.14 | 34.18 | 1.56a) | 128 | | | | | | | |
| 413 | 6.40 | 34.27 | 0.49 | 112 | | | | | | | |
| 547 | 5.47 | 34.33 | 0.36 | 96 | | | | | | | |

93.70

STRANGER; October 19, 1958; 1242 GCT; 31°23.5'N, 120°16'W; sounding, 2800 fm; wind, 340°, force 6; weather, partly cloudy; sea, rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.84 | 33.31 | 5.31 | 412 | 0 | 18.84 | 33.31 | 5.31 | 23.80 | 412 | 0.00 |
| 12 | 18.87 | 33.34 | 5.30 | 410 | 10 | 18.87 | 33.33 | 5.31 | 23.80 | 411 | 0.04 |
| 30 | 18.79 | 33.31 | 5.25 | 411 | 20 | 18.86 | 33.33 | 5.28 | 23.80 | 411 | 0.08 |
| 43 | 18.46 | 33.40 | 5.26 | 396 | 30 | 18.79 | 33.31 | 5.25 | 23.80 | 411 | 0.12 |
| 52 | 17.39 | 33.40 | 5.43 | 371 | 50 | 17.70 | 33.40 | 5.39 | 24.14 | 378 | 0.20 |
| 61 | 15.66 | 33.29 | 5.58 | 341 | 75 | 14.79 | 33.36 | 5.52 | 24.77 | 318 | 0.29 |
| 70 | 15.07 | 33.33 | 5.54 | 326 | 100 | 12.95 | 33.47 | 5.22 | 25.24 | 274 | 0.37 |
| 87 | 14.08 | 33.44 | 5.46 | 298 | 150 | 9.31 | 33.72 | 4.10 | 26.08 | 194 | 0.48 |
| 100 | 12.95 | 33.47 | 5.22 | 274 | 200 | 8.56 | 33.90 | 2.72 | 26.35 | 169 | 0.57 |
| 113 | 11.11 | 33.46 | 4.97 | 241 | 250 | 8.02 | 34.04 | 2.03 | 26.54 | 151 | 0.66 |
| 134 | 9.94 | 33.56 | 4.56 | 215 | 300 | 7.47 | 34.12 | 1.62 | 26.68 | 137 | 0.73 |
| 158 | 9.11 | 33.77 | 3.91 | 186 | 400 | 6.61 | 34.17 | 0.90 | 26.84 | 122 | 0.87 |
| 192 | 8.62 | 33.87 | 2.86 | 172 | 500 | 5.98 | 34.22 | | 26.96 | 110 | 0.99 |
| 240 | 8.12 | 34.02 | 2.12 | 154 | | | | | | | |
| 313 | 7.36 | 34.14 | 1.49 | 134 | | | | | | | |
| 408 | 6.58 | 34.17 | 0.82 | 121 | | | | | | | |
| 539 | 5.72 | 34.25 | 0.92u | 105 | | | | | | | |

93.80

STRANGER; October 19, 1958; 0706 GCT; 31°07'N, 120°56'W; sounding, 2100 fm; wind, 320°, force 6; weather, cloudy; sea, rough; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.04 | 33.30 | 5.60 | 417 | 0 | 19.04 | 33.30 | 5.60 | 23.73 | 417 | 0.00 |
| 11 | 19.06 | 33.33 | 5.56 | 416 | 10 | 19.06 | 33.32 | 5.55 | 23.75 | 416 | 0.04 |
| 30 | 19.04 | 33.30 | 5.74 | 417 | 20 | 19.05 | 33.32 | 5.65 | 23.75 | 416 | 0.08 |
| 45 | 19.07 | 33.43 | 5.87 | 408 | 30 | 19.04 | 33.30 | 5.75 | 23.73 | 417 | 0.12 |
| 54 | 16.38 | 33.40 | 6.31 | 349 | 50 | 18.89 | 33.43 | 5.96 | 23.87 | 405 | 0.21 |
| 63 | 15.52 | 33.42 | 6.54 | 329 | 75 | 14.74 | 33.40 | 6.50 | 24.82 | 314 | 0.30 |
| 72 | 14.94 | 33.40 | 6.54 | 318 | 100 | 12.40 | 33.46 | 5.55 | 25.34 | 265 | 0.37 |
| 91 | 13.52 | 33.48 | 5.95 | 284 | 150 | 9.52 | 33.56 | 4.56 | 25.92 | 209 | 0.49 |
| 105 | 11.81 | 33.44 | 5.35 | 255 | 200 | 8.61 | 33.84 | 3.20 | 26.30 | 174 | 0.59 |
| 118 | 10.94 | 33.39 | 5.13 | 244 | 250 | 7.80 | 33.95 | 2.88 | 26.50 | 154 | 0.67 |
| 142 | 9.78 | 33.50 | 4.75 | 217 | 300 | 7.15 | 34.02 | 2.27 | 26.64 | 141 | 0.75 |
| 169 | 9.04 | 33.69 | 4.02 | 191 | 400 | 6.28 | 34.15 | 0.91 | 26.87 | 119 | 0.88 |
| 207 | 8.50 | 33.86 | 3.05 | 171 | 500 | 5.72 | 34.23 | 0.59 | 27.01 | 106 | 1.00 |
| 257 | 7.65 | 33.96 | 2.88 | 152 | | | | | | | |
| 337 | 6.72 | 34.07 | 1.33 | 131 | | | | | | | |
| 435 | 6.05 | 34.18 | 0.74 | 114 | | | | | | | |
| 571 | 5.32 | 34.29 | 0.48 | 97 | | | | | | | |

a) Uncertain value; sample was drawn after some time delay and from partly empty Nansen bottle.

SIO

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **93.90** | STRANGER; October 19, 1958; 0107 GCT; 30°50'N, 121°35'W; sounding, 2248 fm; wind, 340°, force 6; weather, cloudy; sea, rough; wire angle, 17°. | | | | | | | | | | |
| 3 | 20.36 | 33.66 | 5.29 | 424 | 0 | (20.36) | (33.66) | (5.29) | (23.67) | (424) | (0.00) |
| 12 | 20.37 | 33.68 | 5.26 | 423 | 10 | 20.37 | 33.68 | 5.27 | 23.67 | 423 | 0.04 |
| 30 | 20.29 | 33.65 | 5.22 | 423 | 20 | 20.32 | 33.67 | 5.24 | 23.67 | 423 | 0.08 |
| 43 | 20.20 | 33.61 | 5.30 | 423 | 30 | 20.29 | 33.65 | 5.22 | 23.67 | 423 | 0.13 |
| 52 | 17.75 | 33.40 | 5.92 | 379 | 50 | 19.20 | 33.51 | 5.62 | 23.85 | 406 | 0.21 |
| 61 | 16.43 | 33.35 | 6.08 | 354 | 75 | 15.00 | 33.41 | 5.88 | 24.77 | 319 | 0.30 |
| 70 | 15.42 | 33.42 | 5.99 | 327 | 100 | 12.88 | 33.42 | 5.26 | 25.22 | 276 | 0.38 |
| 87 | 14.17 | 33.39 | 5.64 | 303 | 150 | 9.60 | 33.60 | 4.21 | 25.94 | 207 | 0.50 |
| 101 | 12.76 | 33.42 | 5.23 | 274 | 200 | 8.58 | 33.84 | 3.08 | 26.30 | 173 | 0.59 |
| 114 | 11.42 | 33.39 | 5.01 | 252 | 250 | 7.84 | 33.97 | 2.36 | 26.51 | 153 | 0.68 |
| 135 | 10.14 | 33.51 | 4.64 | 222 | 300 | 7.28 | 34.03 | 2.12 | 26.64 | 141 | 0.76 |
| 159 | 9.28 | 33.65 | 3.93 | 198 | 400 | 6.30 | 34.13 | 1.05 | 26.85 | 121 | 0.89 |
| 193 | 8.64 | 33.83 | 3.17 | 175 | 500 | 5.66 | 34.20 | 0.62 | 26.98 | 108 | 1.01 |
| 241 | 7.93 | 33.96 | 2.40 | 155 | | | | | | | |
| 315 | 7.08 | 34.05 | 2.03 | 137 | | | | | | | |
| 410 | 6.21 | 34.14 | 0.97 | 119 | | | | | | | |
| 542 | 5.42 | 34.22 | 0.48 | 104 | | | | | | | |
| **97.30** | STRANGER; October 17, 1958; 0455 GCT; 32°15.5'N, 117°09'W; sounding, 40 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 17.87 | 33.44 | 5.59 | 380 | 0 | 17.87 | 33.44 | 5.59 | 24.13 | 380 | 0.00 |
| 10 | 17.86 | 33.49 | 5.61 | 376 | 10 | 17.86 | 33.49 | 5.61 | 24.17 | 376 | 0.04 |
| 29 | 14.14 | 33.60 | 4.42 | 287 | 20 | 16.91 | 33.55 | 5.38 | 24.45 | 349 | 0.07 |
| 38 | 13.50 | 33.68 | 3.75 | 269 | 30 | 14.03 | 33.61 | 4.32 | 25.13 | 285 | 0.10 |
| 53 | 12.95 | 33.69 | 3.33 | 258 | 50 | 13.09 | 33.69 | 3.42 | 25.38 | 261 | 0.16 |
| **97.32** | PAOLINA-T; October 8, 1958; 0141 GCT;[a] 32°25'N, 117°25'W; sounding, 450 fm; wind, 240°, force 2; weather, clear; sea, slight; wire angle, 01°. | | | | | | | | | | |
| 433 | 6.92 | 34.23 | 0.86 | 121 | | | | | | | |
| 446 | 6.86 | 34.27 | 0.70 | 118 | | | | | | | |
| 456 | 6.89 | 34.29 | 0.68 | 117 | | | | | | | |
| 464 | 6.90 | 34.29 | 0.60 | 117 | | | | | | | |
| 474 | 6.85 | 34.30 | 0.59 | 115 | | | | | | | |
| 484 | 6.76 | 34.30 | 0.51 | 114 | | | | | | | |
| 494 | 6.65 | 34.34 | 0.44 | 110 | | | | | | | |
| 505 | 6.52 | 34.29u | 0.40 | | | | | | | | |
| 514 | 6.42 | 34.34 | 0.39 | 107 | | | | | | | |
| 524 | 6.32 | 34.32 | 0.32 | 107 | | | | | | | |
| 533 | 6.19 | 34.34 | 0.32 | 104 | | | | | | | |
| 543 | 6.12 | 34.34 | 0.31 | 103 | | | | | | | |
| 554 | 6.04 | 34.34 | 0.26 | 102 | | | | | | | |
| 564 | 5.92 | 34.34 | 0.28 | 101 | | | | | | | |
| 574 | 5.85 | 34.36 | 0.24 | 98 | | | | | | | |
| 584 | 5.82 | 34.36 | 0.28 | 98 | | | | | | | |
| 594 | 5.80 | 34.39 | 0.24 | 94 | | | | | | | |

a) Test cast.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T_3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T_3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

STRANGER; October 17, 1958; 0710, 0750 GCT;[a] 32°11.5'N, 117°17'W; sounding, 700 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 07°, 05°. 97.32

| | | | | |
|---|---|---|---|---|
| 342 | 7.35 | 34.16 | 1.29 | 132 |
| 352 | 7.31 | 34.18 | - | 130 |
| 361 | 7.16 | 34.18 | 1.28 | 128 |
| 371 | 7.10 | 34.21 | - | 126 |
| 380 | 7.06 | 34.21 | 1.13 | 125 |
| 389 | 6.97 | 34.22 | - | 124 |
| 399 | 6.96 | 34.21 | - | 123 |
| 408 | 6.91 | 34.22 | - | 122 |
| 418 | 6.82 | 34.21 | - | 122 |
| 427 | 6.73 | 34.25 | - | 117 |
| 437 | 6.59 | 34.25 | - | 116 |
| 446 | 6.55 | 34.25 | - | 115 |
| 472 | 6.31 | 34.31 | - | 108 |
| 482 | 6.28 | 34.31 | - | 108 |
| 491 | 6.30 | 34.30 | - | 107 |
| 501 | 6.24 | 34.33 | - | 107 |
| 510 | 6.12 | 34.36 | - | 105 |
| 521 | 6.08 | 34.33 | - | 101 |
| 530 | 6.03 | 34.34 | - | 104 |
| 539 | 5.94 | 34.34 | - | 102 |
| 549 | 5.92 | 34.33 | - | 101 |
| 559 | 5.85 | 34.38 | - | 100 |
| 568b) | 5.88 | 34.34 | - | 97 |

STRANGER; October 17, 1958; 0848 GCT; 32°11.5'N, 117°17'W; sounding, 700 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 07°. 97.32

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.77 | 33.58 | 5.37 | 440 | 0 | 20.77 | 33.58 | 5.37 | 23.50 | 440 | 0.00 |
| 12 | 20.74 | 33.57 | 5.31 | 440 | 10 | 20.75 | 33.57 | 5.33 | 23.50 | 440 | 0.04 |
| 31 | 16.08 | 33.50 | 5.65 | 335 | 20 | 20.63 | 33.56 | 5.30 | 23.52 | 438 | 0.09 |
| 40 | 14.99 | 33.48 | 5.26 | 314 | 30 | 16.72 | 33.51 | 5.62 | 24.46 | 348 | 0.13 |
| 50 | 14.46 | 33.51 | 5.13 | 300 | 50 | 14.46 | 33.51 | 5.13 | 24.96 | 300 | 0.19 |
| 59 | 13.84 | 33.44 | 5.38 | 294 | 75 | 12.63 | 33.53 | 4.91 | 25.35 | 264 | 0.26 |
| 68 | 13.14 | 33.53 | 5.11 | 273 | 100 | 11.42 | 33.59 | 4.30 | 25.62 | 238 | 0.33 |
| 82 | 12.15 | 33.53 | 4.73 | 255 | 150 | 9.90 | 33.75 | 3.40 | 26.02 | 200 | 0.44 |
| 95 | 11.58 | 33.57 | 4.43 | 242 | 200 | 9.21 | 33.98 | 2.29 | 26.31 | 172 | 0.53 |
| 109 | 11.12 | 33.64 | 4.01 | 228 | 250 | 8.78 | 34.10 | 1.82 | 26.47 | 157 | 0.62 |
| 131 | 10.38 | 33.67 | 3.77 | 214 | 300 | 7.90 | 34.14 | 1.47 | 26.64 | 141 | 0.69 |
| 158 | 9.70 | 33.80 | 3.21 | 193 | 400 | 6.78 | 34.20 | 0.87 | 26.84 | 122 | 0.83 |
| 190 | 9.27 | 33.96 | 2.38 | 175 | 500 | 6.18 | 34.27 | 0.74 | 26.98 | 108 | 0.95 |
| 236 | 8.94 | 34.08 | 1.94 | 161 | | | | | | | |
| 309 | 7.76 | 34.14 | 1.47 | 139 | | | | | | | |
| 403 | 6.76 | 34.20 | 0.86 | 121 | | | | | | | |
| 528 | 6.04 | 34.29 | 0.72 | 106 | | | | | | | |

a) Test cast.
b) Possible pretrip.

SIO

CCOFI 5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |
| **97.40** | STRANGER; October 17, 1958; 1415 GCT; 31°55.5'N, 117°50'W; sounding, 1000 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°. | | | | | | | | | | |
| 0 | 21.58 | 33.66 | 5.10 | 455 | 0 | 21.58 | 33.66 | 5.10 | 23.34 | 455 | 0.00 |
| 12 | 21.46 | 33.69 | 5.33 | 450 | 10 | 21.47 | 33.68 | 5.30 | 23.37 | 452 | 0.04 |
| 32 | 19.56 | 33.55a) | 5.49 | 412 | 20 | 20.98 | 33.65 | 5.45 | 23.50 | 440 | 0.09 |
| 43p | 16.05 | 33.37 | 6.28 | 344 | 30 | 19.70 | 33.56 | 5.47 | 23.76 | 415 | 0.13 |
| 54p | 15.02 | 33.31 | 6.37 | 327 | 50 | 15.38 | 33.33 | 6.37 | 24.63 | 332 | 0.21 |
| 75p | 13.50 | 33.24 | 5.93 | 301 | 75 | 13.50 | 33.24 | 5.93 | 24.96 | 301 | 0.29 |
| 91p | 12.61 | 33.33 | 5.62 | 278 | 100 | 11.78 | 33.39 | 5.15 | 25.40 | 258 | 0.36 |
| 108p | 11.01 | 33.44 | 4.70 | 241 | 150 | 9.88 | 33.76 | 3.80 | 26.03 | 199 | 0.47 |
| 134p | 10.15 | 33.61 | 4.24 | 215 | 200 | 9.10 | 33.95 | 2.72 | 26.30 | 174 | 0.57 |
| 164p | 9.70 | 33.84 | 3.35 | 191 | 250 | 8.61 | 34.13 | 2.10 | 26.52 | 152 | 0.65 |
| 205p | 9.02 | 33.96 | 2.62 | 171 | 300 | 8.02 | 34.18 | 1.58 | 26.65 | 140 | 0.73 |
| 257p | 8.53 | 34.14 | 2.04 | 151 | 400 | 6.85 | 34.23 | 0.83 | 26.86 | 121 | 0.86 |
| 336p | 7.54 | 34.20 | 1.27 | 132 | 500 | 5.05 | 34.28 | 0.53 | 27.00 | 107 | 0.98 |
| 435p | 6.52 | 34.24 | 0.68 | 115 | | | | | | | |
| 572p | 5.74 | 34.31 | 0.43 | 101 | | | | | | | |
| **97.50** | STRANGER; October 17, 1958; 2152 GCT; 31°36'N, 118°29'W; sounding, 1500 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 13°. | | | | | | | | | | |
| 0 | 20.08 | 33.36 | 5.44 | 438 | 0 | 20.08 | 33.36 | 5.44 | 23.52 | 438 | 0.00 |
| 11 | 19.68 | 33.37 | 5.43 | 428 | 10 | 19.72 | 33.37 | 5.43 | 23.61 | 429 | 0.04 |
| 30 | 19.57 | 33.45 | 4.77u | 420 | 20 | 19.63 | 33.40 | | 23.66 | 424 | 0.08 |
| 39 | 18.85 | 33.49 | 5.70 | 399 | 30 | 19.57 | 33.45 | | 23.70 | 420 | 0.13 |
| 49 | 16.28 | 33.40 | 6.01 | 347 | 50 | 16.23 | 33.40 | 6.03 | 24.48 | 346 | 0.20 |
| 58 | 15.74 | 33.39 | 6.18 | 336 | 75 | 14.38 | 33.34 | 6.27 | 24.85 | 311 | 0.29 |
| 67 | 14.72 | 33.40 | 6.41 | 313 | 100 | 12.40 | 33.37 | 5.58 | 25.27 | 271 | 0.36 |
| 80 | 14.18 | 33.30 | 6.14 | 310 | 150 | 9.15 | 33.65 | 4.09 | 26.06 | 196 | 0.48 |
| 93 | 13.16 | 33.37 | 5.67 | 285 | 200 | 8.40 | 34.08 | 2.67 | 26.51 | 153 | 0.56 |
| 107 | 11.60 | 33.37 | 5.51 | 257 | 250 | 7.53 | 34.06 | 1.98 | 26.62 | 143 | 0.64 |
| 129 | 9.80 | 33.55 | 4.34 | 214 | 300 | 7.30 | 34.12 | 1.60 | 26.70 | 135 | 0.71 |
| 155 | 9.12 | 33.75 | 3.79 | 188 | 400 | 6.49 | (34.18) | 0.88 | (26.87) | (119) | (0.84) |
| 186 | 8.69 | 34.11 | 2.84 | 155 | 500 | 5.98 | | 0.52 | | | |
| 231 | 7.76 | 34.00 | 2.24 | 150 | | | | | | | |
| 304 | 7.26 | 34.12 | 1.54 | 134 | | | | | | | |
| 397 | 6.52 | 34.18 | 0.90 | 120 | | | | | | | |
| 520 | 5.90 | 34.13u | 0.49 | | | | | | | | |
| **97.60** | STRANGER; October 18, 1958; 0346 GCT; 31°18'N, 119°10.5'W; sounding, 1000 fm; wind, 320°, force 4; weather, fog; sea, moderate; wire angle, 06°. | | | | | | | | | | |
| 0 | 19.98 | 33.51 | 5.30 | 425 | 0 | 19.98 | 33.51 | 5.30 | 23.66 | 425 | 0.00 |
| 11 | 20.00 | 33.55 | 5.04 | 423 | 10 | 20.00 | 33.53 | 5.09 | 23.67 | 424 | 0.04 |
| 30 | 19.75 | 33.50 | 5.84 | 421 | 20 | 19.93 | 33.54 | 5.30 | 23.68 | 422 | 0.08 |
| 40 | 16.19 | 33.34 | 4.83u | 349 | 30 | 19.75 | 33.50 | 5.84 | 23.69 | 421 | 0.13 |
| 50 | 14.61 | 33.33 | 6.65u | 317 | 50 | 14.61 | 33.33 | | 24.79 | 317 | 0.20 |
| 59 | 13.26 | 33.34 | 4.95 | 289 | 75 | 11.65 | 33.42 | 4.37 | 25.45 | 254 | 0.27 |
| 68 | 12.12 | 33.39 | 4.48 | 264 | 100 | 10.47 | 33.50 | 3.83 | 25.72 | 228 | 0.33 |
| 82 | 11.23 | 33.44 | 4.26 | 246 | 150 | 9.16 | 33.81 | 2.97 | 26.18 | 184 | 0.44 |
| 96 | 10.60 | 33.48 | 3.89 | 232 | 200 | 8.42 | 34.02 | 1.87 | 26.47 | 157 | 0.52 |
| 110 | 10.12 | 33.58 | 3.66 | 216 | 250 | 7.94 | 34.09 | 1.72 | 26.59 | 145 | 0.60 |
| 134 | 9.42 | 33.71 | 3.39 | 196 | 300 | 7.39 | 34.17 | 1.18 | 26.73 | 133 | 0.67 |
| 161 | 9.00 | 33.87 | 2.68 | 178 | 400 | 6.63 | 34.25 | 0.67 | 26.91 | 116 | 0.80 |
| 192 | 8.53 | 34.00 | 1.90 | 161 | 500 | 5.92 | 34.33 | 0.45 | 27.06 | 101 | 0.92 |
| 237 | 8.05 | 34.07 | 1.81 | 149 | | | | | | | |
| 311 | 7.26 | 34.18 | 1.03 | 130 | | | | | | | |
| 413 | 6.56 | 34.26 | 0.65 | 114 | | | | | | | |
| 526 | 5.71 | 34.37a) | 0.37 | 96 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{-5}T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |

STRANGER; October 18, 1958; 0940 GCT; 31°01.5'N, 119°47.5'W; sounding, 1950 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 04°. 97.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.70 | 33.37 | 5.69 | 404 | 0 | 18.70 | 33.37 | 5.69 | 23.87 | 404 | 0.00 |
| 11 | 18.72 | 33.35 | 6.06 | 406 | 10 | 18.72 | 33.35 | 6.00 | 23.86 | 406 | 0.04 |
| 30 | 18.60 | 33.36 | 5.82 | 402 | 20 | 18.69 | 33.35 | 5.98 | 23.87 | 404 | 0.08 |
| | | | | | 30 | 18.60 | 33.36 | 5.82 | 23.89 | 402 | 0.12 |

STRANGER; October 18, 1958; 1457 GCT; 30°44.5'N, 120°26'W; sounding, 2100 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 06°. 97.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.88 | 33.64 | 5.41 | 413 | 0 | 19.88 | 33.64 | 5.41 | 23.78 | 413 | 0.00 |
| 11 | 19.86 | 33.62 | 5.65 | 414 | 10 | 19.86 | 33.62 | 5.60 | 23.77 | 414 | 0.04 |
| 30 | 19.88 | 33.64 | 5.67 | 414 | 20 | 19.87 | 33.63 | 5.66 | 23.77 | 414 | 0.08 |
| 40 | 19.88 | 33.59 | 5.71 | 417 | 30 | 19.88 | 33.64 | 5.67 | 23.77 | 414 | 0.12 |
| 49 | 17.98 | 33.50 | 6.24 | 377 | 50 | 17.78 | 33.49 | 6.29 | 24.19 | 374 | 0.20 |
| 58 | 16.50 | 33.42 | 6.56 | 350 | 75 | 15.52 | 33.44 | 6.33 | 24.68 | 327 | 0.29 |
| 67 | 15.98 | 33.42 | 6.31 | 338 | 100 | 13.30 | 33.48 | 5.85 | 25.18 | 280 | 0.37 |
| 81 | 15.13 | 33.46 | 6.34 | 317 | 150 | 10.00 | 33.59 | 4.92 | 25.87 | 214 | 0.49 |
| 94 | 13.98 | 33.44 | 6.08 | 296 | 200 | 8.80 | 33.82 | 3.39 | 26.25 | 178 | 0.59 |
| 105 | 12.72 | 33.53 | 5.66 | 265 | 250 | 8.14 | 34.02 | 2.79 | 26.50 | 154 | 0.68 |
| 130 | 11.15 | 33.55 | 5.58 | 235 | 300 | 7.47 | 34.15 | 2.30 | 26.70 | 135 | 0.75 |
| 157 | 9.64 | 33.60 | 4.68 | 207 | 400 | 6.28 | 34.19 | 1.30 | 26.90 | 116 | 0.88 |
| 188 | 8.96 | 33.78 | 3.53 | 183 | 500 | 5.75 | 34.23 | 0.68 | 27.00 | 107 | 1.00 |
| 233 | 8.32 | 33.96 | 2.97 | 161 | | | | | | | |
| 307 | 7.39 | 34.16 | 2.22 | 133 | | | | | | | |
| 398 | 6.30 | 34.19 | 1.34 | 117 | | | | | | | |
| 518 | 5.66 | 34.24 | 0.57 | 105 | | | | | | | |

STRANGER; October 18, 1958; 2020 GCT; 30°24.5'N, 121°12'W; sounding, 2050 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 10°. 97.90

| | | | | |
|---|---|---|---|---|
| 4 | 20.58 | 33.77 | 5.23 | 421 |
| 13 | 20.54 | 33.80 | 5.33 | 418 |
| 23p | 20.45 | 33.78 | 5.15 | 418 |
| 33p | 17.67 | 33.54 | 5.90 | 418 |
| 42p | 16.74 | 33.47 | 5.86 | 367 |
| 50p | 16.14 | 33.44 | 5.96 | 352 |
| 63p | 15.62 | 33.48 | 5.84 | 341 |
| 76p | 14.39 | 33.48 | 5.70 | 327 |
| 88p | 13.48 | 33.48 | 5.40 | 301 |
| 109p | 11.32 | 33.49 | 5.04 | 283 |
| 133p | 9.85 | 33.55 | 4.55 | 243 |
| 163p | 9.20 | 33.69 | 4.25 | 194 |
| 202p | 8.40 | 33.91 | 3.16 | 167 |
| 263p | 7.57 | 34.02 | 2.31 | 146 |
| 337p | 6.70 | 34.09 | 1.43 | 129 |
| 430p | 5.86 | 34.13 | 1.14 | 116 |

PAOLINA-T; October 20, 1958; 1819 GCT; 31°40.5'N, 116°46.5'W; sounding, 250 fm; wind, 090°, force 2; weather, cloudy; sea, very rough; wire angle, 04°. 100.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.06 | 33.56 | 5.37 | 399 | 0 | 19.06 | 33.56 | 5.37 | 23.93 | 399 | 0.00 |
| 9 | 18.58 | 33.51 | 5.53 | 391 | 10 | 18.48 | 33.51 | 5.53 | 24.03 | 389 | 0.04 |
| 30 | 15.62 | 33.48 | 5.80 | 327 | 20 | 18.06 | 33.50 | 5.61 | 24.13 | 379 | 0.08 |
| 50 | 15.08 | 33.68 | 4.36 | 301 | 30 | 15.62 | 33.48 | 5.80 | 24.68 | 327 | 0.11 |
| 75 | 14.06 | 33.69 | 3.49 | 279 | 50 | 15.08 | 33.68 | 4.36 | 24.96 | 301 | 0.18 |
| 100 | 12.81 | 33.78 | 2.57 | 248 | 75 | 14.06 | 33.69 | 3.49 | 25.18 | 279 | 0.25 |
| 124 | 12.25 | 33.87 | 2.04 | 232 | 100 | 12.81 | 33.78 | 2.57 | 25.51 | 248 | 0.32 |
| 165 | 10.46 | 33.96 | 2.43 | 194 | 150 | 11.05 | 33.93 | 2.32 | 25.95 | 206 | 0.43 |
| 203 | 9.73 | 34.05 | 2.33 | 176 | 200 | 9.78 | 34.04 | 2.34 | 26.26 | 177 | 0.53 |
| 253 | 8.96 | 34.18 | 2.14 | 154 | 250 | 8.97 | 34.18 | 2.17 | 26.49 | 155 | 0.62 |
| 300 | 8.34 | 34.22 | 1.40 | 141 | 300 | 8.34 | 34.22 | 1.40 | 26.63 | 141 | 0.69 |
| 408 | 6.92 | 34.23 | 0.94 | 121 | 400 | 7.04 | 34.23 | 0.96 | 26.83 | 123 | 0.83 |

SIO

CCOFI 5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |

100.40 PAOLINA-T; October 20, 1958; 1121 GCT; 31°20.5'N, 117°29'W; sounding, 1100 fm; wind, 340°, force 4; weather, overcast; sea, very rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.18 | 33.58 | 5.24 | 450 | 0 | 21.18 | 33.58 | 5.24 | 23.39 | 450 | 0.00 |
| 11 | 21.18 | 33.63 | 5.11 | 447 | 10 | 21.18 | 33.62 | 5.12 | 23.41 | 448 | 0.04 |
| 31 | 19.35 | 33.50 | 5.54 | 410 | 20 | 21.19 | 33.62 | 5.11 | 23.43 | 446 | 0.09 |
| 46 | 16.62 | 33.58 | 5.33 | 341 | 30 | 19.53 | 33.51 | 5.50 | 23.77 | 414 | 0.13 |
| 56 | 15.85 | 33.60 | 4.93 | 322 | 50 | 16.36 | 33.59 | 5.22 | 24.60 | 335 | 0.21 |
| 66 | 14.56 | 33.56 | 4.72 | 299 | 75 | 13.92 | 33.67 | 4.47 | 25.19 | 278 | 0.28 |
| 76 | 13.92 | 33.67 | 4.46 | 278 | 100 | 12.21 | 33.68 | 3.87 | 25.54 | 245 | 0.35 |
| 95 | 12.47 | 33.68 | 3.99 | 250 | 150 | 10.26 | 33.78 | 3.35 | 25.98 | 204 | 0.47 |
| 110 | 11.82 | 33.69 | 3.69 | 237 | 200 | 8.76 | 33.99 | 2.55 | 26.39 | 165 | 0.56 |
| 125 | 11.60 | 33.73 | 3.27 | 230 | 250 | 8.00 | 34.09 | 1.97 | 26.58 | 146 | 0.64 |
| 149 | 10.27 | 33.78 | 3.35 | 204 | 300 | 7.69 | 34.16 | 1.42 | 26.68 | 137 | 0.71 |
| 177 | 9.36 | 33.91 | 2.85 | 180 | 400 | 7.08 | 34.23 | 0.88 | 26.82 | 124 | 0.85 |
| 215 | 8.48 | 34.03 | 2.37 | 158 | 500 | 6.25 | 34.27 | 0.64 | 26.96 | 110 | 0.97 |
| 269 | 7.86 | 34.12 | 1.79 | 142 | 600 | 5.59 | 34.35 | 0.39 | 27.11 | 96 | 1.08 |
| 352 | 7.55 | 34.22 | 1.06 | 130 | | | | | | | |
| 456 | 6.55 | 34.25 | 0.73 | 115 | | | | | | | |
| 602 | 5.58 | 34.35 | 0.38 | 96 | | | | | | | |

100.70 PAOLINA-T; October 19, 1958; 1435 GCT; 30°12.5'N, 119°40.5'W; sounding, 2000 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.74 | 33.40 | 4.75 | 427 | 0 | 19.74 | 33.40 | 4.75 | 23.63 | 427 | 0.00 |
| 11 | 19.74 | 33.44 | 5.11 | 424 | 10 | 19.74 | 33.44 | 5.10 | 23.66 | 424 | 0.04 |
| 30 | 19.81 | 33.42 | 5.07 | 427 | 20 | 19.77 | 33.43 | 5.10 | 23.64 | 426 | 0.08 |
| 59 | 16.44 | 33.44 | 5.44 | 347 | 30 | 19.81 | 33.42 | 5.07 | 23.63 | 427 | 0.13 |
| 68 | 14.92 | 33.33 | 5.75 | 323 | 50 | 18.74 | 33.43 | 5.11 | 23.90 | 401 | 0.21 |
| 78 | 14.41 | 33.46 | 5.52 | 303 | 75 | 14.60 | 33.41 | 5.61 | 24.86 | 310 | 0.30 |
| 92 | 13.38 | 33.45 | 5.16 | 283 | 100 | 12.42 | 33.43 | 4.91 | 25.31 | 267 | 0.37 |
| 107 | 11.82 | 33.43 | 4.81 | 256 | 150 | 9.80 | 33.60 | 4.31 | 25.92 | 210 | 0.49 |
| 121 | 10.92 | 33.48 | 4.79 | 237 | 200 | 8.72 | 33.89 | 2.88 | 26.32 | 172 | 0.59 |
| 139 | 10.28 | 33.55 | 4.40 | 221 | 250 | 8.06 | 34.03 | 2.55 | 26.53 | 151 | 0.67 |
| 158 | 9.55 | 33.64 | 4.29 | 203 | 300 | 7.47 | 34.08 | 2.25 | 26.65 | 140 | 0.75 |
| 186 | 8.95a) | 33.81 | 3.42 | 181 | 400 | 6.77 | 34.16 | 1.06 | 26.81 | 125 | 0.89 |
| 209 | 8.60 | 33.93 | 2.71 | 167 | 500 | 6.24 | 34.32 | 0.46 | 27.00 | 106 | 1.01 |
| 262 | 7.92 | 34.05 | 2.51 | 148 | 600 | (5.63) | (34.40) | (0.29) | (27.14) | (93) | (1.11) |
| 344 | 7.05 | 34.11 | 1.65 | 132 | | | | | | | |
| 452 | 6.49 | 34.27 | 0.59 | 113 | | | | | | | |
| 590 | 5.71 | 34.39 | 0.29 | 94 | | | | | | | |

100.80 PAOLINA-T; October 19, 1958; 0805 GCT; 29°55'N, 120°12'W; sounding, 1900 fm; wind, 340°, force 7; weather, clear; sea, high; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.54 | 33.57 | 4.36 | 434 | 0 | 20.54 | 33.57 | 4.36 | 23.56 | 434 | 0.00 |
| 12 | 20.53 | 33.57 | 4.90 | 434 | 10 | 20.53 | 33.57 | 4.85 | 23.56 | 434 | 0.04 |
| 31 | 20.57 | 33.57 | 4.86 | 436 | 20 | 20.55 | 33.57 | 4.88 | 23.55 | 435 | 0.09 |
| 60 | 16.00 | 33.33 | 5.05 | 346 | 30 | 20.57 | 33.57 | 4.86 | 23.54 | 436 | 0.13 |
| 69 | 15.22 | 33.35 | 5.79 | 327 | 50 | 17.70 | 33.39 | 5.39 | 24.13 | 380 | 0.21 |
| 79 | 14.41 | 33.38 | 5.60 | 309 | 75 | 14.83 | 33.36 | 5.72 | 24.77 | 319 | 0.30 |
| 93 | 13.47 | 33.48 | 5.27 | 283 | 100 | 12.90 | 33.47 | 5.03 | 25.25 | 273 | 0.38 |
| 108 | 12.24 | 33.47 | 4.79 | 261 | 150 | 9.69 | 33.62 | 3.75 | 25.94 | 207 | 0.49 |
| 121 | 10.86 | 33.48 | 4.46 | 236 | 200 | 8.80 | 33.97 | 2.61 | 26.36 | 167 | 0.59 |
| 139 | 9.96 | 33.57 | 3.92 | 214 | 250 | 8.28 | 34.04 | 2.16 | 26.49 | 155 | 0.67 |
| 158 | 9.46 | 33.69 | 3.54 | 198 | 300 | 7.67 | 34.11 | 1.65 | 26.64 | 141 | 0.75 |
| 186 | 8.90 | 33.86 | 2.88 | 176 | 400 | 6.88 | 34.21 | 0.84 | 26.84 | 122 | 0.89 |
| 209 | 8.77 | 34.00 | 2.50 | 164 | 500 | 6.25 | 34.27 | 0.43 | 26.96 | 110 | 1.01 |
| 262 | 8.14 | 34.05 | 2.05 | 151 | 600 | (5.57) | (34.33) | | (27.10) | (97) | (1.12) |
| 343 | 7.23 | 34.18 | 1.25 | 129 | | | | | | | |
| 450 | 6.60 | 34.24 | 0.50 | 116 | | | | | | | |
| 588 | 5.62 | 34.33 | 0.40 | 98 | | | | | | | |

a) Alternate value, 9.19°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

100.90

PAOLINA-T; October 19, 1958; 0210 GCT; 29°40.5'N, 120°39.5'W; sounding, 2050 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.16 | 33.51 | 5.17 | 429 | 0 | 20.16 | 33.51 | 5.17 | 23.61 | 429 | 0.00 |
| 12 | 20.16 | 33.53 | 4.91 | 427 | 10 | 20.16 | 33.53 | 4.93 | 23.62 | 428 | 0.04 |
| 31 | – | 33.57 | 5.14 | | 20 | 20.14 | 33.54 | 4.93 | 23.64 | 426 | 0.08 |
| 46 | 17.58 | 33.47 | 5.73 | 371 | 30 | 20.07 | 33.56 | 5.18 | 23.66 | 424 | 0.13 |
| 55 | 16.40 | 33.55 | 5.70 | 339 | 50 | 16.78 | 33.50 | 5.77 | 24.43 | 351 | 0.20 |
| 65 | 16.44 | 33.68 | 5.74 | 330 | 75 | 16.37 | 33.83 | 5.67 | 24.78 | 317 | 0.29 |
| 76 | 16.36 | 33.83 | 5.66 | 317 | 100 | 15.55 | 33.79 | 5.31 | 24.94 | 302 | 0.37 |
| 93 | 15.86 | 33.80 | 5.39 | 308 | 150 | 10.39 | 33.59 | 4.47 | 25.80 | 220 | 0.50 |
| 108 | 15.00 | 33.79 | 5.25 | 291 | 200 | 9.22 | 33.88 | 2.54 | 26.21 | 182 | 0.60 |
| 122 | 13.50 | 33.78 | 5.13 | 262 | 250 | 8.83 | 34.12 | 1.82 | 26.48 | 156 | 0.69 |
| 145 | 10.71 | 33.58 | 4.71 | 226 | 300 | 8.45 | 34.19 | 1.46 | 26.59 | 146 | 0.77 |
| 174 | 9.63a) | 33.71 | 3.44 | 199 | 400 | 7.27 | 34.23 | 0.93 | 26.79 | 126 | 0.91 |
| 209 | 9.18 | 33.96 | 2.31 | 172 | 500 | 6.28 | 34.27 | 0.58 | 26.96 | 111 | 1.03 |
| 261 | 8.76 | 34.14 | 1.72 | 154 | 600 | (5.52) | (34.32) | | (27.09) | (98) | (1.14) |
| 340 | 8.02 | 34.21 | 1.23 | 138 | | | | | | | |
| 441 | 6.80 | 34.24 | 0.76 | 119 | | | | | | | |
| 586 | 5.63 | 34.31 | 0.35 | 100 | | | | | | | |

103.32

PAOLINA-T; October 17, 1958; 0525 GCT; 31°00'N, 116°33.5'W; sounding, 190 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.54 | 33.60 | 5.40 | 432 | 0 | 20.54 | 33.60 | 5.40 | 23.58 | 432 | 0.00 |
| 12 | 20.41 | 33.64 | 4.50 | 427 | 10 | 20.45 | 33.64 | 4.57 | 23.62 | 428 | 0.04 |
| 32 | 18.78 | 33.64 | 5.09 | 386 | 20 | 20.37 | 33.64 | 4.50 | 23.68 | 423 | 0.08 |
| 51 | 15.26 | 33.64 | 4.58 | 307 | 30 | 19.17 | 33.64 | 4.98 | 23.96 | 396 | 0.13 |
| 76 | 14.30 | 33.75 | 3.53 | 280 | 50 | 15.30 | 33.64 | 4.61 | 24.88 | 308 | 0.20 |
| 100 | 13.36 | 33.81 | 2.81 | 256 | 75 | 14.32 | 33.74 | 3.55 | 25.17 | 280 | 0.27 |
| 125 | 12.27 | 33.86 | 2.73 | 233 | 100 | 13.36 | 33.81 | 2.81 | 25.42 | 256 | 0.34 |
| 166 | 10.80 | 33.95 | 2.32 | 200 | 150 | 11.53 | 33.93 | 2.48 | 25.87 | 214 | 0.46 |
| 205 | 10.71 | 34.20 | 1.56 | 180 | 200 | 10.72 | 34.18 | 1.60 | 26.20 | 182 | 0.56 |
| 256 | 9.38 | 34.24 | 1.36 | 156 | 250 | 9.50 | 34.24 | 1.36 | 26.46 | 158 | 0.65 |
| 308 | 8.30 | 34.22 | 1.31 | 141 | 300 | 8.48 | 34.22 | 1.32 | 26.61 | 144 | 0.72 |

103.35

PAOLINA-T; October 17, 1958; 0800 GCT; 30°53.5'N, 116°45.5'W; sounding, 930 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.32 | 33.59 | 5.09 | 454 | 0 | 21.32 | 33.59 | 5.09 | 23.36 | 454 | 0.00 |
| 12 | 21.24 | 33.60 | 5.09 | 451 | 10 | 21.26 | 33.60 | 5.09 | 23.38 | 451 | 0.04 |
| 32 | 18.40 | 33.40 | 5.81 | 394 | 20 | 21.18 | 33.60 | 5.10 | 23.40 | 449 | 0.09 |
| 42 | 16.34 | 33.37 | 5.92 | 350 | 30 | 19.00 | 33.44 | 5.41 | 23.85 | 406 | 0.13 |
| 52 | 15.64 | 33.37 | 5.86 | 336 | 50 | 15.74 | 33.37 | 5.88 | 24.58 | 336 | 0.21 |
| 61 | 14.79 | 33.46 | 5.60 | 311 | 75 | 14.07 | 33.52 | 5.22 | 25.06 | 291 | 0.28 |
| 71 | 14.24 | 33.52 | 5.30 | 295 | 100 | 11.83 | 33.58 | 4.29 | 25.54 | 245 | 0.36 |
| 86 | 12.78 | 33.55 | 4.71 | 265 | 150 | 9.80 | 33.76 | 3.16 | 26.04 | 198 | 0.46 |
| 101 | 11.81 | 33.58 | 4.28 | 245 | 200 | 9.41 | 34.07 | 2.28 | 26.34 | 169 | 0.56 |
| 116 | 11.36 | 33.79 | 3.01 | 222 | 250 | 9.65 | 34.42 | 0.68 | 26.57 | 147 | 0.64 |
| 141 | 9.88 | 33.73 | 3.43 | 202 | 300 | 8.94 | 34.38 | 0.69 | 26.66 | 139 | 0.71 |
| 171 | 9.66 | 33.95 | 2.67 | 182 | 400 | 7.30 | 34.31 | 0.63 | 26.86 | 120 | 0.85 |
| 205 | 9.38 | 34.09 | 2.19 | 167 | 500 | 6.38 | 34.32 | 0.44 | 26.99 | 108 | 0.97 |
| 255 | 9.64 | 34.43 | 0.66 | 146 | | | | | | | |
| 335 | 8.32 | 34.34 | 0.72 | 132 | | | | | | | |
| 434 | 6.88 | 34.31 | 0.55 | 115 | | | | | | | |
| 564 | 5.96 | 34.34 | 0.36 | 101 | | | | | | | |

a) Alternate value, 10.00°C, not used in interpolation.

SIO

CCOFI
5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_{-5}^{3}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_{-5}^{3}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

103.40 PAOLINA-T; October 17, 1958; 1143 GCT; 30°44.5'N, 117°06'W; sounding, 1040 fm; wind, 280°, force 2; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.10 | 33.56 | 5.05 | 450 | 0 | 21.10 | 33.56 | 5.05 | 23.39 | 450 | 0.00 |
| 11 | 21.12 | 33.58 | 5.16 | 449 | 10 | 21.12 | 33.58 | 5.15 | 23.40 | 449 | 0.04 |
| 31 | 16.50 | 33.33 | 5.94 | 357 | 20 | 19.78 | 33.40 | 5.22 | 23.70 | 421 | 0.09 |
| 41 | 15.09 | 33.44 | 5.76 | 319 | 30 | 16.75 | 33.34 | 5.90 | 24.32 | 362 | 0.13 |
| 50 | 14.05 | 33.42 | 5.36 | 299 | 50 | 14.05 | 33.42 | 5.36 | 24.98 | 299 | 0.19 |
| 60 | 13.08 | 33.52 | 4.77 | 273 | 75 | 12.10 | 33.55 | 4.30 | 25.47 | 252 | 0.26 |
| 70 | 12.34 | 33.53 | 4.44 | 259 | 100 | 11.02 | 33.59 | 4.08 | 25.70 | 230 | 0.32 |
| 85 | 11.68 | 33.62 | 4.11 | 240 | 150 | 9.38 | 33.80 | 3.28 | 26.14 | 188 | 0.43 |
| 101 | 10.94 | 33.59 | 4.08 | 230 | 200 | 8.99 | 34.05 | 2.32 | 26.40 | 164 | 0.52 |
| 115 | 10.08 | 33.78 | 3.80 | 202 | 250 | 8.52 | 34.17 | 1.70 | 26.56 | 148 | 0.60 |
| 170 | 9.04 | 33.82 | 3.01 | 182 | 300 | 8.26 | 34.28 | 1.02 | 26.69 | 136 | 0.67 |
| 205 | 8.98 | 34.08 | 2.17 | 162 | 400 | 7.40 | 34.32 | 0.58 | 26.85 | 121 | 0.80 |
| 254 | 8.44 | 34.18 | 1.65 | 146 | 500 | 6.48 | 34.32 | 0.41 | 26.98 | 109 | 0.92 |
| 333 | 8.14 | 34.33 | 0.80 | 131 | | | | | | | |
| 433 | 7.02 | 34.32 | 0.50 | 116 | | | | | | | |
| 562 | 5.94 | 34.34 | 0.33 | 101 | | | | | | | |

103.50 PAOLINA-T; October 17, 1958; 1814 GCT; 30°26'N, 117°46.5'W; sounding, 1400 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.66 | 33.64 | 5.10 | 459 | 0 | 21.66 | 33.64 | 5.10 | 23.30 | 459 | 0.00 |
| 12 | 21.36 | 33.69 | 5.35 | 447 | 10 | 21.38 | 33.69 | 5.33 | 23.41 | 448 | 0.04 |
| 32 | 20.20 | 33.55 | 4.61u | 428 | 20 | 21.35 | 33.69 | | 23.42 | 446 | 0.09 |
| 42 | 17.37 | 33.45 | 5.82 | 367 | 30 | 21.00 | 33.65 | | 23.49 | 441 | 0.13 |
| 51 | 15.74 | 33.44 | 5.37 | 332 | 50 | 15.85 | 33.44 | 5.40 | 24.61 | 334 | 0.21 |
| 62 | 15.18 | 33.48 | 5.33 | 317 | 75 | 14.02 | 33.44 | 5.20 | 25.00 | 297 | 0.29 |
| 72 | 14.24 | 33.44 | 5.26 | 301 | 100 | 11.66 | 33.52 | 4.36 | 25.52 | 247 | 0.36 |
| 84 | 13.36 | 33.44 | 4.94 | 284 | 150 | 9.48 | 33.78 | 3.25 | 26.11 | 191 | 0.47 |
| 101 | 11.56 | 33.53 | 4.32 | 244 | 200 | 9.00 | 34.08 | 1.99 | 26.43 | 161 | 0.56 |
| 115 | 10.24 | 33.59 | 3.41 | 218 | 250 | 8.10 | 34.11 | 1.96 | 26.58 | 146 | 0.64 |
| 140 | 9.56 | 33.69 | 3.34 | 199 | 300 | 7.65 | 34.18 | 1.38 | 26.70 | 135 | 0.71 |
| 169 | 9.39 | 33.96 | 2.41 | 177 | 400 | 6.86 | 34.28 | 0.70 | 26.89 | 117 | 0.84 |
| 203 | 8.95 | 34.09 | 1.98 | 160 | 500 | 6.18 | 34.32 | 0.46 | 27.02 | 105 | 0.96 |
| 253 | 8.04 | 34.11 | 1.96 | 146 | | | | | | | |
| 331 | 7.48 | 34.22 | 1.01 | 130 | | | | | | | |
| 432 | 6.58 | 34.30 | 0.59 | 112 | | | | | | | |
| 563 | 5.82 | 34.34 | 0.37 | 100 | | | | | | | |

103.60 PAOLINA-T; October 18, 1958; 0140 GCT; 30°06'N, 118°24'W; sounding, 1700 fm; wind, 340°, force 2; weather, clear; sea, rough; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.66 | 33.59 | 4.66 | 462 | 0 | 21.66 | 33.59 | 4.66 | 23.26 | 462 | 0.00 |
| 12 | 21.49 | 33.58 | 5.06 | 459 | 10 | 21.51 | 33.58 | 5.04 | 23.30 | 459 | 0.05 |
| 32 | 20.37 | 33.52 | 5.20 | 434 | 20 | 21.34 | 33.57 | 5.10 | 23.33 | 456 | 0.09 |
| 41 | 18.52 | 33.48 | 5.55 | 392 | 30 | 20.93 | 33.55 | 5.14 | 23.43 | 446 | 0.14 |
| 51 | 16.62 | 33.37 | 5.82 | 356 | 50 | 16.70 | 33.37 | 5.81 | 24.35 | 358 | 0.22 |
| 61 | 15.86 | 33.48 | 5.71 | 331 | 75 | 14.20 | 33.48 | 5.13 | 25.00 | 297 | 0.30 |
| 71 | 14.78 | 33.47 | 5.38 | 310 | 100 | 12.22 | 33.51 | 4.54 | 25.41 | 258 | 0.37 |
| 86 | 13.35 | 33.50 | 4.81 | 279 | 150 | 10.01 | 33.70 | 3.60 | 25.96 | 206 | 0.49 |
| 100 | 12.22 | 33.51 | 4.54 | 258 | 200 | 9.13 | 34.00 | 2.36 | 26.34 | 169 | 0.58 |
| 115 | 11.06 | 33.55 | 4.23 | 234 | 250 | 8.75 | 34.18 | 1.70 | 26.55 | 150 | 0.66 |
| 140 | 10.24 | 33.66 | 3.77 | 212 | 300 | 8.15 | 34.24 | 1.35 | 26.67 | 138 | 0.74 |
| 168 | 9.58 | 33.78 | 3.19 | 193 | 400 | 7.06 | 34.30 | 0.78 | 26.88 | 118 | 0.87 |
| 203 | 9.08 | 34.02 | 2.32 | 168 | 500 | 6.28 | 34.34 | 0.48 | 27.02 | 105 | 0.99 |
| 251 | 8.71 | 34.19 | 1.67 | 150 | | | | | | | |
| 329 | 7.76 | 34.26 | 1.14 | 130 | | | | | | | |
| 429 | 6.80 | 34.40u | 0.65 | | | | | | | | |
| 561 | 5.86 | 34.36 | 0.36 | 99 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| PAOLINA-T; October 18, 1958; 0752 GCT; 29°44.5'N, 119°08'W; sounding, 1800 fm; wind, 320°, force 2; weather, fog; sea, rough; wire angle, 02°. | | | | | | | | | | | | 103.70 |
| 0 | 20.68 | 33.56 | 5.11 | 439 | 0 | 20.68 | 33.56 | 5.11 | 23.50 | 439 | 0.00 | |
| 11 | 20.67 | 33.55 | 5.02 | 440 | 10 | 20.67 | 33.55 | 5.03 | 23.50 | 440 | 0.04 | |
| 31 | 19.87 | 33.57 | 5.25 | 418 | 20 | 20.58 | 33.55 | 5.02 | 23.52 | 438 | 0.09 | |
| 41 | 17.23 | 33.48 | 5.78 | 362 | 30 | 20.08 | 33.56 | 5.17 | 23.66 | 424 | 0.13 | |
| 51 | 17.02 | 33.65 | 5.82 | 345 | 50 | 17.03 | 33.64 | 5.82 | 24.49 | 345 | 0.21 | |
| 61 | 17.38 | 33.89 | 5.65 | 335 | 75 | 16.30 | 33.83 | 5.66 | 24.80 | 316 | 0.29 | |
| 70 | 16.62 | 33.82 | 5.61 | 324 | 100 | 15.88 | 33.93 | 5.44 | 24.98 | 299 | 0.37 | |
| 85 | 16.04 | 33.85 | 5.69 | 309 | 150 | 10.43 | 33.60 | 4.66 | 25.80 | 220 | 0.50 | |
| 100 | 15.88 | 33.93 | 5.44 | 299 | 200 | 8.90 | 33.91 | 3.10 | 26.30 | 173 | 0.60 | |
| 115 | 14.05 | 33.77 | 5.35 | 273 | 250 | 7.95 | 34.00 | 2.58 | 26.52 | 152 | 0.68 | |
| 139 | 11.02 | 33.58 | 4.90 | 231 | 300 | 7.24 | 34.06 | 1.94 | 26.67 | 138 | 0.76 | |
| 168 | 9.70 | 33.66 | 4.28 | 204 | 400 | 6.61 | 34.22 | 0.80 | 26.88 | 118 | 0.89 | |
| 201 | 8.89 | 33.91 | 3.09 | 173 | 500 | 6.12 | 34.32 | 0.44 | 27.03 | 104 | 1.01 | |
| 249 | 7.96 | 34.00 | 2.59 | 152 | | | | | | | | |
| 326 | 6.96 | 34.09 | 1.57 | 132 | | | | | | | | |
| 426 | 6.48 | 34.25 | 0.61 | 114 | | | | | | | | |
| 555 | 5.71 | 34.38 | 0.37 | 95 | | | | | | | | |
| PAOLINA-T; October 18, 1958; 1405 GCT; 29°24'N, 119°51'W; sounding, 1900 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 03°. | | | | | | | | | | | | 103.80 |
| 0 | 20.12 | 33.39 | 5.24 | 438 | 0 | 20.12 | 33.39 | 5.24 | 23.52 | 438 | 0.00 | |
| 11 | 20.12 | 33.47 | 4.98 | 431 | 10 | 20.12 | 33.46 | 5.00 | 23.58 | 432 | 0.04 | |
| 31 | 20.07 | 33.39 | 5.08 | 436 | 20 | 20.10 | 33.43 | 5.00 | 23.56 | 434 | 0.09 | |
| 56 | 16.06 | 33.26 | 5.43 | 352 | 30 | 20.07 | 33.40 | 5.08 | 23.54 | 436 | 0.13 | |
| 67 | 15.20 | 33.25 | 5.71 | 334 | 50 | 18.00 | 33.31 | 5.26 | 24.00 | 392 | 0.21 | |
| 77 | 14.48 | 33.20 | 5.28 | 324 | 75 | 14.60 | 33.21 | 5.31 | 24.70 | 326 | 0.30 | |
| 87 | 13.12 | 33.22 | 5.57 | 296 | 100 | 12.10 | 33.30 | 5.16 | 25.27 | 271 | 0.38 | |
| 102 | 12.02 | 33.31 | 5.07 | 269 | 150 | 9.46 | 33.62 | 3.77 | 25.99 | 203 | 0.50 | |
| 117 | 10.98 | 33.38 | 4.58 | 245 | 200 | 8.70 | 33.94 | 2.30 | 26.35 | 168 | 0.59 | |
| 136 | 9.76 | 33.60 | 4.08 | 209 | 250 | 8.20 | 34.10 | 1.72 | 26.56 | 148 | 0.67 | |
| 156 | 9.36 | 33.64 | 3.50 | 200 | 300 | 7.66 | 34.13 | 1.38 | 26.66 | 139 | 0.75 | |
| 180 | 8.92a) | 33.81 | 2.76 | 180 | 400 | 6.63 | 34.15 | 0.98 | 26.84 | 122 | 0.88 | |
| 205 | 8.66 | 33.95 | 2.26 | 166 | 500 | 5.70 | 34.28 | 0.56 | 27.05 | 102 | 1.00 | |
| 255 | 8.14 | 34.11 | 1.67 | 147 | | | | | | | | |
| 333 | 7.28 | 34.14 | 1.18 | 133 | | | | | | | | |
| 433 | 6.10 | 34.16 | 0.81 | 116 | | | | | | | | |
| 564 | 5.52 | 34.40 | 0.39 | 92 | | | | | | | | |
| PAOLINA-T; October 18, 1958; 1914 GCT; 29°09.5'N, 120°25'W; sounding, 2000 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 17°. | | | | | | | | | | | | 103.90 |
| 0 | 20.32 | 33.40 | 5.40 | 442 | 0 | 20.32 | 33.40 | 5.40 | 23.48 | 442 | 0.00 | |
| 11 | 20.18 | 33.43 | 5.12 | 436 | 10 | 20.19 | 33.43 | 5.13 | 23.53 | 436 | 0.04 | |
| 30 | 20.07 | 33.40 | 5.22 | 435 | 20 | 20.10 | 33.41 | 5.20 | 23.54 | 436 | 0.09 | |
| 54 | 17.26 | 33.37 | 5.80 | 370 | 30 | 20.07 | 33.40 | 5.22 | 23.54 | 435 | 0.13 | |
| 63 | 16.66 | 33.37 | 5.82 | 357 | 50 | 17.81 | 33.37 | 5.74 | 24.10 | 383 | 0.21 | |
| 72 | 15.84 | 33.41 | 5.89 | 336 | 75 | 15.58 | 33.40 | 5.87 | 24.63 | 332 | 0.30 | |
| 82 | 15.18 | 33.38 | 5.80 | 325 | 100 | 14.26 | 33.43 | 5.61 | 24.94 | 302 | 0.38 | |
| 96 | 14.46 | 33.44 | 5.66 | 305 | 150 | 9.92 | 33.56 | 4.29 | 25.86 | 215 | 0.51 | |
| 109 | 13.02 | 33.33 | 5.34 | 286 | 200 | 8.72 | 33.84 | 2.88 | 26.28 | 175 | 0.61 | |
| 127 | 10.77 | 33.42 | 4.53 | 239 | 250 | 8.00 | 34.03 | 2.05 | 26.54 | 151 | 0.69 | |
| 145 | 10.04 | 33.54 | 4.34 | 218 | 300 | 7.62 | 34.10 | 1.52 | 26.64 | 140 | 0.77 | |
| 167 | 9.44 | 33.61 | 3.92 | 204 | 400 | 6.42 | 34.14 | 1.01 | 26.84 | 122 | 0.91 | |
| 188 | 8.97 | 33.78 | 3.19 | 183 | 500 | 5.73 | 34.21 | 0.64 | 26.99 | 108 | 1.03 | |
| 234 | 8.14 | 33.98 | 2.26 | 156 | | | | | | | | |
| 308 | 7.57 | 34.11 | 1.46 | 139 | | | | | | | | |
| 406 | 6.38 | 34.14 | 0.99 | 121 | | | | | | | | |
| 535 | 5.50 | 34.24 | 0.45 | 104 | | | | | | | | |

a) Alternate value, 9.06°C; not used in interpolation.

SIO

CCOFI 5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

107.32 PAOLINA-T; October 16, 1958; 2324 GCT; 30°25.5'N, 116°10.5'W; sounding, 190 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.82 | 33.62a) | 4.74 | 465 | 0 | 21.82 | 33.62 | 4.74 | 23.24 | 465 | 0.00 |
| 11 | 20.57 | 33.62 | 4.82b) | 432 | 10 | 20.67 | 33.62 | 4.80 | 23.56 | 434 | 0.04 |
| 31 | 18.20 | 33.48 | 5.40 | 384 | 20 | 19.45 | 33.56 | 5.10 | 23.81 | 408 | 0.09 |
| 50 | 15.88 | 33.61 | 5.01 | 322 | 30 | 18.30 | 33.49 | 5.39 | 24.05 | 387 | 0.13 |
| 74 | 14.24 | 33.68 | 3.73 | 284 | 50 | 15.88 | 33.61 | 5.01 | 24.74 | 322 | 0.20 |
| 98 | 12.76 | 33.73 | 2.64 | 251 | 75 | 14.18 | 33.68 | 3.67 | 25.16 | 282 | 0.27 |
| 123 | 12.41 | 33.93 | 1.86 | 230 | 100 | 12.76 | 33.76 | 2.63 | 25.50 | 249 | 0.34 |
| 161 | 11.66 | 34.16 | 1.27 | 200 | 150 | 11.95 | 34.10 | 1.32 | 25.92 | 209 | 0.46 |
| 201 | 9.80 | 34.14 | 1.85 | 170 | 200 | 9.80 | 34.14 | 1.85 | 26.33 | 170 | 0.55 |
| 250 | 9.98 | 34.49 | 0.92 | 146 | 250 | 9.98 | 34.49 | 0.92 | 26.58 | 146 | 0.64 |

107.35 PAOLINA-T; October 16, 1958; 2130 GCT; 30°22.5'N, 116°18'W; sounding, 880 fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.85 | 33.66 | 4.68 | 462 | 0 | 21.85 | 33.66 | 4.68 | 23.26 | 462 | 0.00 |
| 11 | 21.28 | 33.65 | 4.64 | 448 | 10 | 21.30 | 33.65 | 4.64 | 23.40 | 449 | 0.04 |
| 31 | 20.30 | 33.62 | 5.36 | 425 | 20 | 21.14 | 33.65 | 4.74 | 23.44 | 445 | 0.09 |
| 41 | 17.19 | 33.37 | 5.58 | 369 | 30 | 20.60 | 33.63 | 5.15 | 23.58 | 432 | 0.13 |
| 51 | 15.68 | 33.37 | 5.58 | 336 | 50 | 15.80 | 33.37 | 5.58 | 24.57 | 338 | 0.21 |
| 60 | 14.90 | 33.44 | 5.08 | 315 | 75 | 13.78 | 33.54 | 4.69 | 25.13 | 285 | 0.29 |
| 70 | 13.92 | 33.54 | 4.67 | 288 | 100 | 11.98 | 33.60 | 4.28 | 25.53 | 246 | 0.36 |
| 84 | 13.03 | 33.55 | 4.92 | 270 | 150 | 9.87 | 33.88 | 2.56 | 26.12 | 190 | 0.47 |
| 100 | 11.98 | 33.60 | 4.28 | 246 | 200 | 9.34 | 34.14 | 1.82 | 26.42 | 162 | 0.56 |
| 114 | 12.00 | 33.90 | 2.82 | 225 | 250 | 9.90 | 34.44 | 0.78 | 26.55 | 149 | 0.64 |
| 139 | 10.02 | 33.82 | 2.70 | 197 | 300 | 9.12 | 34.41 | 0.68 | 26.66 | 139 | 0.71 |
| 167 | 9.66 | 34.00 | 2.26 | 178 | 400 | 7.60 | 34.35 | 0.51 | 26.84 | 122 | 0.85 |
| 202 | 9.28 | 34.15 | 1.72 | 161 | 500 | 6.60 | 34.34 | 0.36 | 26.98 | 109 | 0.97 |
| 250 | 9.90 | 34.44 | 0.78 | 149 | | | | | | | |
| 330 | 8.62 | 34.39 | 0.65 | 133 | | | | | | | |
| 429 | 7.22 | 34.34 | 0.46 | 117 | | | | | | | |
| 558 | 6.03 | 34.34 | 0.28 | 102 | | | | | | | |

107.40 PAOLINA-T; October 16, 1958; 1820 GCT; 30°15'N, 116°34.5'W; sounding, 1500 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.68 | 33.66 | 4.90 | 458 | 0 | 21.68 | 33.66 | 4.90 | 23.31 | 458 | 0.00 |
| 12 | 21.42 | 33.68 | 4.87 | 450 | 10 | 21.45 | 33.68 | 4.87 | 23.38 | 450 | 0.04 |
| 32 | 21.06 | 33.66 | 5.05 | 441 | 20 | 21.28 | 33.68 | 4.92 | 23.43 | 446 | 0.09 |
| 42 | 17.32 | 33.46 | 5.29 | 365 | 30 | 21.10 | 33.66 | 5.03 | 23.47 | 442 | 0.13 |
| 52 | 16.36 | 33.41 | 5.80 | 347 | 50 | 16.50 | 33.42 | 5.73 | 24.44 | 350 | 0.21 |
| 62 | 15.74 | 33.53 | 5.42 | 325 | 75 | 15.66 | 33.69 | 5.48 | 24.84 | 312 | 0.30 |
| 72 | 15.78 | 33.69 | 5.51 | 314 | 100 | 12.56 | 33.53 | 4.73 | 25.36 | 263 | 0.37 |
| 87 | 14.45 | 33.66 | 5.08 | 289 | 150 | 9.51 | 33.67 | 3.86 | 26.02 | 200 | 0.48 |
| 102 | 12.32 | 33.52 | 4.71c) | 259 | 200 | 9.09 | 34.08 | 2.13 | 26.40 | 164 | 0.58 |
| 116 | 11.12 | 33.58 | 4.66 | 233 | 250 | 8.94 | 34.24 | 1.26 | 26.56 | 148 | 0.66 |
| 142 | 9.80 | 33.62 | 4.12 | 208 | 300 | 8.15 | 34.24 | 1.12 | 26.68 | 138 | 0.73 |
| 171 | 9.08 | 33.84 | 2.98 | 181 | 400 | 7.25 | 34.31 | 0.60 | 26.86 | 120 | 0.87 |
| 206 | 9.09 | 34.11 | 1.96 | 161 | 500 | 6.66 | 34.37 | 0.35 | 26.99 | 108 | 0.99 |
| 256 | 8.86 | 34.25 | 1.23 | 147 | | | | | | | |
| 335 | 7.60 | 34.23 | 1.04 | 131 | | | | | | | |
| 434 | 7.07 | 34.35 | 0.43 | 114 | | | | | | | |
| 564 | 6.24 | 34.38 | 0.31 | 102 | | | | | | | |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.
b) Alternate value, 4.34 ml/L, not used in interpolation.
c) Alternate value, 4.46 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}^{-5}$ 10 cm/g | ΔD dyn. m |

PAOLINA-T; October 16, 1958; 1156 GCT; 29°54'N, 117°14'W; sounding, 1500 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 05°. 107.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.02 | 33.59 | 4.98 | 446 | 0 | 21.02 | 33.59 | 4.98 | 23.43 | 446 | 0.00 |
| 11 | 21.01 | 33.61 | 4.82 | 444 | 10 | 21.01 | 33.61 | 4.83 | 23.45 | 444 | 0.04 |
| 31 | 19.30 | 33.46 | 5.01 | 412 | 20 | 21.00 | 33.61 | 4.82 | 23.45 | 444 | 0.09 |
| 46 | 15.66 | 33.39 | 5.69 | 334 | 30 | 19.80 | 33.50 | 4.82 | 23.69 | 421 | 0.13 |
| 56 | 14.60 | 33.40 | 5.58 | 312 | 50 | 15.25 | 33.39 | 5.66 | 24.70 | 325 | 0.21 |
| 67 | 13.36 | 33.51 | 5.01 | 279 | 75 | 12.48 | 33.49 | 4.77 | 25.35 | 264 | 0.28 |
| 77 | 12.35 | 33.49 | 4.72 | 262 | 100 | 10.70 | 33.58 | 3.84 | 25.74 | 226 | 0.34 |
| 96 | 10.89 | 33.55 | 3.89 | 231 | 150 | 9.58 | 33.86 | 2.71 | 26.16 | 187 | 0.45 |
| 110 | 10.34 | 33.66 | 3.76 | 214 | 200 | 8.60 | 33.99 | 2.41 | 26.42 | 162 | 0.54 |
| 125 | 9.97 | 33.70 | 3.32 | 205 | 250 | 7.88 | 34.12 | 1.82 | 26.63 | 142 | 0.62 |
| 150 | 9.58 | 33.86 | 2.71 | 187 | 300 | 7.58 | 34.21 | 1.42 | 26.74 | 132 | 0.68 |
| 179 | 9.07a) | 33.95 | 2.61 | 173 | 400 | 6.87 | 34.29 | 0.58 | 26.90 | 116 | 0.81 |
| 218 | 8.18 | 34.04 | 2.14 | 153 | 500 | 6.14 | 34.32 | 0.40 | 27.02 | 104 | 0.93 |
| 272 | 7.76 | 34.16 | 1.64 | 138 | 600 | 5.57 | 34.38 | 0.31 | 27.14 | 94 | 1.04 |
| 357 | 7.22 | 34.27 | 0.93 | 122 | | | | | | | |
| 467 | 6.38 | 34.31 | 0.47 | 108 | | | | | | | |
| 606 | 5.55 | 34.38 | 0.30 | 94 | | | | | | | |

PAOLINA-T; October 16, 1958; 0500 GCT; 29°33.5'N, 117°56'W; sounding, 1800 fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 18°, 107.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.48 | 33.65 | 5.10 | 453 | 0 | 21.48 | 33.65 | 5.10 | 23.36 | 453 | 0.00 |
| 11 | 21.49 | 33.64 | 5.15 | 454 | 10 | 21.49 | 33.64 | 5.14 | 23.35 | 454 | 0.04 |
| 30 | 21.28 | 33.69 | 5.12 | 445 | 20 | 21.39 | 33.67 | 5.15 | 23.40 | 449 | 0.09 |
| 59 | 16.52 | 33.58 | 5.58 | 338 | 30 | 21.28 | 33.69 | 5.12 | 23.44 | 445 | 0.13 |
| 68 | 15.58 | 33.58 | 5.24 | 318 | 50 | 17.45 | 33.60 | 5.53 | 24.35 | 358 | 0.22 |
| 77 | 13.82 | 33.55 | 4.91 | 285 | 75 | 14.20 | 33.56 | 4.98 | 25.05 | 292 | 0.30 |
| 91 | 12.42 | 33.55 | 4.30 | 259 | 100 | 11.85 | 33.55 | 4.17 | 25.52 | 248 | 0.37 |
| 104 | 11.60 | 33.55 | 4.14 | 244 | 150 | 9.92 | 33.76 | 3.35 | 26.02 | 200 | 0.48 |
| 118 | 10.92 | 33.55 | 4.11 | 232 | 200 | 9.27 | 34.12 | 2.07 | 26.41 | 163 | 0.57 |
| 134 | 10.58 | 33.74 | 3.84 | 212 | 250 | 8.45 | 34.16 | 1.65 | 26.57 | 148 | 0.65 |
| 152 | 9.86 | 33.76 | 3.30 | 199 | 300 | 7.93 | 34.18 | 1.30 | 26.67 | 138 | 0.73 |
| 177 | 9.52b) | 33.95 | 2.44 | 180 | 400 | 6.92 | 34.22 | 0.78 | 26.84 | 122 | 0.86 |
| 199 | 9.28 | 34.12 | 2.08 | 163 | 500 | 6.12 | 34.27 | 0.46 | 26.99 | 108 | 0.98 |
| 247 | 8.48 | 34.16 | 1.67 | 148 | | | | | | | |
| 326 | 7.70 | 34.19 | 1.18 | 135 | | | | | | | |
| 431 | 6.62 | 34.23 | 0.66 | 117 | | | | | | | |
| 567 | 5.67 | 34.33 | 0.32 | 98 | | | | | | | |

PAOLINA-T; October 15, 1958; 2241 GCT; 29°13'N, 118°38'W; sounding, 2000+ fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 05°. 107.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.40 | 33.64 | 5.14 | 452 | 0 | 21.40 | 33.64 | 5.14 | 23.37 | 452 | 0.00 |
| 11 | 20.95 | 33.66 | 4.71 | 438 | 10 | 20.97 | 33.66 | 4.71 | 23.50 | 439 | 0.04 |
| 31 | 20.47 | 33.66 | 4.98 | 427 | 20 | 20.75 | 33.66 | 4.80 | 23.56 | 434 | 0.09 |
| 41 | 17.72 | 33.46 | 5.82 | 375 | 30 | 20.50 | 33.66 | 4.96 | 23.62 | 428 | 0.13 |
| 51 | 16.89 | 33.58 | 5.78 | 347 | 50 | 16.90 | 33.58 | 5.79 | 24.46 | 348 | 0.21 |
| 61 | 16.64 | 33.75 | 5.67 | 330 | 75 | 16.20 | 33.83 | 5.60 | 24.82 | 314 | 0.29 |
| 70 | 16.44 | 33.83 | 5.61 | 319 | 100 | 15.15 | 33.82 | 5.40 | 25.05 | 292 | 0.37 |
| 85 | 15.78 | 33.82 | 5.60 | 305 | 150 | 10.88 | 33.60 | 4.71 | 25.72 | 228 | 0.50 |
| 99 | 15.20 | 33.82 | 5.42 | 293 | 200 | 9.10 | 33.78 | 3.84 | 26.16 | 186 | 0.61 |
| 114 | 14.30 | 33.78 | 5.28 | 278 | 250 | 8.02 | 34.00 | 2.60 | 26.51 | 153 | 0.69 |
| 138 | 11.80 | 33.63 | 4.92 | 241 | 300 | 7.43 | 34.10 | 1.92 | 26.67 | 138 | 0.77 |
| 166 | 10.13 | 33.58 | 4.42 | 217 | 400 | 6.85 | 34.25 | 0.89 | 26.87 | 119 | 0.90 |
| 199 | 9.12 | 33.77 | 3.85 | 187 | 500 | 6.26 | 34.32 | 0.46 | 27.01 | 106 | 1.02 |
| 247 | 8.06 | 33.99 | 2.64 | 155 | | | | | | | |
| 325 | 7.23 | 34.13 | 1.58 | 133 | | | | | | | |
| 422 | 6.76 | 34.28 | 0.68 | 115 | | | | | | | |
| 552 | 5.94 | 34.35 | 0.38 | 100 | | | | | | | |

a) Alternate value, 9.21°C, not used in interpolation.
b) Alternate value, 9.31°C, not used in interpolation.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

107.80 PAOLINA-T; October 15, 1958; 1617 GCT; 28°49'N, 119°16'W; sounding, 2000 fm; wind, 340°, force 4; weather, clear; sea, rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.96 | 33.80 | 5.10 | 429 | 0 | 20.96 | 33.80 | 5.10 | 23.61 | 429 | 0.00 |
| 12 | 20.96 | 33.86 | 4.85 | 424 | 10 | 20.96 | 33.84 | 4.88 | 23.64 | 426 | 0.04 |
| 32 | 20.94 | 33.86 | 4.96 | 425 | 20 | 20.95 | 33.86 | 4.90 | 23.65 | 425 | 0.08 |
| 62 | 18.27 | 34.13 | 5.54 | 339 | 30 | 20.94 | 33.86 | 4.95 | 23.65 | 425 | 0.13 |
| 73 | 17.96 | 34.18 | 5.45 | 328 | 50 | 19.15 | 34.04 | 5.44 | 24.27 | 366 | 0.21 |
| 83 | 17.60 | 34.13 | 5.51 | 323 | 75 | 17.88 | 34.17 | 5.46 | 24.68 | 327 | 0.29 |
| 97 | 16.22 | 33.94 | 5.51 | 306 | 100 | 16.04 | 33.93 | 5.50 | 24.94 | 303 | 0.37 |
| 112 | 15.52 | 33.90 | 5.36 | 294 | 150 | 12.43 | 33.64 | 4.94 | 25.47 | 252 | 0.52 |
| 126 | 14.90 | 33.86 | 4.96 | 284 | 200 | 9.42 | 33.74 | 3.60 | 26.09 | 193 | 0.63 |
| 146 | 12.82 | 33.64 | 4.98 | 259 | 250 | 8.60 | 33.97 | 2.76 | 26.40 | 164 | 0.72 |
| 164 | 11.16 | 33.64 | 4.66 | 229 | 300 | 7.85 | 34.04 | 2.17 | 26.57 | 148 | 0.80 |
| 192 | 9.60 | 33.69 | 3.80 | 200 | 400 | 6.64 | 34.16 | 1.05 | 26.83 | 123 | 0.94 |
| 217 | 9.10 | 33.87 | 3.26 | 179 | 500 | 6.07 | 34.24 | 0.54 | 26.96 | 110 | 1.07 |
| 272 | 8.24 | 34.02 | 2.47 | 155 | 600 | 5.55 | 34.29 | 0.38 | 27.07 | 100 | 1.18 |
| 355 | 7.06 | 34.09 | 1.62 | 134 | | | | | | | |
| 462 | 6.26 | 34.22 | 0.65 | 114 | | | | | | | |
| 605 | 5.48 | 34.30 | 0.36 | 98 | | | | | | | |

107.90 PAOLINA-T; October 15, 1958; 0921 GCT; 28°25'N, 119°58'W; sounding, 2000 fm; wind, 360°, force 4; weather, clear; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.37 | 33.93 | 4.97 | 430 | 0 | 21.37 | 33.93 | 4.97 | 23.60 | 430 | 0.00 |
| 12 | 21.37 | 33.93 | 4.50 | 430 | 10 | 21.37 | 33.93 | 4.56 | 23.60 | 430 | 0.04 |
| 31 | 21.38 | 33.91 | 4.93 | 432 | 20 | 21.37 | 33.92 | 4.72 | 23.59 | 431 | 0.09 |
| 61 | 18.13 | 33.75 | 5.35 | 363 | 30 | 21.38 | 33.91 | 4.92 | 23.58 | 432 | 0.13 |
| 70 | 17.74 | 33.76 | 5.14 | 353 | 50 | 19.00 | 33.78 | 5.28 | 24.11 | 382 | 0.21 |
| 80 | 17.48 | 33.77 | 5.45 | 347 | 75 | 17.58 | 33.76 | 5.35 | 24.44 | 350 | 0.30 |
| 95 | 17.55 | 33.97 | 5.16 | 334 | 100 | 17.10 | 33.95 | 5.04 | 24.70 | 325 | 0.39 |
| 110 | 16.61 | 33.90 | 5.01 | 317 | 150 | 12.16 | 33.57 | 4.66 | 25.46 | 253 | 0.54 |
| 124 | 15.34 | 33.76 | 5.10 | 300 | 200 | 9.88 | 33.70 | 3.68 | 25.98 | 204 | 0.65 |
| 142 | 12.86 | 33.60 | 4.95 | 262 | 250 | 8.95 | 34.00 | 2.67 | 26.36 | 167 | 0.75 |
| 162 | 11.35 | 33.53 | 4.21 | 241 | 300 | 8.28 | 34.12 | 1.95 | 26.56 | 148 | 0.83 |
| 190 | 10.06a) | 33.62 | 3.88 | 213 | 400 | 7.26 | 34.22 | 1.10 | 26.79 | 127 | 0.98 |
| 215 | 9.60 | 33.85 | 2.96 | 186 | 500 | 6.39 | 34.29 | 0.74 | 26.96 | 110 | 1.10 |
| 268 | 8.64 | 34.05 | 2.52 | 159 | 600 | (5.93) | (34.35) | (0.33) | (27.07) | (100) | (1.21) |
| 351 | 7.82 | 34.19 | 1.33 | 136 | | | | | | | |
| 460 | 6.62 | 34.26 | 0.89 | 116 | | | | | | | |
| 599 | 5.93 | 34.35 | 0.33 | 100 | | | | | | | |

110.33 PAOLINA-T; October 13, 1958; 1225 GCT; 29°50.5'N, 115°52'W; sounding, 40 fm; wind, 330°, force 3; weather, fog; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.62 | 33.58 | 5.34 | 387 | 0 | 18.62 | 33.58 | 5.34 | 24.05 | 387 | 0.00 |
| 12 | 18.59 | 33.65 | 5.20 | 381 | 10 | 18.60 | 33.65 | 5.23 | 24.11 | 382 | 0.04 |
| 27 | 18.43 | 33.61 | 5.35 | 380 | 20 | 18.55 | 33.64 | 5.23 | 24.12 | 381 | 0.08 |
| 47 | 15.96 | 33.60 | 5.26 | 325 | 30 | 18.26 | 33.60 | 5.37 | 24.16 | 376 | 0.11 |
| 68 | 15.16 | 33.69 | 4.65 | 301 | 50 | 15.58 | 33.60 | 5.20 | 24.75 | 321 | 0.18 |

a) Alternate value, 9.81°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; October 13, 1958; 1419 GCT; 29°46.5'N, 115°59.5'W; sounding, 600 fm; wind, 280°, force 4; weather, fog; sea, moderate; wire angle, 10°. 110.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.40 | 33.60 | 5.41 | 404 | 0 | 19.40 | 33.60 | 5.41 | 23.87 | 404 | 0.00 |
| 12 | 19.28 | 33.64 | 5.38 | 398 | 10 | 19.29 | 33.64 | 5.39 | 23.92 | 399 | 0.04 |
| 31 | 16.50 | 33.53 | 5.62 | 342 | 20 | 19.17 | 33.64 | 5.38 | 23.96 | 396 | 0.08 |
| 46 | 15.00 | 33.74 | 4.32 | 295 | 30 | 16.60 | 33.53 | 5.61 | 24.50 | 344 | 0.12 |
| 55 | 14.74 | 33.82 | 3.79 | 283 | 50 | 14.90 | 33.78 | 4.06 | 25.07 | 290 | 0.18 |
| 65 | 13.86 | 33.81 | 3.22 | 266 | 75 | 13.60 | 33.85 | 2.66 | 25.40 | 258 | 0.25 |
| 75 | 13.60 | 33.85 | 2.66 | 258 | 100 | 13.38 | 33.91 | 2.36 | 25.49 | 250 | 0.31 |
| 94 | 13.50 | 33.91 | 2.31 | 252 | 150 | 11.64 | 34.08 | 1.88 | 25.96 | 205 | 0.43 |
| 109 | 13.08 | 33.89 | 2.49 | 246 | 200 | 11.02 | 34.31 | 1.03 | 26.25 | 178 | 0.53 |
| 123 | 12.61 | 33.95 | 2.16 | 232 | 250 | 10.04 | 34.36 | 0.88 | 26.46 | 158 | 0.61 |
| 148 | 11.66 | 34.07 | 1.89 | 206 | 300 | 9.20 | 34.33 | 0.93 | 26.58 | 146 | 0.69 |
| 176 | 11.56a) | 34.20 | 1.34 | 195 | 400 | 7.52 | 34.25 | 0.87 | 26.76 | 129 | 0.84 |
| 216 | 10.64 | 34.36 | 0.92 | 167 | 500 | 6.27 | 34.26 | 0.54 | 26.96 | 111 | 0.96 |
| 269 | 9.70 | 34.36 | 0.89 | 152 | 600 | 5.68 | 34.34 | 0.32 | 27.09 | 98 | 1.07 |
| 354 | 8.30 | 34.27 | 0.99 | 137 | | | | | | | |
| 456 | 6.70 | 34.24 | 0.66 | 118 | | | | | | | |
| 600 | 5.68 | 34.34 | 0.32 | 98 | | | | | | | |

PAOLINA-T; October 13, 1958; 1800 GCT; 29°35'N, 116°19'W; sounding, 1120 fm; wind, 340°, force 4; weather, fog; sea, moderate; wire angle, 00°. 110.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 20.81 | 33.66 | 5.35 | 435 | 0 | 20.8 | (33.66) | (5.35) | (23.55) | (435) | (0.00) |
| 14 | 20.66 | 33.69 | 5.35 | 430 | 10 | 20.72 | 33.68 | 5.35 | 23.58 | 432 | 0.04 |
| 34 | 20.52 | 33.64 | 5.26 | 429 | 20 | 20.65 | 33.67 | 5.32 | 23.60 | 430 | 0.09 |
| 64 | 13.71 | 33.64 | 4.15 | 276 | 30 | 20.64 | 33.65 | 5.28 | 23.59 | 431 | 0.13 |
| 74 | 13.12 | 33.68 | 3.82 | 261 | 50 | 16.60 | 33.64 | 4.69 | 24.58 | 336 | 0.21 |
| 83 | 12.40 | 33.68 | 3.60 | 248 | 75 | 13.08 | 33.68 | 3.81 | 25.38 | 261 | 0.28 |
| 97 | 11.87 | 33.80 | 2.99 | 230 | 100 | 11.78 | 33.83 | 2.85 | 25.74 | 226 | 0.34 |
| 112 | 11.60 | 33.91 | 2.60 | 217 | 150 | 11.08 | 34.17 | 1.86 | 26.12 | 189 | 0.45 |
| 127 | 11.52 | 34.04 | 1.96 | 206 | 200 | 10.68 | 34.44 | 0.94 | 26.42 | 162 | 0.54 |
| 148 | 11.10 | 34.16 | 1.89 | 190 | 250 | 10.07 | 34.47 | 0.73 | 26.54 | 150 | 0.62 |
| 167 | 11.02 | 34.31 | 1.32 | 177 | 300 | 9.26 | 34.45 | 0.73 | 26.66 | 139 | 0.69 |
| 196 | 10.71b) | 34.43 | 0.96 | 163 | 400 | 7.59 | 34.35 | 0.74 | 26.85 | 121 | 0.83 |
| 221 | 10.44 | 34.47 | 0.81 | 156 | 500 | 6.56 | 34.34 | 0.48 | 26.98 | 108 | 0.95 |
| 276 | 9.68 | 34.47 | 0.68 | 144 | 600 | 5.98 | 34.39 | 0.34 | 27.09 | 98 | 1.06 |
| 362 | 8.16 | 34.38 | 0.82 | 127 | | | | | | | |
| 468 | 6.76 | 34.33 | 0.54 | 112 | | | | | | | |
| 613 | 5.88 | 34.40 | 0.31 | 96 | | | | | | | |

PAOLINA-T; October 14, 1958; 0054 GCT; 29°13'N, 116°56.5'W; sounding, 1900 fm; wind, 320°, force 2; weather, fog; sea, moderate; wire angle, 08°. 110.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.08 | 33.78 | 4.95 | 460 | 0 | 22.08 | 33.78 | 4.95 | 23.28 | 460 | 0.00 |
| 12 | 22.00 | 33.75 | 4.94 | 460 | 10 | 22.01 | 33.76 | 4.94 | 23.28 | 460 | 0.05 |
| 32 | 21.94 | 33.77 | 4.96 | 457 | 20 | 21.97 | 33.76 | 4.95 | 23.31 | 458 | 0.09 |
| 47 | 18.04 | 33.54 | 5.81 | 376 | 30 | 21.95 | 33.77 | 4.96 | 23.32 | 457 | 0.14 |
| 56 | 16.86 | 33.63 | 5.82 | 343 | 50 | 17.52 | 33.58 | 5.81 | 24.32 | 361 | 0.22 |
| 66 | 16.20 | 33.60 | 5.52 | 330 | 75 | 14.54 | 33.58 | 5.05 | 25.00 | 297 | 0.30 |
| 75 | 14.54 | 33.58 | 5.05 | 297 | 100 | 12.62 | 33.69 | 4.32 | 25.48 | 251 | 0.37 |
| 95 | 12.84 | 33.71 | 4.46 | 254 | 150 | 10.10 | 33.82 | 3.18 | 26.04 | 198 | 0.48 |
| 111 | 12.11 | 33.66 | 3.95 | 245 | 200 | 9.37 | 34.07 | 2.18 | 26.35 | 168 | 0.58 |
| 124 | 10.96 | 33.65 | 3.94 | 225 | 250 | 9.42 | 34.33 | 1.12 | 26.54 | 150 | 0.66 |
| 148 | 10.12 | 33.82 | 3.21 | 199 | 300 | 9.28 | 34.45 | 0.61 | 26.66 | 139 | 0.74 |
| 176 | 9.74 | 34.00 | 2.32 | 179 | 400 | 8.08 | 34.43 | 0.44 | 26.84 | 122 | 0.87 |
| 213 | 9.20 | 34.11 | 2.11 | 163 | 500 | 6.80 | 34.39 | 0.38 | 26.98 | 108 | 0.99 |
| 267 | 9.51 | 34.43 | 0.79 | 144 | 600 | (5.90) | (34.40) | (0.26) | (27.11) | (96) | (1.10) |
| 349 | 8.82 | 34.46 | 0.44 | 131 | | | | | | | |
| 451 | 7.32 | 34.39 | 0.44 | 115 | | | | | | | |
| 594 | 5.94 | 34.40 | 0.26 | 97 | | | | | | | |

a) Alternate value, 11.32°C, not used in interpolation.
b) Alternate value, 10.92°C, not used in interpolation.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

110.60 PAOLINA-T; October 14, 1958; 0745 GCT; 28°52.5'N, 117°35.5'W; sounding, 2000 fm; wind, 320°, force 1; weather, fog; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.80 | 33.84 | 4.96 | 448 | 0 | 21.80 | 33.84 | 4.96 | 23.41 | 448 | 0.00 |
| 12 | 21.78 | 33.81 | 4.97 | 450 | 10 | 21.78 | 33.82 | 4.97 | 23.40 | 449 | 0.04 |
| 32 | 21.76 | 33.91 | 5.02 | 442 | 20 | 21.77 | 33.86 | 4.99 | 23.44 | 446 | 0.09 |
| 57 | 17.96 | 33.58 | 5.77 | 371 | 30 | 21.76 | 33.91 | 5.01 | 23.48 | 442 | 0.13 |
| 67 | 16.70 | 33.55 | 5.84 | 345 | 50 | 19.05 | 33.66 | 5.59 | 24.01 | 391 | 0.22 |
| 77 | 15.74 | 33.58 | 5.48 | 322 | 75 | 15.95 | 33.57 | 5.56 | 24.68 | 327 | 0.31 |
| 87 | 14.98 | 33.67 | 5.38 | 299 | 100 | 13.66 | 33.58 | 4.76 | 25.18 | 280 | 0.38 |
| 102 | 13.56 | 33.57 | 4.70 | 278 | 150 | 10.50 | 33.73 | 3.43 | 25.89 | 212 | 0.51 |
| 117 | 12.44 | 33.57 | 4.50 | 257 | 200 | 9.39 | 34.07 | 2.40 | 26.34 | 169 | 0.60 |
| 137 | 11.04 | 33.66 | 3.60 | 226 | 250 | 9.18 | 34.29 | 1.32 | 26.56 | 149 | 0.69 |
| 155 | 10.26 | 33.75 | 3.39 | 206 | 300 | 8.32 | 34.28 | 1.12 | 26.67 | 138 | 0.76 |
| 180 | 9.22 | 33.82 | 3.25 | 185 | 400 | 7.18 | 34.29 | 0.62 | 26.86 | 120 | 0.89 |
| 205 | 9.42 | 34.11 | 2.01 | 166 | 500 | 6.66 | 34.35 | 0.38 | 26.98 | 109 | 1.02 |
| 254 | 9.12 | 34.29 | 1.28 | 148 | | | | | | | |
| 333 | 7.78 | 34.26 | 0.98 | 131 | | | | | | | |
| 434 | 6.96 | 34.31 | 0.52 | 116 | | | | | | | |
| 564 | 6.32 | 34.41 | 0.25 | 100 | | | | | | | |

110.70 PAOLINA-T; October 14, 1958; 1402 GCT; 28°31'N, 118°13'W; sounding, 1600 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.88 | 33.78 | 5.83 | 455 | 0 | 21.88 | 33.78 | 5.83 | 23.34 | 455 | 0.00 |
| 11 | 21.88 | 33.82 | 4.99 | 452 | 10 | 21.88 | 33.82 | 5.01 | 23.37 | 452 | 0.04 |
| 31 | 21.78 | 33.75 | 4.98 | 454 | 20 | 21.83 | 33.78 | 4.99 | 23.36 | 453 | 0.09 |
| 56 | 15.88 | 33.57 | 4.73 | 326 | 30 | 21.78 | 33.75 | 4.98 | 23.35 | 454 | 0.14 |
| 66 | 14.14 | 33.57 | 4.87 | 290 | 50 | 17.20 | 33.60 | 4.78 | 24.41 | 353 | 0.22 |
| 76 | 13.01 | 33.70 | 4.20 | 258 | 75 | 13.03 | 33.70 | 4.22 | 25.39 | 259 | 0.29 |
| 86 | 12.31 | 33.59 | 4.08 | 253 | 100 | 11.50 | 33.68 | 3.51 | 25.68 | 232 | 0.36 |
| 101 | 11.49 | 33.68 | 3.50 | 232 | 150 | 10.10 | 33.82 | 2.97 | 26.04 | 198 | 0.46 |
| 115 | 11.17 | 33.71 | 3.28 | 224 | 200 | 9.38 | 34.08 | 2.18 | 26.36 | 168 | 0.56 |
| 135 | 10.44 | 33.77 | 3.15 | 208 | 250 | 8.88 | 34.26 | 1.40 | 26.58 | 147 | 0.64 |
| 154 | 10.00a) | 33.84 | 2.89 | 195 | 300 | 8.16 | 34.26 | 1.17 | 26.68 | 137 | 0.71 |
| 179 | 9.53 | 33.94 | 2.44 | 180 | 400 | 7.42 | 34.33 | 0.50 | 26.85 | 121 | 0.85 |
| 203 | 9.32 | 34.09 | 2.05 | 166 | 500 | 6.75 | 34.36 | 0.37 | 26.97 | 109 | 0.97 |
| 252 | 8.87 | 34.26 | 1.39 | 147 | | | | | | | |
| 331 | 7.72 | 34.25 | 1.03 | 130 | | | | | | | |
| 431 | 7.32 | 34.35 | 0.38 | 118 | | | | | | | |
| 560 | 6.20 | 34.36 | 0.37 | 103 | | | | | | | |

110.80 PAOLINA-T; October 14, 1958; 1956, 2026 GCT; 28°11.5'N, 118°53'W; sounding, 2050 fm; wind, 320°, force 4; weather, overcast; sea, moderate; wire angle, 07°, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.72 | 33.71 | 4.89 | 455 | 0 | 21.72 | 33.71 | 4.89 | 23.34 | 455 | 0.00 |
| 12 | 21.04 | 33.71 | 4.76 | 438 | 10 | 21.10 | 33.71 | 4.77 | 23.50 | 440 | 0.04 |
| 32 | 20.65 | 33.82 | 4.94 | 420 | 20 | 20.88 | 33.75 | 4.83 | 23.59 | 431 | 0.09 |
| 42 | 18.75 | 33.78 | 5.45 | 376 | 30 | 20.73 | 33.81 | 4.90 | 23.68 | 422 | 0.13 |
| 52 | 17.64 | 33.78 | 5.45 | 350 | 50 | 17.78 | 33.78 | 5.45 | 24.41 | 353 | 0.21 |
| 62 | 17.06 | 33.93 | 5.29 | 325 | 75 | 16.38 | 33.92 | 5.28 | 24.85 | 311 | 0.29 |
| | | | | | 100 | 13.95 | 33.70 | 5.06 | 25.21 | 277 | 0.37 |
| 71 | 16.62 | 33.95 | 5.29 | 314 | 150 | 9.84 | 33.61 | 4.01 | 25.91 | 210 | 0.49 |
| 86 | 15.64 | 33.83 | 5.26 | 302 | 200 | 8.54 | 33.89 | 3.03 | 26.34 | 169 | 0.58 |
| 101 | 13.84 | 33.69 | 5.05 | 275 | 250 | 8.38 | 34.10 | 2.05 | 26.53 | 152 | 0.67 |
| 116 | 12.15 | 33.60 | 4.90 | 250 | 300 | 8.36 | 34.28 | 1.40 | 26.67 | 138 | 0.74 |
| 139 | 10.41 | 33.57 | 4.37 | 222 | 400 | 7.59 | 34.36 | 0.47 | 26.85 | 121 | 0.88 |
| 168 | 9.03b) | 33.70 | 3.52 | 190 | 500 | 6.60 | 34.37 | 0.34 | 27.00 | 107 | 1.00 |
| 200 | 8.54 | 33.89 | 3.03 | 169 | | | | | | | |
| 248 | 8.38 | 34.07 | 2.12 | 153 | | | | | | | |
| 325 | 8.32 | 34.34 | 0.75 | 133 | | | | | | | |
| 422 | 7.37 | 34.36 | 0.45 | 118 | | | | | | | |
| 550 | 6.15 | 34.38 | 0.29 | 100 | | | | | | | |

a) Mean value of 9.94 and 10.05°C.

b) Alternate value, 9.36°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m | |
| PAOLINA-T; October 15, 1958; 0216 GCT; 27°52'N, 119°32.5'W; sounding, 2000+ fm; wind, 350°, force 3; weather, cloudy; sea, moderate; wire angle, 03°. | | | | | | | | | | | | 110.90 |
| 0 | 21.38 | 33.77 | 4.87 | 442 | 0 | 21.38 | 33.77 | 4.87 | 23.48 | 442 | 0.00 | |
| 12 | 21.39 | 33.82 | 4.77 | 438 | 10 | 21.39 | 33.81 | 4.77 | 23.50 | 439 | 0.04 | |
| 31 | 20.99 | 33.96 | 4.94 | 418 | 20 | 21.26 | 33.89 | 4.81 | 23.59 | 431 | 0.09 | |
| 40 | 18.56 | 33.87 | 4.91 | 364 | 30 | 21.03 | 33.95 | 4.93 | 23.70 | 420 | 0.13 | |
| 51 | 17.44 | 33.86 | 5.59 | 340 | 50 | 17.50 | 33.86 | 5.55 | 24.52 | 341 | 0.20 | |
| 60 | 16.66 | 33.80 | 5.30 | 326 | 75 | 15.79 | 33.85 | 5.50 | 24.94 | 303 | 0.29 | |
| 69 | 16.15 | 33.87 | 5.59 | 310 | 100 | 14.85 | 33.81 | 5.25 | 25.10 | 287 | 0.36 | |
| 83 | 15.38 | 33.82 | 5.38 | 297 | 150 | 10.40 | 34.00 | 2.25 | 26.13 | 189 | 0.48 | |
| 98 | 14.92 | 33.81 | 5.27 | 288 | 200 | 10.06 | 34.14 | 1.78 | 26.29 | 174 | 0.58 | |
| 112 | 13.16 | 33.71 | 5.01 | 260 | 250 | 9.80 | 34.24 | 1.50 | 26.42 | 162 | 0.66 | |
| 135a) | 11.05 | 33.57 | 4.25 | 233 | 300 | 9.54 | 34.32 | 1.12 | 26.52 | 153 | 0.74 | |
| 142p | 10.56 | 33.78 | 3.10 | 209 | 400 | 8.36 | 34.36 | 0.66 | 26.75 | 130 | 0.89 | |
| 173p | 10.28 | 34.10 | 1.94 | 180 | 500 | 7.21 | 34.38 | 0.37 | 26.92 | 114 | 1.02 | |
| 217p | 9.92 | 34.18 | 1.69 | 169 | | | | | | | | |
| 288p | 9.64 | 34.31 | 1.23 | 155 | | | | | | | | |
| 381p | 8.48 | 34.35 | 0.71 | 134 | | | | | | | | |
| 504p | 7.18 | 34.39 | 0.36 | 113 | | | | | | | | |
| PAOLINA-T; October 13, 1958; 0655 GCT; 29°23.5'N, 115°23.5'W; sounding, 40 fm; wind, 280°, force 3; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 113.30 |
| 4 | 21.20 | 33.75 | 5.36 | 439 | 0 | 21.2 | (33.75) | (5.36) | (23.50) | (439) | (0.00) | |
| 14 | 21.18 | 33.72 | 5.44 | 440 | 10 | 21.19 | 33.73 | 5.41 | 23.49 | 440 | 0.04 | |
| 29 | 17.50 | 33.58 | 5.55 | 361 | 20 | 19.80 | 33.65 | 5.50 | 23.81 | 410 | 0.09 | |
| 49 | 15.70 | 33.60 | 5.00 | 319 | 30 | 17.49 | 33.58 | 5.55 | 24.34 | 359 | 0.12 | |
| 69 | 15.06 | 33.89 | 3.16 | 285 | 50 | 15.69 | 33.60 | 4.99 | 24.77 | 319 | 0.19 | |
| PAOLINA-T; October 13, 1958; 0429 GCT; 29°18'N, 115°35.5'W; sounding, 120 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 25°. | | | | | | | | | | | | 113.35 |
| 0 | 20.58 | 33.74 | 5.22 | 423 | 0 | 20.58 | 33.74 | 5.22 | 23.67 | 423 | 0.00 | |
| 12 | 20.56 | 33.73 | 5.09 | 423 | 10 | 20.57 | 33.73 | 5.16 | 23.67 | 423 | 0.04 | |
| 21 | 20.40 | 33.75 | 5.28 | 418 | 20 | 20.42 | 33.75 | 5.26 | 23.72 | 419 | 0.08 | |
| 40 | 16.62 | 33.75 | 5.11 | 328 | 30 | 17.38 | 33.75 | 5.18 | 24.49 | 346 | 0.12 | |
| 63 | 15.12 | 33.69 | 4.65 | 301 | 50 | 15.98 | 33.73 | 4.97 | 24.80 | 316 | 0.19 | |
| 87 | 13.42 | 33.84 | 2.55 | 256 | 75 | 14.34 | 33.74 | 3.80 | 25.16 | 282 | 0.26 | |
| 112 | 12.04 | 34.11 | 1.56 | 210 | 100 | 12.40 | 34.02 | 1.77 | 25.77 | 224 | 0.33 | |
| 149 | 11.52 | 34.24 | 1.19 | 191 | 150 | 11.51 | 34.24 | 1.18 | 26.11 | 191 | 0.43 | |
| 189 | 11.02 | 34.37 | 0.95 | 173 | | | | | | | | |
| PAOLINA-T; October 13, 1958; 0043 GCT; 29°08'N, 115°54'W; sounding, 700 fm; wind, 330°, force 5; weather, missing; sea, very rough; wire angle, 22°. | | | | | | | | | | | | 113.40 |
| 0 | 21.42 | 33.78 | 5.14 | 442 | 0 | 21.42 | 33.78 | 5.14 | 23.47 | 442 | 0.00 | |
| 12 | 21.42 | 33.78 | 5.17 | 442 | 10 | 21.42 | 33.78 | 5.16 | 23.47 | 442 | 0.04 | |
| 30 | 20.68 | 33.70 | 5.30 | 429 | 20 | 21.41 | 33.77 | 5.18 | 23.47 | 442 | 0.09 | |
| 43 | 18.38 | 33.60 | 5.51 | 380 | 30 | 20.68 | 33.70 | 5.30 | 23.61 | 429 | 0.13 | |
| 52 | 16.72 | 33.58 | 5.46 | 343 | 50 | 17.08 | 33.58 | 5.48 | 24.43 | 351 | 0.21 | |
| 60 | 15.32 | 33.59 | 5.19 | 312 | 75 | 14.42 | 33.60 | 4.77 | 25.04 | 293 | 0.29 | |
| 70 | 14.79 | 33.58 | 4.98 | 302 | 100 | 11.65 | 33.72 | 3.51 | 25.68 | 232 | 0.36 | |
| 86 | 13.38 | 33.69 | 4.08 | 266 | 150 | 11.20 | 34.22 | 1.62 | 26.16 | 187 | 0.47 | |
| 97 | 11.91 | 33.70 | 3.63 | 238 | 200 | 10.66 | 34.42 | 0.86 | 26.41 | 163 | 0.56 | |
| 109 | 11.37 | 33.78 | 3.22 | 222 | 250 | 9.77 | 34.42 | 0.84 | 26.56 | 149 | 0.64 | |
| 128 | 10.62 | 33.86 | 2.77 | 204 | 300 | 8.98 | 34.41 | 0.68 | 26.68 | 138 | 0.71 | |
| 150 | 11.20 | 34.22 | 1.62 | 187 | 400 | 7.88 | 34.40 | 0.57 | 26.84 | 122 | 0.84 | |
| 180 | 10.95 | 34.41 | 0.87 | 169 | 500 | 6.80 | 34.38 | 0.38 | 26.99 | 108 | 0.96 | |
| 223 | 10.26 | 34.42 | 0.91 | 157 | | | | | | | | |
| 292 | 9.08 | 34.41 | 0.70 | 139 | | | | | | | | |
| 383 | 8.02 | 34.40 | 0.59 | 124 | | | | | | | | |
| 521 | 6.56 | 34.38 | 0.32 | 105 | | | | | | | | |

a) Depth uncertain, possible pretrip; alternate depth, 117 meters.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |
| **113.50** | PAOLINA-T; October 12, 1958; 1755 GCT; 28°46'N, 116°32.5'W; sounding, 2000 fm; wind, 340°, force 5; weather, cloudy; sea, very rough; wire angle, 13°. | | | | | | | | | | |
| 4 | 22.00 | 33.80 | 4.80 | 456 | 0 | 22.0 | (33.80) | (4.80) | (23.32) | (456) | (0.00) |
| 14 | 21.98 | 33.78 | 4.37 | 457 | 10 | 21.99 | 33.79 | 4.54 | 23.32 | 457 | 0.04 |
| 33 | 20.53 | 33.66 | 5.01 | 428 | 20 | 21.96 | 33.78 | 4.37 | 23.32 | 456 | 0.09 |
| 47 | 16.40 | 33.48 | 5.69 | 344 | 30 | 21.95 | 33.78 | 4.36 | 23.32 | 456 | 0.14 |
| 57 | 15.40 | 33.55 | 5.00 | 317 | 50 | 16.03 | 33.50 | 5.46 | 24.62 | 333 | 0.22 |
| 67 | 14.19 | 33.55 | 4.89 | 292 | 75 | 13.50 | 33.56 | 4.50 | 25.20 | 278 | 0.29 |
| 76 | 13.48 | 33.56 | 4.49 | 278 | 100 | 11.59 | 33.55 | 4.78 | 25.56 | 244 | 0.36 |
| 96 | 11.90 | 33.55 | 4.75 | 249 | 150 | 10.05 | 33.70 | | 25.94 | 207 | 0.47 |
| 110 | 11.04 | 33.55 | 4.83 | 234 | 200 | 10.20 | 34.24 | 1.60 | 26.34 | 169 | 0.57 |
| 124 | 10.57 | 33.57 | 5.25u | 225 | 250 | 10.01 | 34.46 | 0.78 | 26.55 | 149 | 0.65 |
| 173 | 9.74 | 33.91 | 2.75 | 186 | 300 | 9.40 | 34.49 | 0.59 | 26.66 | 138 | 0.72 |
| 209 | 10.38 | 34.35 | 1.18 | 163 | 400 | 8.10 | 34.45 | 0.51 | 26.84 | 122 | 0.86 |
| 259 | 9.88 | 34.47 | 0.70 | 147 | 500 | 6.88 | 34.43 | 0.41 | 27.01 | 106 | 0.98 |
| 337 | 8.94 | 34.49 | 0.53 | 130 | 600 | (6.10) | (34.46) | | (27.14) | (94) | (1.08) |
| 437 | 7.54 | 34.42 | 0.50 | 116 | | | | | | | |
| 580 | 6.28 | 34.45 | 0.33 | 97 | | | | | | | |
| **113.60** | PAOLINA-T; October 12, 1958; 0949 GCT; 28°23'N, 117°11'W; sounding, 2000 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 15°. | | | | | | | | | | |
| 0 | 22.19 | 33.89 | 4.96 | 455 | 0 | 22.19 | 33.89 | 4.96 | 23.34 | 455 | 0.00 |
| 10 | 22.19 | 33.87 | 4.84 | 456 | 10 | 22.19 | 33.87 | 4.84 | 23.32 | 456 | 0.04 |
| 29 | 22.19 | 33.87 | 4.95 | 456 | 20 | 22.19 | 33.87 | 4.90 | 23.32 | 456 | 0.09 |
| 45 | 20.80 | 33.86 | 5.34 | 420 | 30 | 22.19 | 33.87 | 4.95 | 23.32 | 456 | 0.14 |
| 55 | 18.68 | 33.80 | 5.60 | 373 | 50 | 19.67 | 33.83 | 5.40 | 23.98 | 394 | 0.22 |
| 64 | 18.08 | 33.80 | 5.62 | 358 | 75 | 17.48 | 33.81 | 5.44 | 24.50 | 344 | 0.31 |
| 73 | 17.60 | 33.82 | 5.44 | 346 | 100 | 16.05 | 33.70 | 5.48 | 24.76 | 320 | 0.40 |
| 92 | 16.50 | 33.70 | 5.48 | 330 | 150 | 10.80 | 33.57 | 4.49 | 25.72 | 228 | 0.54 |
| 105 | 15.72 | 33.69 | 5.48 | 313 | 200 | 9.75 | 33.97 | 2.82 | 26.22 | 181 | 0.64 |
| 119 | 13.42 | 33.55 | 5.10 | 277 | 250 | 9.61 | 34.24 | 1.55 | 26.44 | 160 | 0.73 |
| 142 | 11.34 | 33.53 | 4.80 | 240 | 300 | 8.73 | 34.21 | 1.53 | 26.57 | 148 | 0.81 |
| 168 | 10.10a) | 33.68 | 3.76 | 209 | 400 | 7.42 | 34.26 | 0.93 | 26.80 | 126 | 0.95 |
| 203 | 9.72 | 33.98 | 2.72 | 180 | 500 | 6.72 | 34.33 | 0.52 | 26.96 | 111 | 1.08 |
| 252 | 9.60 | 34.24 | 1.54 | 160 | | | | | | | |
| 332 | 8.14 | 34.20 | 1.52 | 140 | | | | | | | |
| 432 | 7.20 | 34.29 | 0.74 | 120 | | | | | | | |
| 573 | 6.09 | 34.37 | 0.29 | 100 | | | | | | | |
| **113.70** | PAOLINA-T; October 12, 1958; 0241 GCT; 28°02.5'N, 117°57'W; sounding, 1800 fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 21.82 | 33.77 | 5.05 | 454 | 0 | 21.82 | 33.77 | 5.05 | 23.35 | 454 | 0.00 |
| 13 | 21.82 | 33.75 | 4.63 | 455 | 10 | 21.82 | 33.76 | 4.75 | 23.34 | 455 | 0.04 |
| 32 | 21.52 | 33.78 | 4.99 | 445 | 20 | 21.82 | 33.75 | 4.63 | 23.34 | 455 | 0.09 |
| 56 | 17.62 | 33.78 | 5.73 | 349 | 30 | 21.65 | 33.76 | 4.82 | 23.39 | 450 | 0.14 |
| 66 | 16.84 | 33.75 | 5.51 | 334 | 50 | 18.25 | 33.78 | 5.70 | 24.30 | 364 | 0.22 |
| 76 | 16.18 | 33.80 | 5.64 | 315 | 75 | 16.23 | 33.80 | 5.63 | 24.79 | 317 | 0.30 |
| 85 | 15.60 | 33.78 | 5.56 | 304 | 100 | 13.98 | 33.80 | 5.11 | 25.29 | 269 | 0.38 |
| 100 | 13.98 | 33.80 | 5.11 | 269 | 150 | 10.60 | 33.68 | 4.04 | 25.84 | 217 | 0.50 |
| 114 | 12.34 | 33.58 | 4.57 | 255 | 200 | 9.17 | 33.98 | 2.91 | 26.32 | 171 | 0.60 |
| 134 | 11.19 | 33.65 | 3.93 | 229 | 250 | 8.69 | 34.13 | 2.22 | 26.50 | 154 | 0.68 |
| 154 | 10.00 | 33.66 | 4.15 | 209 | 300 | 8.05 | 34.17 | 1.55 | 26.64 | 141 | 0.76 |
| 178 | 9.56 | 33.84 | 3.32 | 188 | 400 | 7.20 | 34.26 | 0.74 | 26.83 | 123 | 0.90 |
| 202 | 9.13 | 33.98 | 2.87 | 171 | 500 | 6.60 | 34.32 | 0.41 | 26.96 | 110 | 1.02 |
| 251 | 8.68 | 34.13 | 2.21 | 154 | | | | | | | |
| 330 | 7.70 | 34.20 | 1.25 | 134 | | | | | | | |
| 429 | 7.01 | 34.28 | 0.60 | 119 | | | | | | | |
| 558 | 6.13 | 34.34 | 0.28 | 103 | | | | | | | |

a) Alternate value, 10.34°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_{T_3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_{T_3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

PAOLINA-T; October 11, 1958; 2049 GCT; 27°44'N, 118°33.5'W; sounding, 2000+ fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°. 113.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.54 | 33.86 | 4.86 | 466 | 0 | 22.54 | 33.86 | 4.86 | 23.22 | 466 | 0.00 |
| 11 | 22.34 | 33.82 | 4.92 | 464 | 10 | 22.35 | 33.82 | 4.92 | 23.24 | 464 | 0.05 |
| 30 | 22.31 | 33.84 | 4.80 | 461 | 20 | 22.31 | 33.83 | 4.85 | 23.25 | 463 | 0.09 |
| 55 | 15.92 | 33.57 | 5.44 | 326 | 30 | 22.31 | 33.84 | 4.80 | 23.27 | 461 | 0.14 |
| 64 | 14.60 | 33.58 | 5.05 | 298 | 50 | 16.85 | 33.60 | 5.39 | 24.49 | 345 | 0.22 |
| 74 | 13.24 | 33.57 | 4.62 | 272 | 75 | 13.22 | 33.57 | 4.61 | 25.26 | 272 | 0.30 |
| 85 | 12.56 | 33.56 | 4.29 | 260 | 100 | 11.78 | 33.62 | 3.82 | 25.58 | 241 | 0.36 |
| 100 | 11.78 | 33.62 | 3.82 | 241 | 150 | 10.03 | 33.90 | 2.82 | 26.11 | 191 | 0.47 |
| 114 | 11.07 | 33.75 | 3.30 | 220 | 200 | 9.26 | 34.17 | 1.91 | 26.44 | 160 | 0.56 |
| 133 | 10.29 | 33.79 | 3.24 | 204 | 250 | 8.66 | 34.25 | 1.30 | 26.60 | 144 | 0.64 |
| 153 | 9.96 | 33.92 | 2.61 | 188 | 300 | 8.19 | 34.30 | 0.98 | 26.72 | 134 | 0.71 |
| 178 | 9.39 | 34.03 | 2.35 | 172 | 400 | 7.42 | 34.38 | 0.48 | 26.89 | 117 | 0.84 |
| 201 | 9.26 | 34.17 | 1.91 | 160 | 500 | 6.58 | 34.40 | 0.27 | 27.02 | 104 | 0.96 |
| 250 | 8.66 | 34.25 | 1.30 | 144 | | | | | | | |
| 328 | 7.95 | 34.32 | 0.82 | 128 | | | | | | | |
| 427 | 7.22 | 34.40 | 0.36 | 113 | | | | | | | |
| 557 | 5.98 | 34.40 | 0.23 | 97 | | | | | | | |

PAOLINA-T; October 11, 1958; 1500 GCT; 27°26.5'N, 119°09'W; sounding, 2000+ fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°. 113.90

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.30 | 33.86 | 4.73 | 460 | 0 | 22.30 | 33.86 | 4.73 | 23.28 | 460 | 0.00 |
| 12 | 22.30 | 33.82 | 4.85 | 463 | 10 | 22.30 | 33.82 | 4.84 | 23.26 | 463 | 0.05 |
| 32 | 22.31 | 33.86 | 4.86 | 460 | 20 | 22.30 | 33.84 | 4.85 | 23.27 | 461 | 0.09 |
| 57 | 15.10 | 33.62 | 5.22 | 306 | 30 | 22.31 | 33.86 | 4.85 | 23.28 | 460 | 0.14 |
| 66 | 13.55 | 33.60 | 4.48 | 276 | 50 | 20.00 | 33.78 | 4.99 | 23.85 | 406 | 0.22 |
| 76 | 12.72 | 33.60 | 4.28 | 260 | 75 | 12.74 | 33.60 | 4.29 | 25.38 | 260 | 0.31 |
| 86 | 11.60 | 33.64 | 3.58 | 237 | 100 | 11.06 | 33.64 | 3.75 | 25.72 | 228 | 0.37 |
| 102 | 10.80 | 33.61 | 3.82 | 225 | 150 | 9.88 | 33.94 | 2.67 | 26.16 | 186 | 0.48 |
| 116 | 10.62 | 33.75 | 3.05 | 212 | 200 | 9.17 | 34.17 | 2.00 | 26.46 | 158 | 0.56 |
| 136 | 10.35 | 33.89 | 2.76 | 197 | 250 | 8.79 | 34.23 | 1.37 | 26.57 | 148 | 0.64 |
| 154 | 9.76 | 33.95 | 2.63 | 183 | 300 | 7.97 | 34.24 | 1.17 | 26.70 | 135 | 0.72 |
| 179 | 9.36 | 34.04 | 2.34 | 170 | 400 | 7.19 | 34.40 | 0.45 | 26.94 | 112 | 0.84 |
| 204 | 9.12 | 34.18 | 1.88 | 156 | 500 | 6.41 | 34.40 | 0.27 | 27.04 | 103 | 0.96 |
| 252 | 8.78 | 34.23 | 1.36 | 147 | | | | | | | |
| 331 | 7.46 | 34.24 | 1.05 | 128 | | | | | | | |
| 429 | 7.08 | 34.40 | 0.37 | 111 | | | | | | | |
| 559 | 5.79 | 34.39 | 0.25 | 95 | | | | | | | |

PAOLINA-T; October 9, 1958; 1118 GCT; 28°53'N, 117°38'W; sounding, 48 fm; wind, 270°, force 2; weather, clear; sea, slight; wire angle, 00°. 117.26

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.34 | 33.69 | 5.14 | 473 | 0 | 22.34 | 33.69 | 5.14 | 23.15 | 473 | 0.00 |
| 11 | 22.33 | 33.72 | 5.24 | 471 | 10 | 22.33 | 33.72 | 5.23 | 23.17 | 471 | 0.05 |
| 31 | 19.22 | 33.63 | 5.51 | 398 | 20 | 21.75 | 33.70 | 5.34 | 23.32 | 457 | 0.09 |
| 51 | 16.04 | 33.60 | 5.14 | 327 | 30 | 19.36 | 33.63 | 5.51 | 23.90 | 401 | 0.14 |
| 76 | 14.04 | 33.69 | 2.85 | 279 | 50 | 16.07 | 33.60 | 5.15 | 24.68 | 328 | 0.21 |
| | | | | | 75 | 14.05 | 33.69 | 2.86 | 25.18 | 279 | 0.28 |

PAOLINA-T; October 9, 1958; 1413 GCT; 28°44.5'N, 114°52.5'W; sounding, 59 fm; wind, 290°, force 3; weather, cloudy; sea, rough; wire angle, 05°. 117.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.54 | 33.78 | 4.73 | 472 | 0 | 22.54 | 33.78 | 4.73 | 23.16 | 472 | 0.00 |
| 13 | 22.56 | 33.78 | 4.88 | 473 | 10 | 22.55 | 33.78 | 4.82 | 23.16 | 472 | 0.05 |
| 23 | 22.54 | 33.78 | 4.82 | 472 | 20 | 22.54 | 33.78 | 4.84 | 23.16 | 472 | 0.09 |
| 44 | 22.24 | 33.83 | 4.86 | 460 | 30 | 22.53 | 33.78 | 4.82 | 23.17 | 471 | 0.14 |
| 63 | 19.48 | 33.71 | 4.96 | 398 | 50 | 21.57 | 33.80 | 4.91 | 23.44 | 445 | 0.23 |
| 88 | 14.39 | 33.80 | 2.04 | 278 | 75 | 17.28 | 33.74 | 3.86 | 24.50 | 344 | 0.33 |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

117.35 PAOLINA-T; October 9, 1958; 1727 GCT; 28°31.5'N, 115°14'W; sounding, 80 fm; wind, 280°, force 3; weather, cloudy; sea, rough; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.68 | 33.83 | 4.88 | 472 | 0 | 22.68 | 33.83 | 4.88 | 23.16 | 472 | 0.00 |
| 11 | 22.68 | 33.86 | 4.92 | 470 | 10 | 22.68 | 33.86 | 4.91 | 23.18 | 470 | 0.05 |
| 31 | 19.54 | 33.70 | 5.36 | 400 | 20 | 22.26 | 33.84 | 5.03 | 23.28 | 460 | 0.09 |
| 52 | 16.82 | 33.53 | 5.60 | 349 | 30 | 19.60 | 33.70 | 5.34 | 23.90 | 402 | 0.14 |
| 76 | 14.24 | 33.69 | 4.32 | 283 | 50 | 17.14 | 33.54 | 5.59 | 24.39 | 355 | 0.21 |
| 102 | 12.64 | 33.78 | 3.68 | 245 | 75 | 14.30 | 33.68 | 4.36 | 25.13 | 284 | 0.29 |
| 127 | 11.62 | 33.91 | 1.86 | 217 | 100 | 12.75 | 33.78 | 3.73 | 25.51 | 248 | 0.36 |

117.40 PAOLINA-T; October 9, 1958; 2343 GCT; 28°28.5'N, 115°36'W; sounding, 540 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.23 | 33.73 | 5.05 | 468 | 0 | 22.23 | 33.73 | 5.05 | 23.21 | 468 | 0.00 |
| 11 | 22.20 | 33.77 | 5.11 | 464 | 10 | 22.20 | 33.76 | 5.11 | 23.24 | 465 | 0.05 |
| 31 | 19.36 | 33.58 | 5.52 | 405 | 20 | 22.20 | 33.77 | 5.11 | 23.25 | 463 | 0.09 |
| 41 | 17.14 | 33.52 | 5.58 | 357 | 30 | 19.80 | 33.60 | 5.48 | 23.77 | 414 | 0.14 |
| 51 | 16.03 | 33.57 | 5.69 | 329 | 50 | 16.06 | 33.57 | 5.68 | 24.66 | 330 | 0.21 |
| 61 | 15.64 | 33.51 | 5.69 | 325 | 75 | 14.92 | 33.62 | 5.20 | 24.96 | 301 | 0.29 |
| 71 | 15.04 | 33.54 | 5.50 | 310 | 100 | 12.93 | 33.83 | 3.50 | 25.52 | 247 | 0.36 |
| 85 | 14.64 | 33.80 | 3.98 | 283 | 150 | 11.68 | 34.00 | 2.50 | 25.89 | 212 | 0.48 |
| 100 | 12.93 | 33.83 | 3.50 | 247 | 200 | 11.34 | 34.26 | 1.38 | 26.16 | 187 | 0.58 |
| 115 | 12.12 | 33.81 | 3.34 | 234 | 250 | 10.57 | 34.45 | 0.74 | 26.45 | 159 | 0.67 |
| 139 | 11.74 | 33.93 | 2.70 | 218 | 300 | 9.76 | 34.43 | 0.67 | 26.58 | 147 | 0.75 |
| 167 | 11.66 | 34.04 | 2.21 | 208 | 400 | 7.78 | 34.40 | 0.50 | 26.86 | 120 | 0.88 |
| 201 | 11.34 | 34.27 | 1.38 | 186 | 500 | 6.65 | 34.38 | 0.31 | 27.00 | 106 | 1.00 |
| 249 | 10.58 | 34.45 | 0.74 | 160 | | | | | | | |
| 329 | 9.24 | 34.42 | 0.64 | 140 | | | | | | | |
| 428 | 7.24 | 34.39 | 0.42 | 114 | | | | | | | |
| 560 | 6.18 | 34.38 | 0.23 | 100 | | | | | | | |

117.50 PAOLINA-T; October 10, 1958; 0642 GCT; 28°10.5'N, 116°15'W; sounding, 2400 fm; wind, 320°, force 3; weather, missing; sea, moderate; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.94 | 33.69 | 4.36 | 463 | 0 | 21.94 | 33.69 | 4.36 | 23.26 | 463 | 0.00 |
| 12 | 21.92 | 33.69 | 4.68 | 463 | 10 | 21.93 | 33.69 | 4.60 | 23.26 | 463 | 0.05 |
| 31 | 19.57 | 33.62 | 5.02 | 406 | 20 | 21.98 | 33.68 | 4.70 | 23.24 | 465 | 0.09 |
| 41 | 18.08 | 33.55 | 5.46 | 377 | 30 | 20.80 | 33.66 | 4.86 | 23.55 | 435 | 0.14 |
| 51 | 16.34 | 33.57 | 5.46 | 335 | 50 | 16.50 | 33.57 | 5.46 | 24.56 | 339 | 0.21 |
| 60 | 15.32 | 33.55 | 4.86 | 315 | 75 | 14.47 | 33.60 | 5.28 | 25.04 | 294 | 0.29 |
| 71 | 14.66 | 33.58 | 5.33 | 300 | 100 | 12.48 | 33.62 | 4.93 | 25.44 | 254 | 0.36 |
| 85 | 14.04 | 33.68 | 5.14 | 280 | 150 | 10.20 | 33.78 | 3.37 | 25.99 | 203 | 0.48 |
| 99 | 12.56 | 33.62 | 4.96 | 256 | 200 | 11.12 | 34.43 | 0.79 | 26.33 | 170 | 0.57 |
| 114 | 11.40 | 33.57 | 4.29 | 239 | 250 | 10.44 | 34.47 | 0.65 | 26.48 | 156 | 0.66 |
| 138 | 10.08 | 33.64 | 3.68 | 211 | 300 | 9.80 | 34.44 | 0.56 | 26.57 | 148 | 0.74 |
| 167 | 11.59a) | 34.27 | 1.20 | 190 | 400 | 8.10 | 34.36 | 0.51 | 26.78 | 128 | 0.88 |
| 201 | 11.12 | 34.43 | 0.79 | 170 | 500 | 7.06 | 34.37 | 0.38 | 26.94 | 113 | 1.01 |
| 250 | 10.44 | 34.47 | 0.65 | 156 | | | | | | | |
| 330 | 9.40 | 34.42 | 0.53 | 143 | | | | | | | |
| 432 | 7.54 | 34.34 | 0.51 | 121 | | | | | | | |
| 563 | 6.76 | 34.41 | 0.23 | 105 | | | | | | | |

a) Alternate value, 11.86°C, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; October 10, 1958; 1333, 1425 GCT; 27°51.5'N, 116°55.5'W; sounding, 2000 fm; wind, 320°, force 2; weather, overcast; sea, moderate; wire angle, 00°, 05°. 117.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.30 | 33.84 | 5.02 | 462 | 0 | 22.30 | 33.84 | 5.02 | 23.27 | 462 | 0.00 |
| 12 | 22.32 | 33.84 | 5.01 | 462 | 10 | 22.32 | 33.84 | 5.01 | 23.27 | 462 | 0.05 |
| 31 | 20.34 | 33.67 | 5.51 | 423 | 20 | 22.31 | 33.84 | 5.02 | 23.27 | 462 | 0.09 |
| 41 | 17.04 | 33.62 | 5.67 | 348 | 30 | 20.98 | 33.72 | 5.38 | 23.54 | 436 | 0.14 |
| 51 | 16.00 | 33.55 | 5.79 | 329 | 50 | 16.07 | 33.56 | 5.78 | 24.65 | 330 | 0.21 |
| | | | | | 75 | 14.70 | 33.73 | 5.13 | 25.08 | 289 | 0.29 |
| 60 | 15.55a) | 33.53 | 5.72 | 321 | 100 | 13.28 | 33.95 | 2.51 | 25.54 | 245 | 0.36 |
| 70 | 15.53 | 33.77 | 5.43 | 303 | 150 | 12.40 | 34.32 | 1.04 | 26.00 | 202 | 0.47 |
| 85 | 13.24 | 33.66 | 4.40 | 266 | 200 | 11.69 | 34.42 | 0.80 | 26.22 | 181 | 0.57 |
| 100 | 13.28 | 33.95 | 2.51 | 245 | 250 | 11.04 | 34.47 | 0.70 | 26.38 | 166 | 0.66 |
| 114 | 12.92 | 34.16 | 1.46 | 223 | 300 | 10.10 | 34.46 | 0.61 | 26.54 | 151 | 0.74 |
| 138 | 12.60 | 34.31 | 1.05 | 206 | 400 | 8.72 | 34.44 | 0.53 | 26.75 | 130 | 0.89 |
| 167 | 12.19 | 34.34 | 0.95 | 196 | 500 | 7.54 | 34.42 | 0.46 | 26.91 | 116 | 1.02 |
| 201 | 11.68 | 34.42 | 0.79 | 181 | | | | | | | |
| 251 | 11.02 | 34.47 | 0.69 | 166 | | | | | | | |
| 330 | 9.50 | 34.45 | 0.60 | 142 | | | | | | | |
| 431 | 8.38 | 34.44 | 0.51 | 126 | | | | | | | |
| 563 | 6.72 | 34.40 | 0.44 | 106 | | | | | | | |

PAOLINA-T; October 10, 1958; 2030 GCT; 27°32.5'N, 117°32.5'W; sounding, 1820 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 03°. 117.70

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.52 | 33.77 | 4.24 | 472 | 0 | 22.52 | 33.77 | 4.24 | 23.16 | 472 | 0.00 |
| 12 | 22.34 | 33.74 | 4.58 | 470 | 10 | 22.35 | 33.74 | 4.57 | 23.18 | 470 | 0.05 |
| 32 | 22.20 | 33.77 | 4.54 | 464 | 20 | 22.26 | 33.76 | 4.57 | 23.22 | 466 | 0.09 |
| 42 | 20.60 | 33.72 | 5.10 | 426 | 30 | 22.22 | 33.77 | 4.55 | 23.24 | 464 | 0.14 |
| 52 | 18.62 | 33.74 | 5.22 | 376 | 50 | 18.88 | 33.74 | 5.21 | 24.11 | 381 | 0.22 |
| 63 | 17.55 | 33.69 | 5.32 | 354 | 75 | 16.25 | 33.56 | 5.69 | 24.61 | 334 | 0.31 |
| 72 | 16.42 | 33.55 | 5.75 | 339 | 100 | 14.69 | 33.64 | 5.06 | 25.04 | 292 | 0.39 |
| 87 | 15.77 | 33.65 | 5.39 | 317 | 150 | 11.60 | 33.86 | 2.94 | 25.80 | 221 | 0.52 |
| 101 | 14.46 | 33.64 | 5.05 | 291 | 200 | 10.91 | 34.29 | 1.40 | 26.26 | 177 | 0.62 |
| 116 | 12.92 | 33.65 | 3.86 | 260 | 250 | 10.42 | 34.46 | 0.74 | 26.48 | 156 | 0.71 |
| 139 | 12.18 | 33.84 | 2.96 | 232 | 300 | 9.10 | 34.36 | 0.86 | 26.62 | 143 | 0.79 |
| 168 | 10.06 | 33.88 | 2.97 | 183 | 400 | 7.51 | 34.31 | 0.64 | 26.82 | 123 | 0.92 |
| 201 | 10.92 | 34.30 | 1.38 | 177 | 500 | 6.73 | 34.32 | 0.37 | 26.96 | 111 | 1.05 |
| 250 | 10.42 | 34.46 | 0.74 | 156 | | | | | | | |
| 327 | 8.40 | 34.31 | 0.91 | 136 | | | | | | | |
| 426 | 7.30 | 34.31 | 0.56 | 120 | | | | | | | |
| 555 | 6.27 | 34.34 | 0.28 | 105 | | | | | | | |

PAOLINA-T; October 11, 1958; 0253, 0333 GCT; 27°10.5'N, 118°16'W; sounding, 2100 fm; wind, 280°, force 2; weather, missing; sea, rough; wire angle, 00°, 02°. 117.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.48 | 34.05 | 4.84 | 451 | 0 | 22.48 | 34.05 | 4.84 | 23.38 | 451 | 0.00 |
| 11 | 22.34 | 34.02 | 4.96 | 450 | 10 | 22.35 | 34.02 | 4.95 | 23.39 | 450 | 0.04 |
| 31 | 22.24 | 33.99 | 4.91 | 450 | 20 | 22.26 | 34.00 | 4.94 | 23.39 | 450 | 0.09 |
| 56 | 18.76 | 33.82 | 5.16 | 373 | 30 | 22.24 | 33.99 | 4.91 | 23.39 | 450 | 0.14 |
| 66 | 18.16 | 33.84 | 5.35 | 357 | 50 | 19.90 | 33.86 | 5.03 | 23.94 | 398 | 0.22 |
| 76 | 17.60 | 33.78 | 5.35 | 349 | 75 | 17.65 | 33.78 | 5.35 | 24.45 | 349 | 0.31 |
| 86 | 17.20 | 33.78 | 5.32 | 339 | 100 | 16.32 | 33.80 | 5.45 | 24.76 | 319 | 0.40 |
| | | | | | 150 | 11.32 | 33.59 | 4.15 | 25.64 | 236 | 0.54 |
| 98 | 16.40 | 33.80 | 5.45 | 320 | 200 | 9.37 | 33.97 | 2.84 | 26.28 | 175 | 0.64 |
| 112 | 14.86 | 33.71 | 5.35 | 294 | 250 | 8.75 | 34.14 | 2.14 | 26.51 | 153 | 0.73 |
| 131 | 12.94 | 33.58 | 4.65 | 265 | 300 | 8.26 | 34.26 | 1.42 | 26.67 | 138 | 0.80 |
| 150 | 11.32 | 33.59 | 4.15 | 236 | 400 | 7.27 | 34.34 | 0.55 | 26.88 | 118 | 0.94 |
| 173 | 9.91 | 33.77 | 3.50 | 199 | 500 | 6.48 | 34.36 | 0.34 | 27.00 | 107 | 1.06 |
| 199 | 9.38 | 33.97 | 2.85 | 176 | | | | | | | |
| 249 | 8.76 | 34.14 | 2.15 | 154 | | | | | | | |
| 327 | 8.02 | 34.30 | 1.00 | 131 | | | | | | | |
| 427 | 7.02 | 34.34 | 0.46 | 115 | | | | | | | |
| 555 | 6.04 | 34.37 | 0.27 | 100 | | | | | | | |

a) Alternate value, 15.74°C, not used in interpolation.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

117.90 PAOLINA-T; October 11, 1958; 0906 GCT; 26°54'N, 118°49.5'W; sounding, 2000+ fm; wind, direction missing, force 1; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.93 | 33.91 | 4.55a) | 446 | 0 | 21.93 | 33.91 | 4.55 | 23.43 | 446 | 0.00 |
| 11 | 21.86 | 33.88 | 4.76 | 447 | 10 | 21.87 | 33.89 | 4.75 | 23.42 | 447 | 0.04 |
| 31 | 21.83 | 33.90 | 4.73 | 444 | 20 | 21.85 | 33.89 | 4.75 | 23.43 | 446 | 0.09 |
| 56 | 18.44 | 33.85 | 5.48 | 363 | 30 | 21.84 | 33.90 | 4.74 | 23.44 | 445 | 0.13 |
| 66 | 17.76 | 33.83 | 5.35 | 348 | 50 | 19.10 | 33.86 | 5.36 | 24.14 | 378 | 0.22 |
| 76 | 17.40 | 33.84 | 5.54 | 340 | 75 | 17.45 | 33.84 | 5.53 | 24.54 | 340 | 0.30 |
| 86 | 16.94 | 33.84 | 5.14 | 329 | 100 | 15.76 | 33.78 | 5.16 | 24.89 | 307 | 0.39 |
| 101 | 15.70 | 33.78 | 5.16 | 307 | 150 | 10.54 | 33.66 | 4.11 | 25.83 | 218 | 0.52 |
| 116 | 13.90 | 33.71 | 4.95 | 274 | 200 | 9.38 | 33.94 | 2.99 | 26.25 | 178 | 0.62 |
| 135 | 11.63 | 33.66 | 4.25 | 236 | 250 | 8.52 | 34.14 | 2.08 | 26.54 | 150 | 0.70 |
| 155 | 10.37 | 33.66 | 4.08 | 214 | 300 | 7.97 | 34.22 | 1.53 | 26.69 | 136 | 0.78 |
| 179 | 10.04b) | 33.79 | 3.47 | 200 | 400 | 6.92 | 34.32 | 0.72 | 26.92 | 114 | 0.91 |
| 203 | 9.25c) | 33.95 | 2.93 | 175 | 500 | 6.28 | 34.38 | 0.42 | 27.05 | 102 | 1.02 |
| 252 | 8.48 | 34.14 | 2.04 | 150 | | | | | | | |
| 332 | 7.62 | 34.26 | 1.26 | 129 | | | | | | | |
| 432 | 6.67 | 34.34 | 0.57 | 110 | | | | | | | |
| 564 | 5.92 | 34.42 | 0.30 | 94 | | | | | | | |

118.39 PAOLINA-T; October 9, 1958; 2006 GCT; 28°18.5'N, 115°23'W; sounding, 115 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.81 | 33.84 | 5.05 | 475 | 0 | 22.81 | 33.84 | 5.05 | 23.13 | 475 | 0.00 |
| 11 | 22.52 | 33.86 | 5.02 | 466 | 10 | 22.54 | 33.86 | 5.03 | 23.22 | 466 | 0.05 |
| 31 | 19.20 | 33.62 | 4.83 | 398 | 20 | 21.40 | 33.78 | 4.90 | 23.48 | 442 | 0.09 |
| 51 | 16.56 | 33.56 | 4.87 | 341 | 30 | 19.35 | 33.63 | 4.83 | 23.90 | 401 | 0.13 |
| 76 | 14.66 | 33.59 | 5.22 | 299 | 50 | 16.70 | 33.56 | 4.86 | 24.50 | 344 | 0.21 |
| 102 | 13.04 | 33.73 | 3.86 | 257 | 75 | 14.75 | 33.59 | 5.21 | 24.96 | 301 | 0.29 |
| 127 | 12.27 | 33.95 | 2.32 | 226 | 100 | 13.30 | 33.69 | 4.24 | 25.34 | 264 | 0.36 |
| 167 | 11.61 | 34.16 | 1.36 | 199 | 150 | 11.88 | 34.07 | 1.70 | 25.91 | 210 | 0.48 |
| 208 | 11.02 | 34.33 | 0.87 | 176 | 200 | 11.15 | 34.30 | 0.94 | 26.22 | 180 | 0.58 |

119.33 BLACK DOUGLAS; October 10, 1958; 1741 GCT; 28°19'N, 114°53'W; sounding, 61 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.98 | 33.77 | | 484 | 0 | 22.98 | 33.77 | | 23.03 | 484 | 0.00 |
| 9 | 22.98 | 33.80 | | 482 | 10 | 22.98 | 33.80 | | 23.05 | 482 | 0.05 |
| 28 | 22.94 | 33.78 | | 482 | 20 | 22.96 | 33.79 | | 23.05 | 482 | 0.10 |
| 46 | 22.36 | 33.75 | | 469 | 30 | 22.93 | 33.78 | | 23.05 | 482 | 0.14 |
| 69 | 18.78 | 33.86 | | 370 | 50 | 21.50 | 33.75 | | 23.43 | 446 | 0.24 |

120.25 BLACK DOUGLAS; October 10, 1958; 1154 GCT; 28°23'N, 114°14.5'W; sounding, 31 fm; wind, 270°, force 2; weather, cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.28 | 33.78 | 5.14 | 466 | 0 | 22.28 | 33.78 | 5.14 | 23.22 | 466 | 0.00 |
| 9 | 22.27 | 33.80 | 5.17 | 464 | 10 | 22.26 | 33.80 | 5.18 | 23.25 | 463 | 0.05 |
| 28 | 18.48 | 33.70 | 5.41 | 374 | 20 | 20.70 | 33.76 | 5.27 | 23.65 | 425 | 0.09 |
| 38 | 16.75 | 33.66 | 5.14 | 338 | 30 | 18.20 | 33.69 | 5.38 | 24.24 | 368 | 0.13 |

120.30 BLACK DOUGLAS; October 10, 1958; 1445 GCT; 28°13'N, 114°34'W; sounding, 51 fm; wind, 300°, force 3; weather, cloudy; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.54 | 33.85 | 5.08 | 467 | 0 | 22.54 | 33.85 | 5.08 | 23.21 | 467 | 0.00 |
| 10 | 22.54 | 33.84 | 5.00 | 468 | 10 | 22.54 | 33.84 | 5.00 | 23.20 | 468 | 0.05 |
| 29 | 21.18 | 33.78 | 5.18 | 436 | 20 | 22.08 | 33.81 | 5.05 | 23.31 | 458 | 0.09 |
| 47 | 18.38 | 33.68 | 5.00 | 374 | 30 | 21.08 | 33.78 | 5.18 | 23.56 | 434 | 0.14 |
| 70 | 16.21 | 33.68 | 4.54 | 325 | 50 | 18.00 | 33.68 | 4.92 | 24.28 | 365 | 0.22 |

a) Alternate value, 4.80 ml/L, not used in interpolation.
b) Alternate value, 9.90°C, not used in interpolation.
c) Mean value of 9.19 and 9.31°C.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$<br>$-5$<br>$10$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$<br>$-5$<br>$10$ cm/g | ΔD<br>dyn. m |

BLACK DOUGLAS; October 10, 1958; 2015 GCT; 28°03'N, 114°54'W; sounding, 47 fm; wind, 320°, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. 120.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.34 | 33.88 | 4.97 | 486 | 0 | 23.34 | 33.88 | 4.97 | 23.01 | 486 | 0.00 |
| 10 | 22.84 | 33.84 | 4.99 | 476 | 10 | 22.84 | 33.84 | 4.99 | 23.12 | 476 | 0.05 |
| 29 | 22.73 | 33.84 | 4.98 | 472 | 20 | 22.75 | 33.84 | 4.99 | 23.14 | 474 | 0.10 |
| 48 | 22.70 | 33.92 | 5.02 | 466 | 30 | 22.73 | 33.84 | 4.99 | 23.16 | 472 | 0.14 |

BLACK DOUGLAS; October 11, 1958; 0147 GCT; 27°43'N, 115°33'W; sounding, 1150 fm; wind, 340°, force 4; weather, partly cloudy; sea, moderate; wire angle, 25°. 120.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.42 | 33.80 | 4.87 | 468 | 0 | 22.42 | 33.80 | 4.87 | 23.20 | 468 | 0.00 |
| 9 | 22.43 | 33.78 | 5.07 | 469 | 10 | 22.44 | 33.78 | 5.07 | 23.19 | 469 | 0.05 |
| 27 | 22.43 | 33.84 | 5.09 | 465 | 20 | 22.44 | 33.82 | 5.08 | 23.22 | 466 | 0.09 |
| 40 | 18.65 | 33.58 | 5.98 | 388 | 30 | 22.20 | 33.82 | 5.17 | 23.29 | 460 | 0.14 |
| 48 | 17.17 | 33.56 | 6.04 | 354 | 50 | 17.00 | 33.57 | 6.01 | 24.44 | 350 | 0.22 |
| 56 | 16.62 | 33.60 | 5.93 | 340 | 75 | 14.80 | 33.54 | 5.73 | 24.92 | 305 | 0.30 |
| 65 | 15.94 | 33.58 | 5.88 | 326 | 100 | 13.02 | 33.58 | 5.09 | 25.31 | 268 | 0.38 |
| 82 | 14.18 | 33.53 | 5.55 | 293 | 150 | 10.50 | 33.76 | 3.43 | 25.92 | 209 | 0.50 |
| 93 | 13.46 | 33.56 | 5.28 | 277 | 200 | 11.10 | 34.33 | 1.30 | 26.26 | 177 | 0.59 |
| 106 | 12.59 | 33.59 | 4.89 | 258 | 250 | 10.35 | 34.41 | 0.92 | 26.46 | 158 | 0.68 |
| 126 | 10.89 | 33.56 | 4.66 | 231 | 300 | 9.06 | 34.33 | 1.17 | 26.61 | 144 | 0.76 |
| 150 | 10.50 | 33.76 | 3.43 | 209 | 400 | 8.02 | 34.38 | 0.53 | 26.81 | 125 | 0.90 |
| 182 | 11.12 | 34.27 | 1.45 | 182 | 500 | 6.70 | 34.34 | 0.33 | 26.96 | 110 | 1.02 |
| 225 | 10.89 | 34.45 | 0.81 | 165 | | | | | | | |
| 293 | 9.14 | 34.33 | 1.19 | 146 | | | | | | | |
| 381 | 8.24 | 34.38 | 0.59 | 128 | | | | | | | |
| 509 | 6.60 | 34.34 | 0.32 | 109 | | | | | | | |

BLACK DOUGLAS; October 11, 1958; 0519 GCT; 27°33'N, 115°52.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°. 120.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.10 | 33.73 | 5.09 | 464 | 0 | 22.10 | 33.73 | 5.09 | 23.24 | 464 | 0.00 |
| 9 | 22.10 | 33.76 | 4.89 | 462 | 10 | 22.10 | 33.76 | 4.90 | 23.26 | 462 | 0.05 |
| 28 | 22.12 | 33.74 | 5.01 | 464 | 20 | 22.11 | 33.74 | 4.98 | 23.24 | 464 | 0.09 |
| 42 | 19.12 | 33.57 | 5.37 | 400 | 30 | 22.10 | 33.74 | 5.03 | 23.24 | 464 | 0.14 |
| 51 | 17.68 | 33.55 | 5.75 | 367 | 50 | 17.83 | 33.55 | 5.72 | 24.22 | 371 | 0.22 |
| 60 | 16.95 | 33.55 | 5.59 | 350 | 75 | 16.16 | 33.63 | 5.39 | 24.68 | 327 | 0.31 |
| 69 | 16.48 | 33.58 | 5.58 | 338 | 100 | 13.86 | 33.75 | 4.29 | 25.26 | 272 | 0.39 |
| 88 | 15.26 | 33.78 | 4.37 | 297 | 150 | 10.59 | 33.90 | 3.39 | 26.01 | 201 | 0.50 |
| 101 | 13.80 | 33.75 | 4.29 | 270 | 200 | 10.55 | 34.48 | 1.50 | 26.48 | 156 | 0.60 |
| 115 | 11.88 | 33.55 | 4.93 | 248 | 250 | 10.34 | 34.52 | 0.69 | 26.54 | 150 | 0.68 |
| 136 | 10.44 | 33.68 | 4.13 | 214 | 300 | 9.50 | 34.42 | 0.68 | 26.60 | 144 | 0.75 |
| 162 | 10.74 | 34.05 | 2.57 | 192 | 400 | 8.17 | 34.39 | 0.48 | 26.80 | 126 | 0.89 |
| 197 | 10.58 | - | 1.70 | | 500 | 7.05 | 34.38 | 0.46 | 26.94 | 113 | 1.02 |
| 245 | 10.40 | 34.52 | 0.69 | 151 | | | | | | | |
| 322 | 9.16 | 34.38 | 0.68 | 142 | | | | | | | |
| 417 | 7.99 | 34.39 | 0.46 | 124 | | | | | | | |
| 549 | 6.53 | 34.36 | 0.46 | 106 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

120.60 BLACK DOUGLAS; October 11, 1958; 1124 GCT; 27°14.5'N, 116°33'W; sounding, 2000+ fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.63 | 33.56 | 5.16 | 464 | 0 | 21.63 | 33.56 | 5.16 | 23.24 | 464 | 0.00 |
| 10 | 21.63 | 33.58 | 5.17 | 462 | 10 | 21.63 | 33.58 | 5.17 | 23.26 | 462 | 0.05 |
| 29 | 19.21 | 33.53 | 5.74 | 405 | 20 | 20.98 | 33.56 | 5.36 | 23.43 | 446 | 0.09 |
| 43 | 16.51 | 33.53 | 5.96 | 342 | 30 | 19.06 | 33.53 | 5.76 | 23.90 | 401 | 0.13 |
| 53 | 15.46 | 33.54 | 5.82 | 319 | 50 | 15.79 | 33.54 | 5.90 | 24.69 | 326 | 0.21 |
| 62 | 14.51 | 33.55 | 5.24 | 298 | 75 | 13.02 | 33.65 | 4.56 | 25.37 | 262 | 0.28 |
| 71 | 13.49 | 33.65 | 4.56 | 271 | 100 | 11.67 | 33.77 | 4.00 | 25.72 | 228 | 0.34 |
| 90 | 11.98 | 33.65 | 4.56 | 243 | 150 | 11.60 | 34.19 | 1.52 | 26.05 | 197 | 0.45 |
| 104 | 11.60 | 33.84 | 3.06 | 222 | 200 | 10.33 | 34.23 | 1.52 | 26.32 | 171 | 0.54 |
| 117 | 11.82 | 34.04 | 2.14 | 211 | 250 | 10.11 | 34.46 | 0.65 | 26.54 | 151 | 0.63 |
| 140 | 11.72 | 34.14 | 1.74 | 202 | 300 | 9.47 | 34.49 | 0.56 | 26.67 | 138 | 0.70 |
| 167 | 11.39 | 34.29 | 1.30 | 185 | 400 | 8.15 | 34.43 | 0.35 | 26.83 | 123 | 0.84 |
| 203 | 10.22 | 34.23 | 1.52 | 170 | 500 | 7.12 | 34.40 | 0.29 | 26.96 | 110 | 0.96 |
| 253 | 10.10 | 34.47 | 0.63 | 150 | | | | | | | |
| 330 | 8.95 | 34.47 | 0.56 | 132 | | | | | | | |
| 426 | 7.86 | 34.42 | 0.30 | 120 | | | | | | | |
| 559 | 6.52 | 34.40 | 0.29 | 103 | | | | | | | |

120.70 BLACK DOUGLAS; October 11, 1958; 1650 GCT; 26°52.5'N, 117°10'W; sounding, 2000+ fm; wind, 340°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.02 | 33.71 | 5.11 | 464 | 0 | 22.02 | 33.71 | 5.11 | 23.24 | 464 | 0.00 |
| 10 | 22.02 | 33.73 | 5.17 | 462 | 10 | 22.02 | 33.73 | 5.17 | 23.26 | 462 | 0.05 |
| 27 | 21.78 | 33.71 | 5.38 | 457 | 20 | 21.90 | 33.72 | 5.28 | 23.30 | 459 | 0.09 |
| 41 | 18.68 | 33.86 | 5.89 | 368 | 30 | 21.63 | 33.72 | 5.41 | 23.36 | 452 | 0.14 |
| 49 | 17.88 | 33.83 | 5.99 | 351 | 50 | 17.86 | 33.83 | 5.99 | 24.43 | 351 | 0.22 |
| 58 | 17.40 | 33.82 | 5.85 | 341 | 75 | 16.30 | 33.76 | 5.68 | 24.75 | 321 | 0.30 |
| 67 | 16.91 | 33.78 | 5.92 | 333 | 100 | 13.47 | 33.88 | 3.73 | 25.45 | 254 | 0.38 |
| 84 | 14.88 | 33.73 | 4.94 | 293 | 150 | 12.60 | 34.25 | 1.70 | 25.91 | 210 | 0.49 |
| 96 | 13.46 | 33.73 | 4.22 | 264 | 200 | 11.94 | 34.52 | 0.69 | 26.25 | 178 | 0.59 |
| 109 | 13.54 | 34.07 | 2.62 | 241 | 250 | 10.47 | 34.47 | 0.93 | 26.48 | 156 | 0.68 |
| 129 | 12.98 | 34.13 | 2.14 | 226 | 300 | 9.16 | 34.34 | 1.16 | 26.60 | 145 | 0.76 |
| 154 | 12.54 | 34.27 | 1.52 | 208 | 400 | 8.27 | 34.40 | 0.62 | 26.79 | 127 | 0.90 |
| 186 | 12.25 | 34.52 | 0.68 | 184 | 500 | 7.35 | 34.42 | 0.32 | 26.94 | 113 | 1.02 |
| 231 | 11.00 | 34.51 | 0.82 | 162 | | | | | | | |
| 302 | 9.10 | 34.34 | 1.16 | 144 | | | | | | | |
| 392 | 8.36 | 34.40 | 0.63 | 128 | | | | | | | |
| 522 | 7.14 | 34.42 | 0.27 | 110 | | | | | | | |

120.80 BLACK DOUGLAS; October 11, 1958; 2233 GCT; 26°32.5'N, 117°48.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, cloudy; sea, moderate; wire angle, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.17 | 33.71 | 5.11 | 467 | 0 | 22.17 | 33.71 | 5.11 | 23.21 | 467 | 0.00 |
| 10 | 22.16 | 33.68 | 5.20 | 468 | 10 | 22.16 | 33.68 | 5.20 | 23.20 | 468 | 0.05 |
| 28 | 22.00 | 33.68 | 5.51 | 465 | 20 | 22.08 | 33.68 | 5.39 | 23.22 | 466 | 0.09 |
| 41 | 20.51 | 33.67 | 5.51 | 427 | 30 | 21.97 | 33.68 | 5.51 | 23.24 | 464 | 0.14 |
| 50 | 18.73 | 33.69 | 5.53 | 382 | 50 | 18.73 | 33.69 | 5.53 | 24.11 | 382 | 0.22 |
| 59 | 17.14 | 33.74 | 5.57 | 341 | 75 | 15.50 | 33.60 | 5.61 | 24.81 | 315 | 0.31 |
| 68 | 16.11 | 33.62 | 5.59 | 327 | 100 | 14.80 | 33.80 | 4.34 | 25.11 | 286 | 0.39 |
| 86 | 14.80 | 33.60 | 5.64 | 301 | 150 | 10.40 | 33.62 | 4.01 | 25.83 | 218 | 0.52 |
| 98 | 14.82 | 33.80 | 4.39 | 287 | 200 | 9.42 | 33.94 | 2.98 | 26.25 | 178 | 0.62 |
| 112 | 13.94 | 33.81 | 4.11 | 268 | 250 | 8.84 | 34.10 | 2.20 | 26.46 | 158 | 0.70 |
| 133 | 11.19 | 33.55 | 4.25 | 236 | 300 | 8.44 | 34.23 | 1.44 | 26.62 | 143 | 0.78 |
| 158 | 10.12 | 33.66 | 3.83 | 211 | 400 | 7.50 | 34.34 | 0.76 | 26.85 | 121 | 0.92 |
| 192 | 9.54 | 33.91 | 3.15 | 182 | 500 | 6.68 | 34.36 | 0.41 | 26.98 | 109 | 1.04 |
| 240 | 8.96 | 34.08 | 2.34 | 161 | | | | | | | |
| 314 | 8.31 | 34.27 | 1.27 | 137 | | | | | | | |
| 408 | 7.41 | 34.34 | 0.71 | 120 | | | | | | | |
| 541 | 6.42 | 34.36 | 0.33 | 105 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_{-5}^{3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_{-5}^{3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

120.90

BLACK DOUGLAS; October 12, 1958; 0425 GCT; 26°13'N, 118°27.5'W; sounding, 2000+ fm; wind, 010°, force 3; weather, partly cloudy; sea, rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.49 | 33.95 | 4.89 | 459 | 0 | 22.49 | 33.95 | 4.89 | 23.30 | 459 | 0.00 |
| 10 | 22.48 | 33.94 | 4.95 | 459 | 10 | 22.48 | 33.94 | 4.95 | 23.30 | 459 | 0.05 |
| 29 | 22.50 | 33.97 | 4.96 | 457 | 20 | 22.50 | 33.95 | 4.96 | 23.30 | 458 | 0.09 |
| 42 | 22.52 | 34.03 | 5.07 | 453 | 30 | 22.50 | 33.97 | 4.97 | 23.31 | 457 | 0.14 |
| 52 | 20.20 | 33.81 | 5.47 | 409 | 50 | 20.72 | 33.86 | 5.37 | 23.72 | 418 | 0.22 |
| 61 | 18.94 | 33.73 | 5.76 | 383 | 75 | 17.55 | 33.68 | 5.83 | 24.40 | 354 | 0.32 |
| 70 | 17.96 | 33.68 | 5.83 | 364 | 100 | 16.22 | 33.71 | 5.65 | 24.72 | 323 | 0.41 |
| 87 | 16.70 | 33.68 | 5.77 | 336 | 150 | 11.41 | 33.64 | 4.66 | 25.66 | 234 | 0.55 |
| 100 | 16.22 | 33.71a) | 5.65 | 323 | 200 | 9.70 | 33.74 | 3.73 | 26.04 | 198 | 0.66 |
| 114 | 15.32 | 33.69 | 5.41 | 305 | 250 | 8.74 | 34.07 | 2.38 | 26.45 | 159 | 0.75 |
| 136 | 13.24 | 33.60 | 4.82 | 270 | 300 | 8.09 | 34.15 | 1.74 | 26.62 | 143 | 0.83 |
| 161 | 10.75 | 33.66 | 4.53 | 221 | 400 | 7.05 | 34.28 | 0.77 | 26.86 | 120 | 0.97 |
| 195 | 9.80 | 33.71 | 3.85 | 202 | 500 | 6.45 | 34.32 | 0.45 | 26.98 | 108 | 1.09 |
| 242 | 8.86 | 34.04 | 2.50 | 163 | | | | | | | |
| 317 | 7.86 | 34.18 | 1.52 | 138 | | | | | | | |
| 411 | 6.98 | 34.29 | 0.68 | 118 | | | | | | | |
| 542 | 6.20 | 34.34 | 0.34 | 104 | | | | | | | |

123.37

BLACK DOUGLAS; October 14, 1958; 2218 GCT; 27°24'N, 114°39.5'W; sounding, 40 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.82 | 34.33 | 5.06 | 496 | 0 | 24.82 | 34.33 | 5.06 | 22.91 | 496 | 0.00 |
| 9 | 24.46 | 34.35 | 5.27 | 484 | 10 | 24.46 | 34.35 | 5.27 | 23.04 | 484 | 0.05 |
| 28 | 23.30 | 34.30 | 4.89 | 456 | 20 | 24.42 | 34.35 | 5.26 | 23.05 | 483 | 0.10 |
| 47 | 18.69 | 34.02 | 4.81 | 357 | 30 | 22.90 | 34.28 | 4.87 | 23.44 | 446 | 0.14 |

123.42

BLACK DOUGLAS; October 13, 1958; 1413 GCT; 27°15'N, 115°00'W; sounding, 850 fm; wind, 320°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.53 | 34.25 | 4.68 | 465 | 0 | 23.53 | 34.25 | 4.68 | 23.24 | 465 | 0.00 |
| 10 | 23.54 | 34.25 | 4.68 | 465 | 10 | 23.54 | 34.25 | 4.68 | 23.24 | 465 | 0.05 |
| 29 | 19.03 | 33.75 | 5.61 | 384 | 20 | 21.35 | 33.99 | 5.16 | 23.66 | 425 | 0.09 |
| 43 | 16.96 | 33.58 | 5.60 | 348 | 30 | 18.80 | 33.73 | 5.60 | 24.12 | 380 | 0.13 |
| 53 | 16.22 | 33.67 | 5.43 | 326 | 50 | 16.43 | 33.64 | 5.46 | 24.62 | 332 | 0.20 |
| 62 | 15.42 | 33.60 | 6.20 | | | | | | | | |
| 72b) | 15.04 | 33.57 | 5.40 | | | | | | | | |
| 85b) | 14.30 | 33.68 | 4.93 | | | | | | | | |
| 100b) | 13.22 | 33.63 | 4.62 | | | | | | | | |
| 120b) | 12.92 | 33.99 | 3.06 | | | | | | | | |
| 148b) | 12.34 | 34.23 | 1.80 | | | | | | | | |
| 188b) | 11.98 | 34.61 | 0.53 | | | | | | | | |
| 250b) | 10.94 | 34.63 | 0.36 | | | | | | | | |
| 326b) | 9.14 | 34.48 | 0.66 | | | | | | | | |
| 431b) | 7.64 | 34.47 | 0.31 | | | | | | | | |

a) The salinity values appear as listed on the data sheet. However, there is doubt concerning the correct order of values between 100 and 317 meters.

b) Posttrip; depth too uncertain for interpolation.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

123.50 BLACK DOUGLAS; October 13, 1958; 0854 GCT; 26°58'N, 115°30.5'W; sounding, 2000+ fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.23 | 33.82 | 5.09 | 461 | 0 | 22.23 | 33.82 | 5.09 | 23.28 | 461 | 0.00 |
| 11 | 22.22 | 33.83 | 5.15 | 460 | 10 | 22.22 | 33.83 | 5.14 | 23.28 | 460 | 0.05 |
| 30 | 22.12 | 33.80 | 5.18 | 459 | 20 | 22.20 | 33.82 | 5.16 | 23.29 | 460 | 0.09 |
| 44 | 18.54 | 33.80 | 5.72 | 369 | 30 | 22.12 | 33.80 | 5.18 | 23.29 | 459 | 0.14 |
| 53 | 17.18 | 33.87 | 5.30 | 332 | 50 | 17.57 | 33.85 | 5.38 | 24.52 | 342 | 0.22 |
| 62 | 15.64 | 33.78 | 5.16 | 305 | 75 | 15.18 | 33.86 | 4.79 | 25.08 | 289 | 0.30 |
| 71 | 15.28 | 33.83 | 4.93 | 294 | 100 | 14.05 | 33.94 | 3.56 | 25.38 | 260 | 0.37 |
| 90 | 14.76 | 33.95 | 3.72 | 274 | 150 | 10.59 | 33.87 | 3.28 | 26.00 | 202 | 0.48 |
| 103 | 13.80 | 33.93 | 3.57 | 256 | 200 | 9.60 | 34.18 | 2.12 | 26.40 | 164 | 0.58 |
| 117 | 11.90 | 33.68 | 4.10 | 239 | 250 | 9.87 | 34.51 | 0.70 | 26.62 | 143 | 0.66 |
| 139 | 10.92 | 33.78 | 3.58 | 215 | 300 | 9.38 | 34.50 | 0.40 | 26.69 | 136 | 0.73 |
| 166 | 10.22 | 33.97 | 2.90 | 189 | 400 | 7.98 | 34.40 | 0.40 | 26.83 | 123 | 0.86 |
| 201 | 9.58 | 34.18 | 2.03 | 164 | 500 | 6.82 | 34.38 | 0.39 | 26.98 | 109 | 0.99 |
| 248 | 9.88 | 34.51 | 0.72 | 144 | | | | | | | |
| 324 | 9.06 | 34.49 | 0.38 | 133 | | | | | | | |
| 419 | 7.72 | 34.39 | 0.41 | 120 | | | | | | | |
| 554 | 6.22 | 34.38 | 0.36 | 101 | | | | | | | |

123.60 BLACK DOUGLAS; October 13, 1958; 0203 GCT; 26°38.5'N, 116°08'W; sounding, 2000+ fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.06 | 33.75 | 5.05 | 462 | 0 | 22.06 | 33.75 | 5.05 | 23.27 | 462 | 0.00 |
| 11 | 22.04 | 33.82 | 5.14 | 456 | 10 | 22.04 | 33.81 | 5.13 | 23.32 | 456 | 0.05 |
| 29 | 21.78 | 33.73 | 5.13 | 455 | 20 | 21.93 | 33.78 | 5.14 | 23.33 | 456 | 0.09 |
| 43 | 16.50 | 33.75 | 5.19 | 326 | 30 | 21.77 | 33.73 | 5.13 | 23.34 | 454 | 0.14 |
| 52 | 15.26 | 33.81 | 4.17 | 295 | 50 | 15.45 | 33.80 | 4.36 | 24.97 | 300 | 0.21 |
| 61 | 14.36 | 33.94 | 3.33 | 267 | 75 | 13.75 | 33.94 | 2.89 | 25.44 | 254 | 0.28 |
| 70 | 14.22 | 33.99 | 2.83 | 260 | 100 | 11.63 | 33.86 | 3.14 | 25.79 | 222 | 0.34 |
| 88 | 12.60 | 33.83 | 3.10 | 242 | 150 | 10.09 | 33.98 | 2.64 | 26.16 | 187 | 0.45 |
| 102 | 11.47 | 33.86 | 3.14 | 219 | 200 | 9.00 | 34.16 | 2.00 | 26.48 | 156 | 0.53 |
| 116 | 11.07 | 33.93 | 2.79 | 207 | 250 | 8.70 | 34.32 | 1.17 | 26.66 | 140 | 0.61 |
| 137 | 10.40 | 33.94 | 2.69 | 194 | 300 | 8.35 | 34.36 | 0.78 | 26.74 | 132 | 0.68 |
| 163 | 9.82 | 34.04 | 2.60 | 178 | 400 | 7.21 | 34.36 | 0.35 | 26.91 | 115 | 0.81 |
| 197 | 9.02 | 34.15 | 2.05 | 157 | 500 | 6.47 | 34.39 | 0.35 | 27.03 | 104 | 0.92 |
| 245 | 8.72 | 34.31 | 1.20 | 140 | | | | | | | |
| 320 | 8.16 | 34.37 | 0.67 | 128 | | | | | | | |
| 415 | 7.05 | 34.36 | 0.34 | 114 | | | | | | | |
| 550 | 6.10 | 34.41 | 0.36 | 98 | | | | | | | |

123.70 BLACK DOUGLAS; October 12, 1958; 1938 GCT; 26°18.5'N, 116°47'W; sounding, 2000+ fm; wind, 330°, force 4; weather, cloudy; sea, rough; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.80 | 33.62 | 5.05 | 464 | 0 | 21.80 | 33.62 | 5.05 | 23.24 | 464 | 0.00 |
| 10 | 21.76 | 33.64 | 5.08 | 461 | 10 | 21.76 | 33.64 | 5.08 | 23.28 | 461 | 0.05 |
| 28 | 21.68 | 33.60 | 4.95 | 462 | 20 | 21.72 | 33.62 | 4.97 | 23.27 | 462 | 0.09 |
| 41 | 18.84 | 33.57 | 5.85 | 393 | 30 | 21.65 | 33.60 | 4.96 | 23.27 | 462 | 0.14 |
| 50 | 17.24 | 33.66 | 5.85 | 349 | 50 | 17.24 | 33.66 | 5.85 | 24.45 | 349 | 0.22 |
| 59 | 16.75 | 33.73 | 5.72 | 333 | 75 | 15.66 | 33.80 | 5.48 | 24.92 | 304 | 0.30 |
| 68 | 16.28 | 33.84 | 5.68 | 315 | 100 | 12.29 | 33.62 | 4.19 | 25.48 | 251 | 0.37 |
| 86 | 13.58 | 33.59 | 4.54 | 277 | 150 | 11.47 | 34.01 | 2.30 | 25.94 | 207 | 0.49 |
| 97 | 12.31 | 33.62 | 4.21 | 251 | 200 | 10.02 | 34.20 | 1.85 | 26.34 | 169 | 0.58 |
| 110 | 12.16 | 33.72 | 3.54 | 241 | 250 | 9.72 | 34.31 | 1.34 | 26.48 | 156 | 0.67 |
| 131 | 11.76 | 33.95 | 2.86 | 216 | 300 | (9.64) | (34.43) | (0.78) | (26.58) | (146) | (0.74) |
| 155 | 11.41 | 34.02 | 2.17 | 206 | | | | | | | |
| 185 | 10.28 | 34.14 | 2.02 | 178 | | | | | | | |
| 228 | 9.76 | 34.28 | 1.59 | 159 | | | | | | | |
| 299 | 9.64 | 34.43 | 0.78 | 146 | | | | | | | |
| 318a) | 9.60 | 34.43 | 0.69 | | | | | | | | |
| 491a) | 8.46 | 34.50 | 0.26 | | | | | | | | |

a) Pretrip; depth too uncertain for interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m | |
| BLACK DOUGLAS; October 12, 1958; 1228 GCT; 26°00'N, 117°29'W; sounding, 2000+ fm; wind, 340°, force 3; weather, clear; sea, moderate; wire angle, 19°. | | | | | | | | | | | | 123.80 |
| 0 | 21.94 | 33.67 | 5.23 | 464 | 0 | 21.94 | 33.67 | 5.23 | 23.24 | 464 | 0.00 | |
| 10 | 21.95 | 33.67 | 5.17 | 464 | 10 | 21.95 | 33.67 | 5.17 | 23.24 | 464 | 0.05 | |
| 28 | 21.96 | 33.69 | 5.23 | 463 | 20 | 21.95 | 33.68 | 5.19 | 23.25 | 464 | 0.09 | |
| 41 | 19.11 | 33.68 | 5.90 | 391 | 30 | 21.70 | 33.69 | 5.33 | 23.32 | 456 | 0.14 | |
| 50 | 18.10 | 33.72 | 6.00 | 364 | 50 | 18.10 | 33.72 | 6.00 | 24.29 | 364 | 0.22 | |
| 59 | 17.65 | 33.72 | 5.94 | 354 | 75 | 17.28 | 33.86 | 5.84 | 24.60 | 336 | 0.31 | |
| 68 | 17.49 | 33.85 | 5.85 | 341 | 100 | 14.98 | 33.66 | 5.67 | 24.97 | 300 | 0.39 | |
| 85 | 16.92 | 33.87 | 5.84 | 327 | 150 | 10.77 | 33.63 | 4.30 | 25.77 | 224 | 0.52 | |
| 97 | 15.54 | 33.66 | 5.76 | 312 | 200 | 9.30 | 33.92 | 3.15 | 26.25 | 178 | 0.62 | |
| 110 | 13.74 | 33.68 | 5.41 | 274 | 250 | 8.69 | 34.10 | 2.34 | 26.48 | 156 | 0.71 | |
| 131 | 11.92 | 33.58 | 4.65 | 247 | 300 | 8.40 | 34.25 | 1.61 | 26.65 | 140 | 0.79 | |
| 155 | 10.58 | 33.64 | 4.22 | 220 | 400 | 7.60 | 34.34 | 0.57 | 26.84 | 122 | 0.92 | |
| 190 | 9.50 | 33.87 | 3.37 | 185 | 500 | 6.66 | 34.36 | 0.40 | 26.98 | 109 | 1.04 | |
| 236 | 8.80 | 34.04 | 2.57 | 162 | | | | | | | | |
| 309 | 8.37 | 34.27 | 1.46 | 138 | | | | | | | | |
| 402 | 7.58 | 34.34 | 0.58 | 122 | | | | | | | | |
| 535 | 6.32 | 34.36 | 0.36 | 104 | | | | | | | | |
| BLACK DOUGLAS; October 15, 1958; 0324 GCT; 26°55.5'N, 114°06'W; sounding, 45 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 00°. | | | | | | | | | | | | 127.34 |
| 0 | 24.95 | 34.53 | 4.93 | 485 | 0 | 24.95 | 34.53 | 4.93 | 23.02 | 485 | 0.00 | |
| 9 | 24.92 | 34.47 | 4.90 | 488 | 10 | 24.91 | 34.47 | 4.90 | 22.99 | 488 | 0.05 | |
| 28 | 24.64 | 34.51 | 4.93 | 478 | 20 | 24.72 | 34.50 | 4.91 | 23.06 | 481 | 0.10 | |
| 48 | 20.51 | 34.11 | 5.29 | 395 | 30 | 24.59 | 34.51 | 4.92 | 23.12 | 476 | 0.14 | |
| BLACK DOUGLAS; October 15, 1958; 0713 GCT; 26°43.5'N, 114°29.5'W; sounding, 1650 fm; wind, 260°, force 1; weather, clear; sea, moderate; wire angle, 03°. | | | | | | | | | | | | 127.40 |
| 0 | 24.58 | 34.39 | 4.89 | 485 | 0 | 24.58 | 34.39 | 4.89 | 23.02 | 485 | 0.00 | |
| 10 | 24.55 | 34.39 | 4.88 | 484 | 10 | 24.55 | 34.39 | 4.88 | 23.04 | 484 | 0.05 | |
| 29 | 23.43 | 34.33 | 5.04 | 457 | 20 | 24.50 | 34.39 | 4.90 | 23.06 | 482 | 0.10 | |
| 43 | 19.98 | 34.14 | 5.12 | 380 | 30 | 23.10 | 34.31 | 5.06 | 23.40 | 449 | 0.14 | |
| 52 | 19.30 | 34.14 | 4.51 | 363 | 50 | 19.42 | 34.14 | 4.57 | 24.28 | 366 | 0.22 | |
| 62 | 17.01 | 33.82 | 4.70 | 332 | 75 | 16.42 | 33.94 | 4.93 | 24.86 | 311 | 0.31 | |
| 71 | 16.96 | 33.96 | 5.18 | 321 | 100 | 13.40 | 33.86 | 3.34 | 25.46 | 254 | 0.38 | |
| 90 | 14.55 | 33.86 | 4.07 | 276 | 150 | 11.00 | 34.04 | 2.44 | 26.05 | 197 | 0.50 | |
| 103 | 13.06 | 33.87 | 3.20 | 247 | 200 | 11.44 | 34.56 | 0.57 | 26.37 | 166 | 0.59 | |
| 116 | 12.32 | 33.88 | 3.13 | 232 | 250 | 10.57 | 34.54 | 0.56 | 26.52 | 152 | 0.67 | |
| 139 | 11.14 | 33.93 | 2.65 | 208 | 300 | 9.45 | 34.50 | 0.69 | 26.68 | 138 | 0.75 | |
| 165 | 11.37 | 34.31 | 1.37 | 183 | 400 | 7.78 | 34.36 | 0.53 | 26.83 | 123 | 0.88 | |
| 200 | 11.44 | 34.56 | 0.57 | 166 | 500 | 6.76 | 34.34 | 0.36 | 26.95 | 112 | 1.00 | |
| 250 | 10.57 | 34.54 | 0.56 | 152 | | | | | | | | |
| 326 | 8.88 | 34.47 | 0.73 | 131 | | | | | | | | |
| 423 | 7.46 | 34.34 | 0.47 | 121 | | | | | | | | |
| 557 | 6.29 | 34.34 | 0.30 | 105 | | | | | | | | |
| BLACK DOUGLAS; October 15, 1958; 1333 GCT; 26°25'N, 115°09'W; sounding, 2000+ fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 02°. | | | | | | | | | | | | 127.50 |
| 0 | 24.26 | 34.34 | 4.69 | 479 | 0 | 24.26 | 34.34 | 4.69 | 23.08 | 479 | 0.00 | |
| 10 | 24.26 | 34.27 | 4.67 | 484 | 10 | 24.26 | 34.27 | 4.67 | 23.03 | 484 | 0.05 | |
| 29 | 22.27 | 33.79 | 4.87 | 464 | 20 | 22.35 | 33.80 | 4.86 | 23.22 | 466 | 0.10 | |
| 43 | 18.73 | 33.81 | 5.71 | 373 | 30 | 22.26 | 33.79 | 4.88 | 23.24 | 464 | 0.14 | |
| 52 | 17.99 | 33.75 | 5.79 | 360 | 50 | 18.13 | 33.77 | 5.78 | 24.32 | 362 | 0.22 | |
| 61 | 17.22 | 33.65 | 5.73 | 350 | 75 | 16.42 | 33.67 | 5.48 | 24.65 | 330 | 0.31 | |
| 71 | 16.68 | 33.66 | 5.56 | 337 | 100 | 14.00 | 33.64 | 5.08 | 25.16 | 282 | 0.39 | |
| 89 | 15.30 | 33.72 | 5.25 | 302 | 150 | 10.87 | 33.70 | 3.85 | 25.80 | 220 | 0.51 | |
| 103 | 13.50 | 33.62 | 4.98 | 273 | 200 | 9.52 | 33.99 | 2.62 | 26.26 | 177 | 0.62 | |
| 116 | 12.18 | 33.65 | 3.95 | 246 | 250 | 9.64 | 34.38 | 1.14 | 26.55 | 150 | 0.70 | |
| 140 | 11.30 | 33.66 | 3.90 | 230 | 300 | 8.77 | 34.35 | 1.16 | 26.67 | 138 | 0.77 | |
| 167 | 10.10 | 33.77 | 3.54 | 202 | 400 | 7.32 | 34.30 | 1.01 | 26.84 | 122 | 0.91 | |
| 202 | 9.48 | 34.02 | 2.58 | 174 | 500 | 6.52 | 34.35 | 0.57 | 27.00 | 107 | 1.03 | |
| 250 | 9.64 | 34.38 | 1.14 | 150 | | | | | | | | |
| 325 | 8.29 | 34.33 | 1.15 | 133 | | | | | | | | |
| 420 | 7.16 | 34.29 | 0.93 | 120 | | | | | | | | |
| 553 | 6.20 | 34.40 | 0.37 | 100 | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| 127.60 | BLACK DOUGLAS; October 15, 1958; 1939 GCT; 26°05'N, 115°46'W; sounding, 2000+ fm; wind, 320°, force 2; weather, clear; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 22.82 | - | 5.00 | | 0 | 22.82 | (33.71) | 5.00 | (23.02) | (485) | (0.00) |
| 10 | 22.48 | 33.71 | 5.10 | 475 | 10 | 22.48 | 33.71 | 5.10 | 23.13 | 475 | 0.05 |
| 29 | 21.28 | 34.02 | 5.50 | 421 | 20 | 22.54 | 33.78 | 5.27 | 23.16 | 472 | 0.10 |
| 44 | 19.70 | 33.95 | 5.56 | 386 | 30 | 21.16 | 34.02 | 5.51 | 23.72 | 418 | 0.14 |
| 53 | 18.40 | 33.86 | 5.74 | 361 | 50 | 18.95 | 33.90 | 5.67 | 24.22 | 372 | 0.22 |
| 62 | 17.68 | 33.83 | 5.74 | 346 | 75 | 17.15 | 33.86 | 5.60 | 24.63 | 332 | 0.31 |
| 71 | 17.35 | 33.87 | 5.64 | 336 | 100 | 14.56 | 33.73 | 5.22 | 25.11 | 286 | 0.39 |
| 91 | 15.71 | 33.78 | 5.43 | 306 | 150 | 10.58 | 33.75 | 4.04 | 25.90 | 211 | 0.51 |
| 103 | 14.10 | 33.71 | 5.12 | 278 | 200 | 10.22 | 34.23 | 1.84 | 26.34 | 170 | 0.61 |
| 116 | 12.58 | 33.63 | 4.75 | 255 | 250 | 9.70 | 34.41 | 1.03 | 26.56 | 148 | 0.69 |
| 139 | 11.00 | 33.68 | 4.30 | 224 | 300 | 9.08 | 34.42 | 0.93 | 26.67 | 138 | 0.76 |
| 165 | 10.14 | 33.87 | 3.30 | 195 | 400 | 7.87 | 34.40 | 0.58 | 26.85 | 121 | 0.90 |
| 201 | 10.22 | 34.24 | 1.83 | 170 | 500 | 6.95 | 34.41 | 0.37 | 26.98 | 108 | 1.02 |
| 250 | 9.70 | 34.41 | 1.03 | 148 | | | | | | | |
| 327 | 8.74 | 34.42 | 0.89 | 132 | | | | | | | |
| 424 | 7.60 | 34.40 | 0.49 | 118 | | | | | | | |
| 557 | 6.45 | 34.42 | 0.31 | 101 | | | | | | | |
| 127.70 | BLACK DOUGLAS; October 16, 1958; 0142 GCT; 25°45.5'N, 116°23'W; sounding, 2000+ fm; wind, 320°, force 1; weather, clear; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 23.10 | 33.84 | 5.04 | 483 | 0 | 23.10 | 33.84 | 5.04 | 23.04 | 483 | 0.00 |
| 10 | 23.04 | 33.85 | 5.07 | 481 | 10 | 23.04 | 33.85 | 5.07 | 23.06 | 481 | 0.05 |
| 29 | 22.51 | 33.78 | 5.06 | 471 | 20 | 22.58 | 33.79 | 5.06 | 23.16 | 472 | 0.10 |
| 43 | 19.76 | 33.89 | 5.74 | 392 | 30 | 22.49 | 33.78 | 5.06 | 23.17 | 471 | 0.14 |
| 53 | 18.34 | 33.83 | 5.94 | 362 | 50 | 18.74 | 33.85 | 5.91 | 24.23 | 370 | 0.23 |
| 62 | 17.72 | 33.80 | 5.92 | 350 | 75 | 17.27 | 33.79 | 5.82 | 24.54 | 341 | 0.32 |
| 71 | 17.38 | 33.77 | 5.87 | 344 | 100 | 15.54 | 33.78 | 5.65 | 24.94 | 303 | 0.40 |
| 89 | 16.58 | 33.79 | 5.75 | 325 | 150 | 11.04 | 33.69 | 4.27 | 25.76 | 224 | 0.53 |
| 103 | 15.14 | 33.77 | 5.56 | 295 | 200 | 9.66 | 34.08 | 2.38 | 26.32 | 172 | 0.63 |
| 116 | 13.70 | 33.66 | 5.06 | 274 | 250 | 8.88 | 34.22 | 1.85 | 26.55 | 150 | 0.71 |
| 137 | 11.63 | 33.62 | 4.61 | 239 | 300 | 8.69 | 34.34 | 0.90 | 26.67 | 138 | 0.79 |
| 163 | 10.52 | 33.79 | 3.69 | 208 | 400 | 7.57 | 34.39 | 0.47 | 26.88 | 118 | 0.92 |
| 197 | 9.67 | 34.07 | 2.42 | 173 | 500 | 6.66 | 34.42 | 0.36 | 27.03 | 104 | 1.04 |
| 245 | 8.92 | 34.22 | 1.89 | 150 | | | | | | | |
| 320 | 8.59 | 34.43 | 0.69 | 130 | | | | | | | |
| 418 | 7.34 | 34.38 | 0.44 | 116 | | | | | | | |
| 545 | 6.36 | 34.45 | 0.30 | 98 | | | | | | | |
| 127.80 | BLACK DOUGLAS; October 16, 1958; 0746 GCT; 25°23.5'N, 117°02.5'W; sounding, 2000+ fm; wind, 310°, force 3; weather, clear; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 0 | 22.82 | 33.89 | 5.12 | 472 | 0 | 22.82 | 33.89 | 5.12 | 23.16 | 472 | 0.00 |
| 9 | 22.80 | 33.92 | 5.06 | 469 | 10 | 22.80 | 33.92 | 5.06 | 23.19 | 469 | 0.05 |
| 28 | 22.73 | 33.93 | 5.08 | 466 | 20 | 22.77 | 33.92 | 5.07 | 23.20 | 468 | 0.09 |
| 43 | 21.62 | 34.08 | 5.46 | 426 | 30 | 22.70 | 33.93 | 5.09 | 23.23 | 466 | 0.14 |
| 52 | 20.30 | 34.09 | 5.53 | 391 | 50 | 21.14 | 34.09 | 5.49 | 23.78 | 413 | 0.23 |
| 61 | 19.30 | 34.02 | 5.75 | 372 | 75 | 18.39 | 34.00 | 5.61 | 24.43 | 351 | 0.32 |
| 70 | 18.74 | 34.03 | 5.65 | 357 | 100 | 16.50 | 33.86 | 5.47 | 24.78 | 318 | 0.41 |
| 89 | 17.45 | 33.91 | 5.58 | 336 | 150 | 12.00 | 33.74 | 4.00 | 25.64 | 236 | 0.55 |
| 103 | 16.22 | 33.86 | 5.40 | 312 | 200 | 9.97 | 33.82 | 3.42 | 26.06 | 196 | 0.66 |
| 116 | 14.44 | 33.75 | 4.98 | 282 | 250 | 9.47 | 34.22 | 1.83 | 26.45 | 159 | 0.75 |
| 139 | 12.42 | 33.66 | 4.26 | 250 | 300 | 8.68 | 34.29 | 1.31 | 26.63 | 142 | 0.83 |
| 166 | 11.12 | 33.80 | 3.50 | 217 | 400 | 7.56 | 34.34 | 0.64 | 26.84 | 122 | 0.96 |
| 201 | 9.94 | 33.82 | 3.42 | 196 | 500 | 6.73 | 34.39 | 0.37 | 27.00 | 107 | 1.09 |
| 249 | 9.48 | 34.22 | 1.85 | 159 | | | | | | | |
| 326 | 8.36 | 34.31 | 1.12 | 135 | | | | | | | |
| 420 | 7.38 | 34.35 | 0.57 | 118 | | | | | | | |
| 551 | 6.34 | 34.42 | 0.31 | 100 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | SIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T,3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T,3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m | CCOFI 5810 |

BLACK DOUGLAS; October 17, 1958; 1630 GCT; 26°29'N, 113°29'W; sounding, 40 fm; wind, 060°, force 4; weather, clear; sea, rough; wire angle, 00°. 130.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.98 | 34.56a) | 4.69 | 513 | 0 | 25.98 | 34.56 | 4.69 | 22.73 | 513 | 0.00 |
| 10 | 25.76 | 34.52 | 4.82 | 509 | 10 | 25.76 | 34.52 | 4.82 | 22.77 | 509 | 0.05 |
| 29 | 24.06 | 34.35 | 5.25 | 473 | 20 | 25.52 | 34.49 | 4.92 | 22.81 | 505 | 0.10 |
| 49 | 19.49 | 34.04 | 5.12 | 374 | 30 | 23.89 | 34.33 | 5.26 | 23.19 | 469 | 0.15 |

BLACK DOUGLAS; October 17, 1958; 1327 GCT; 26°21'N, 113°48.5'W; sounding, 200 fm; wind, 100°, force 4; weather, clear; sea, moderate; wire angle, 00°. 130.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.05 | 34.47a) | 4.70 | 522 | 0 | 26.05 | 34.47 | 4.70 | 22.64 | 522 | 0.00 |
| 9 | 26.06 | 34.43 | 4.66 | 525 | 10 | 26.05 | 34.43 | 4.65 | 22.60 | 525 | 0.05 |
| 28 | 25.84 | 34.47 | 4.70 | 516 | 20 | 25.96 | 34.45 | 4.67 | 22.66 | 520 | 0.10 |
| 47 | 20.64 | 34.03 | 5.73 | 404 | 30 | 25.67 | 34.46 | 4.72 | 22.75 | 511 | 0.16 |
| 70 | 17.03 | 34.05 | 5.63 | 316 | 50 | 19.76 | 34.00 | 5.73 | 24.08 | 384 | 0.25 |
| 93 | 15.78 | 33.80 | 3.94 | 306 | 75 | 16.92 | 34.06 | 5.39 | 24.83 | 313 | 0.33 |
| 115 | 13.96 | 33.96 | 3.19 | 257 | 100 | 15.00 | 33.83 | 3.68 | 25.09 | 288 | 0.41 |
| 151 | 13.70 | 34.46 | 1.50 | 216 | 150 | 13.70 | 34.45 | 1.52 | 25.84 | 216 | 0.54 |
| 187 | 11.66 | 34.38 | 1.23 | 184 | 200 | 11.37 | 34.39 | 1.21 | 26.26 | 177 | 0.64 |
| 233 | 10.92 | 34.52 | 0.70 | 160 | | | | | | | |

BLACK DOUGLAS; October 17, 1958; 1038 GCT; 26°14'N, 114°03'W; sounding, 1150 fm; wind, 060°, force 1; weather, clear; sea, moderate; wire angle, 00°. 130.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.00 | 34.46 | 4.63 | 521 | 0 | 26.00 | 34.46 | 4.63 | 22.65 | 521 | 0.00 |
| 10 | 25.79 | 34.42 | 4.68 | 518 | 10 | 25.79 | 34.42 | 4.68 | 22.68 | 518 | 0.05 |
| 29 | 24.47 | 34.21 | 4.77 | 494 | 20 | 25.29 | 34.34 | 4.70 | 22.77 | 509 | 0.10 |
| 44 | 21.93 | 33.89 | 5.37 | 448 | 30 | 24.40 | 34.20 | 4.78 | 22.94 | 493 | 0.15 |
| 53 | 18.41 | 33.64 | 5.80 | 377 | 50 | 19.40 | 33.69 | 5.72 | 23.94 | 398 | 0.24 |
| 63 | 16.39 | 33.64 | 5.80 | 332 | 75 | 15.89 | 33.93 | 4.40 | 24.98 | 299 | 0.33 |
| 72 | 15.90 | 33.92 | 4.46 | 300 | 100 | 13.88 | 34.04 | 2.77 | 25.49 | 250 | 0.40 |
| 90 | 13.85 | 33.96 | 3.12 | 256 | 150 | 11.26 | 34.02 | 2.04 | 25.98 | 203 | 0.51 |
| 104 | 13.43 | 34.02 | 2.72 | 243 | 200 | 10.73 | 34.47 | 1.04 | 26.44 | 160 | 0.60 |
| 117 | 12.32 | 33.96 | 2.64 | 227 | 250 | 9.86 | 34.43 | 0.85 | 26.56 | 149 | 0.68 |
| 140 | 11.41 | 33.98 | 2.33 | 209 | 300 | 9.42 | 34.50 | 0.51 | 26.68 | 138 | 0.76 |
| 166 | 11.07 | 34.18 | 1.62 | 188 | 400 | 8.00 | 34.45 | 0.37 | 26.86 | 120 | 0.89 |
| 200 | 10.73 | 34.47 | 1.04 | 160 | 500 | 6.93 | 34.43 | 0.32 | 27.00 | 106 | 1.01 |
| 249 | 9.87 | 34.43 | 0.86 | 150 | | | | | | | |
| 324 | 9.20 | 34.52 | 0.38 | 132 | | | | | | | |
| 420 | 7.73 | 34.44 | 0.37 | 116 | | | | | | | |
| 553 | 6.42 | 34.43 | 0.29 | 100 | | | | | | | |

BLACK DOUGLAS; October 17, 1958; 0329 GCT; 25°49'N, 114°46'W; sounding, 2000+ fm; wind, 320°, force 2; weather, clear; sea, rough; wire angle, 03°. 130.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.62 | 34.51b) | 4.66 | 506 | 0 | 25.62 | 34.51 | 4.66 | 22.80 | 506 | 0.00 |
| 10 | 25.38 | 34.53 | 4.59 | 498 | 10 | 25.38 | 34.53 | 4.59 | 22.89 | 498 | 0.05 |
| 29 | 25.17 | 34.45 | 4.66 | 497 | 20 | 25.26 | 34.49 | 4.63 | 22.89 | 498 | 0.10 |
| 43 | 18.82 | 33.78b) | 6.00 | 377 | 30 | 25.13 | 34.44 | 4.68 | 22.91 | 496 | 0.15 |
| 53 | 16.38 | 33.71 | 5.76 | 326 | 50 | 17.00 | 33.72 | 5.91 | 24.55 | 340 | 0.23 |
| 62 | 15.70 | 33.84 | 4.79 | 302 | 75 | 14.92 | 33.93 | 3.83 | 25.19 | 279 | 0.31 |
| 72 | 15.16 | 33.93 | 3.98 | 284 | 100 | 12.68 | 33.90 | 3.10 | 25.63 | 237 | 0.38 |
| 91 | 13.18 | 33.89 | 3.28 | 247 | | | | | | | |
| 105 | 12.46 | 33.91 | 3.00 | 233 | | | | | | | |

a) Salinity bottle numbers were not recorded on the data sheet. Since standard handling and titrating procedures were used, these salinity values are assumed to be in correct order.

b) Salinity bottle number recorded on the data sheet differs from number on titration sheet. Since standard handling and titrating procedures were used, this salinity value is assumed to be listed correctly.

SIO

CCOFI
5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

130.60 BLACK DOUGLAS; October 16, 1958; 2016 GCT; 25°26.5'N, 115°24'W; sounding, 2000+ fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.16 | 34.16 | 4.70 | 489 | 0 | 24.16 | 34.16 | 4.70 | 22.98 | 489 | 0.00 |
| 10 | 24.02 | 34.16 | 4.86 | 486 | 10 | 24.02 | 34.16 | 4.86 | 23.01 | 486 | 0.05 |
| 29 | 22.74 | 33.91 | 4.81 | 468 | 20 | 23.50 | 34.06 | 4.83 | 23.10 | 478 | 0.10 |
| 43 | 19.33 | 33.79 | 5.56 | 388 | 30 | 22.70 | 33.90 | 4.81 | 23.22 | 466 | 0.14 |
| 53 | 18.53 | 33.84 | 5.76 | 366 | 50 | 18.73 | 33.83 | 5.73 | 24.21 | 372 | 0.23 |
| 61 | 17.80 | 33.84 | 5.46 | 349 | 75 | 16.72 | 33.77 | 5.42 | 24.66 | 329 | 0.32 |
| 70 | 17.04 | 33.79 | 5.43 | 335 | 100 | 14.72 | 33.69 | 5.14 | 25.04 | 293 | 0.40 |
| 89 | 15.80 | 33.72 | 5.32 | 313 | 150 | 11.00 | 33.81 | 3.30 | 25.87 | 214 | 0.52 |
| 102 | 14.40 | 33.68 | 5.04 | 287 | 200 | 10.90 | 34.41 | 1.13 | 26.36 | 168 | 0.62 |
| 115 | 12.94 | 33.68 | 3.99 | 258 | 250 | 10.26 | 34.43 | 0.68 | 26.48 | 156 | 0.70 |
| 137 | 11.58 | 33.73 | 3.69 | 230 | 300 | 9.40 | 34.49 | 0.67 | 26.67 | 138 | 0.78 |
| 162 | 11.66 | 34.11 | 1.83 | 204 | 400 | 8.38 | 34.56 | 0.41 | 26.89 | 118 | 0.91 |
| 196 | 11.01 | 34.42 | 1.16 | 169 | 500 | 7.23 | 34.51 | 0.38 | 27.02 | 105 | 1.03 |
| 245 | 10.30 | 34.42 | 0.70 | 157 | | | | | | | |
| 319 | 9.03 | 34.51 | 0.65 | 130 | | | | | | | |
| 413 | 8.22 | 34.56 | 0.36 | 114 | | | | | | | |
| 543 | 6.66 | 34.47 | 0.42 | 100 | | | | | | | |

133.25 BLACK DOUGLAS; October 18, 1958; 0003 GCT; 26°04.5'N, 112°48'W; sounding, 44 fm; wind, 290°, force 3; weather, clear; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.60 | 34.42 | 4.65 | 542 | 0 | 26.60 | 34.42 | 4.65 | 22.43 | 542 | 0.00 |
| 9 | 26.00 | 34.45 | 4.70 | 522 | 10 | 25.95 | 34.45 | 4.71 | 22.66 | 520 | 0.05 |
| 28 | 25.12 | 34.38 | 4.81 | 501 | 20 | 25.50 | 34.42 | 4.76 | 22.76 | 510 | 0.10 |
| 47 | 20.72 | 34.14 | 5.17 | 398 | 30 | 24.55 | 34.34 | 4.87 | 23.00 | 487 | 0.15 |

133.30 BLACK DOUGLAS; October 18, 1958; 0300 GCT; 25°54.5'N, 113°07.5'W; sounding, 110 fm; wind, 310°, force 2; weather, clear; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.42 | 34.36 | 4.66 | 541 | 0 | 26.42 | 34.36 | 4.66 | 22.44 | 541 | 0.00 |
| 9 | 25.41 | 34.36 | 4.78 | 511 | 10 | 25.32 | 34.36 | 4.79 | 22.79 | 508 | 0.05 |
| 28 | 23.93 | 34.32 | 4.87 | 471 | 20 | 24.57 | 34.34 | 4.86 | 22.99 | 488 | 0.10 |
| 47 | 20.32 | 34.23 | 4.69 | 381 | 30 | 23.68 | 34.31 | 4.87 | 23.23 | 465 | 0.15 |
| 71 | 16.22 | 33.89 | 4.62 | 310 | 50 | 19.76 | 34.15 | 4.70 | 24.20 | 373 | 0.23 |
| 95 | 14.77 | 33.93 | 3.89 | 276 | 75 | 16.21 | 33.92 | 4.50 | 24.89 | 307 | 0.32 |
| 119 | 15.27 | 34.37 | 2.05 | 254 | 100 | 14.77 | 33.96 | 3.87 | 25.24 | 274 | 0.39 |
| 147 | 14.94 | 34.63 | 0.95 | 228 | 150 | (14.87) | (34.65) | (0.90) | (25.75) | (225) | (0.52) |

133.40 BLACK DOUGLAS; October 17, 1958; 0923 GCT; 25°34.5'N, 113°45.5'W; sounding, 1400 fm; wind, calm; weather, clear; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.08 | 34.31 | 4.61 | 534 | 0 | 26.08 | 34.31 | 4.61 | 22.51 | 534 | 0.00 |
| 10 | 25.38 | 34.23 | 4.71 | 519 | 10 | 25.38 | 34.23 | 4.71 | 22.67 | 519 | 0.05 |
| 29 | 23.84 | 34.11 | 4.77 | 484 | 20 | 25.04 | 34.21 | 4.72 | 22.74 | 512 | 0.10 |
| 44 | 20.42 | 33.73 | 5.57 | 421 | 30 | 23.60 | 34.08 | 4.78 | 23.08 | 479 | 0.15 |
| 53 | 18.76 | 33.68 | 5.81 | 383 | 50 | 19.30 | 33.69 | 5.77 | 23.96 | 396 | 0.24 |
| 62 | 17.68 | 33.72 | 5.73 | 355 | 75 | 15.84 | 33.68 | 5.60 | 24.79 | 317 | 0.33 |
| 72 | 16.36 | 33.68 | 5.62 | 328 | 100 | 13.78 | 33.76 | 4.83 | 25.29 | 269 | 0.41 |
| 90 | 14.42 | 33.70 | 5.56 | 286 | 150 | 13.00 | 34.36 | 1.20 | 25.91 | 210 | 0.53 |
| 104 | 13.52 | 33.78 | 3.94 | 262 | 200 | 11.22 | 34.45 | 0.86 | 26.33 | 171 | 0.62 |
| 118 | 12.52 | 33.83 | 2.98 | 240 | 250 | 10.51 | 34.50 | 0.62 | 26.50 | 154 | 0.71 |
| 141 | 11.74 | 33.94 | 2.62 | 217 | 300 | 9.75 | 34.50 | 0.49 | 26.63 | 142 | 0.78 |
| 166 | 12.19 | 34.44 | 1.00 | 188 | 400 | 8.48 | 34.47 | 0.33 | 26.81 | 125 | 0.92 |
| 203 | 11.14 | 34.45 | 0.87 | 169 | 500 | 7.23 | 34.45 | 0.27 | 26.97 | 109 | 1.05 |
| 253 | 10.48 | 34.51 | 0.59 | 154 | | | | | | | |
| 330 | 9.28 | 34.49 | 0.45 | 136 | | | | | | | |
| 426 | 8.17 | 34.46 | 0.30 | 121 | | | | | | | |
| 559 | 6.44 | 34.44 | 0.26 | 100 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m | |

BLACK DOUGLAS; October 18, 1958; 1551, 1619 GCT; 25°14.5'N, 114°24'W; sounding, 2000 fm; wind, calm; weather, cloudy; sea, slight; wire angle, 00°, 00°. 133.50

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.20 | 34.18 | 4.62 | 518 | 0 | 25.20 | 34.18 | 4.62 | 22.68 | 518 | 0.00 | |
| 9 | 25.02 | 34.18 | 4.61 | 513 | 10 | 25.00 | 34.18 | 4.60 | 22.74 | 512 | 0.05 | |
| 28 | 24.61 | 34.21 | 4.60 | 498 | 20 | 24.82 | 34.20 | 4.60 | 22.81 | 506 | 0.10 | |
| 42 | 19.50 | 33.70 | 5.46 | 399 | 30 | 24.54 | 34.21 | 4.60 | 22.90 | 497 | 0.15 | |
| 52 | 17.18 | 33.69 | 5.61 | 345 | 50 | 17.40 | 33.69 | 5.60 | 24.44 | 350 | 0.24 | |
| 61 | 16.22 | 33.69 | 5.48 | 324 | 75 | 14.57 | 33.66 | 4.83 | 25.05 | 292 | 0.32 | |
| 70 | 15.29 | 33.69 | 5.14 | 304 | 100 | 13.18 | 33.69 | 4.07 | 25.36 | 262 | 0.39 | |
| 89 | 14.13 | 33.72 | 4.18 | 278 | 150 | 11.20 | 34.10 | 1.65 | 26.06 | 196 | 0.51 | |
| 103 | 12.91 | 33.68 | 4.05 | 258 | 200 | 10.65 | 34.46 | 1.06 | 26.44 | 160 | 0.60 | |
| 116 | 12.18 | 33.68 | 3.82 | 244 | 250 | 10.09 | 34.52 | 0.56 | 26.58 | 147 | 0.68 | |
| 139 | 11.83 | 34.00 | 2.32 | 214 | 300 | 9.60 | 34.54 | 0.37 | 26.68 | 137 | 0.75 | |
| 166 | 11.13 | 34.29 | 1.37 | 180 | 400 | 8.31 | 34.51 | 0.28 | 26.86 | 120 | 0.88 | |
| 202 | 10.60 | 34.47 | 1.05 | 158 | 500 | 7.08 | 34.45 | 0.24 | 27.00 | 107 | 1.00 | |
| 251 | 10.07 | 34.52 | 0.55 | 146 | | | | | | | | |
| 329 | 9.26 | 34.54 | 0.33 | 132 | | | | | | | | |
| 427 | 7.95 | 34.49 | 0.27 | 116 | | | | | | | | |
| 562 | 6.52 | 34.43 | 0.20 | 101 | | | | | | | | |

BLACK DOUGLAS; October 18, 1958; 2223 GCT; 24°56'N, 114°59'W; sounding, 2000+ fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. 133.60

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.40 | 34.06 | 4.68 | 532 | 0 | 25.40 | 34.06 | 4.68 | 22.53 | 532 | 0.00 | |
| 10 | 24.05 | 33.97 | 4.95 | 500 | 10 | 24.05 | 33.97 | 4.95 | 22.86 | 500 | 0.05 | |
| 29 | 23.16 | 33.90 | 4.98 | 480 | 20 | 23.28 | 33.91 | 4.98 | 23.04 | 483 | 0.10 | |
| 44 | 21.02 | 33.87 | 5.28 | 425 | 30 | 22.97 | 33.89 | 4.99 | 23.13 | 475 | 0.15 | |
| 53 | 19.02 | 33.84 | 5.54 | 378 | 50 | 19.80 | 33.86 | 5.47 | 23.97 | 395 | 0.24 | |
| 62 | 17.34 | 33.80 | 5.56 | 341 | 75 | 15.86 | 33.79 | 5.16 | 24.87 | 309 | 0.32 | |
| 71 | 16.08 | 33.79 | 5.19 | 314 | 100 | 14.40 | 33.81 | 4.23 | 25.20 | 278 | 0.40 | |
| 90 | 15.44 | 33.82 | 4.80 | 298 | 150 | 11.31 | 34.11 | 2.10 | 26.05 | 197 | 0.52 | |
| 104 | 13.96 | 33.80 | 4.02 | 269 | 200 | 10.64 | 34.40 | 1.01 | 26.39 | 165 | 0.61 | |
| 117 | 12.60 | 33.78 | 3.35 | 245 | 250 | 10.60 | 34.61 | 0.38 | 26.56 | 148 | 0.69 | |
| 139 | 11.50 | 33.96 | 2.52 | 212 | 300 | 9.80 | 34.57 | 0.37 | 26.67 | 138 | 0.76 | |
| 165 | 10.88 | 34.22 | 1.64 | 182 | 400 | 8.20 | 34.47 | 0.28 | 26.85 | 121 | 0.90 | |
| 200 | 10.64 | 34.40 | 1.01 | 165 | 500 | 7.06 | 34.46 | 0.17 | 27.01 | 106 | 1.02 | |
| 250 | 10.60 | 34.61 | 0.38 | 148 | | | | | | | | |
| 326 | 9.39 | 34.54 | 0.37 | 134 | | | | | | | | |
| 420 | 7.88 | 34.46 | 0.26 | 117 | | | | | | | | |
| 555 | 6.60 | 34.47 | 0.13 | 99 | | | | | | | | |

BLACK DOUGLAS; October 20, 1958; 0238 GCT; 25°34'N, 112°18.5'W; sounding, 40 fm; wind, 280°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. 137.23

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.96 | 34.61 | 4.64 | 539 | 0 | 26.96 | 34.61 | 4.64 | 22.46 | 539 | 0.00 | |
| 10 | 26.96 | 34.61 | 4.71 | 539 | 10 | 26.96 | 34.61 | 4.71 | 22.46 | 539 | 0.05 | |
| 29 | 25.41 | 34.72 | 4.72 | 485 | 20 | 26.48 | 34.70 | 4.72 | 22.68 | 518 | 0.11 | |
| 48 | 24.68 | 34.76 | 4.67 | 461 | 30 | 25.38 | 34.72 | 4.72 | 23.04 | 484 | 0.16 | |

BLACK DOUGLAS; October 19, 1958; 2306 GCT; 25°20.5'N, 112°45.5'W; sounding, 200 fm; wind, 290°, force 3; weather, partly cloudy; sea, slight; wire angle, 00°. 137.30

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.33 | 34.33 | 4.71 | 540 | 0 | 26.33 | 34.33 | 4.71 | 22.45 | 540 | 0.00 | |
| 9 | 26.08 | 34.34 | 4.65 | 532 | 10 | 26.07 | 34.34 | 4.65 | 22.53 | 532 | 0.05 | |
| 28 | 24.52 | 34.36 | 4.82 | 485 | 20 | 25.43 | 34.35 | 4.84 | 22.74 | 512 | 0.11 | |
| 47 | 18.56 | 33.94 | 5.29 | 359 | 30 | 24.00 | 34.33 | 4.90 | 23.15 | 473 | 0.16 | |
| 71 | 16.81 | 33.88 | 5.26 | 324 | 50 | 18.43 | 33.96 | 5.30 | 24.39 | 355 | 0.24 | |
| 95 | 15.82 | 34.02 | 3.85 | 292 | 75 | 16.52 | 33.88 | 5.23 | 24.79 | 317 | 0.32 | |
| 119 | 15.31 | 34.33 | 2.24 | 258 | 100 | 15.67 | 34.07 | 3.69 | 25.12 | 285 | 0.40 | |
| 157 | 14.94 | 34.74 | 0.80 | 220 | 150 | 15.18 | 34.70 | 1.04 | 25.73 | 227 | 0.53 | |
| 195 | 13.28 | 34.74 | 0.40 | 187 | 200 | 13.12 | 34.74 | 0.37 | 26.19 | 184 | 0.63 | |
| 242 | 11.96 | 34.70 | 0.25 | 165 | 250 | 11.80 | 34.69 | 0.23 | 26.41 | 163 | 0.72 | |
| 290 | 11.28 | 34.65 | 0.19 | 157 | 300 | (11.18) | (34.64) | (0.19) | (26.48) | (156) | (0.80) | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

137.35 BLACK DOUGLAS; October 19, 1958; 1935 GCT; 25°13'N, 113°04'W; sounding, 600 fm; wind, 180°, force 3; weather, partly cloudy; sea, slight; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.39 | 34.45 | 4.56 | 533 | 0 | 26.39 | 34.45 | 4.56 | 22.52 | 533 | 0.00 |
| 10 | 26.33 | 34.47 | 4.64 | 530 | 10 | 26.33 | 34.47 | 4.64 | 22.55 | 530 | 0.05 |
| 29 | 26.06 | 34.61 | 4.52 | 512 | 20 | 26.20 | 34.55 | 4.59 | 22.66 | 520 | 0.11 |
| 44 | 22.84 | 34.22 | 5.20 | 448 | 30 | 26.05 | 34.61 | 4.52 | 22.74 | 512 | 0.16 |
| 53 | 21.35 | 34.25 | 5.42 | 406 | 50 | 21.78 | 34.24 | 5.37 | 23.72 | 418 | 0.25 |
| 62 | 20.20 | 34.22 | 5.50 | 379 | 75 | 18.31 | 34.22 | 5.17 | 24.62 | 333 | 0.34 |
| 71 | 18.92 | 34.22 | 5.54 | 348 | 100 | 15.68 | 34.14 | 3.19 | 25.17 | 280 | 0.42 |
| 90 | 16.90 | 34.20 | 3.80 | 302 | 150 | 12.58 | 34.23 | 2.03 | 25.90 | 211 | 0.54 |
| 104 | 15.16 | 34.11 | 2.98 | 271 | 200 | 10.63 | 34.32 | 1.32 | 26.32 | 171 | 0.64 |
| 117 | 14.27 | 34.29 | 2.12 | 240 | 250 | 10.22 | 34.52 | 0.67 | 26.56 | 149 | 0.72 |
| 140 | 13.16 | 34.23 | 2.05 | 222 | 300 | 9.60 | 34.52 | 0.46 | 26.67 | 139 | 0.80 |
| 166 | 12.48 | 34.42 | 1.22 | 196 | 400 | 8.23 | 34.49 | 0.33 | 26.86 | 120 | 0.93 |
| 201 | 10.58 | 34.31 | 1.32 | 170 | 500 | 6.96 | 34.47 | 0.32 | 27.03 | 104 | 1.05 |
| 250 | 10.22 | 34.52 | 0.67 | 149 | | | | | | | |
| 327 | 9.24 | 34.52 | 0.42 | 133 | | | | | | | |
| 423 | 7.92 | 34.48 | 0.30 | 116 | | | | | | | |
| 557 | 6.28 | 34.47 | 0.36 | 95 | | | | | | | |

137.40 BLACK DOUGLAS; October 19, 1958; 1617, 1643 GCT; 25°03'N, 113°22'W; sounding, 1400 fm; wind, 300°, force 3; weather, rain; sea, moderate; wire angle, 00°, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.28 | 34.58 | 4.56 | 521 | 0 | 26.28 | 34.58 | 4.56 | 22.65 | 521 | 0.00 |
| 9 | 26.30 | 34.57 | 4.63 | 522 | 10 | 26.29 | 34.57 | 4.62 | 22.64 | 522 | 0.05 |
| 28 | 26.06 | 34.58 | 4.25 | 514 | 20 | 26.18 | 34.58 | 4.47 | 22.68 | 518 | 0.10 |
| 43 | 25.24 | 34.56 | 4.72 | 491 | 30 | 26.02 | 34.58 | 4.26 | 22.73 | 513 | 0.16 |
| 52 | 23.02 | 34.33 | 5.37 | 445 | 50 | 23.60 | 34.39 | 5.24 | 23.32 | 457 | 0.25 |
| 61 | 20.88 | 34.33 | 5.39 | 389 | 75 | 18.80 | 34.27 | 4.85 | 24.54 | 341 | 0.35 |
| 71 | 19.33 | 34.28 | 5.12 | 353 | 100 | 15.20 | 34.01 | 3.25 | 25.19 | 279 | 0.43 |
| 89 | 16.54 | 34.13 | 3.66 | 299 | 150 | 11.87 | 34.12 | 1.90 | 25.96 | 206 | 0.55 |
| 103 | 14.90 | 33.99 | 3.14 | 274 | 200 | 11.16 | 34.48 | 0.81 | 26.36 | 167 | 0.65 |
| 117 | 13.66 | 34.00 | 2.59 | 249 | 250 | 10.52 | 34.59 | 0.41 | 26.56 | 148 | 0.73 |
| 139 | 12.27 | 34.04 | 1.92 | 220 | 300 | 9.90 | 34.56 | 0.45 | 26.65 | 140 | 0.81 |
| 166 | 11.99 | 34.41 | 1.23 | 187 | 400 | 8.23 | 34.45 | 0.37 | 26.84 | 122 | 0.94 |
| 201 | 11.14 | 34.49 | 0.80 | 166 | 500 | 7.02 | 34.43 | 0.27 | 26.98 | 108 | 1.06 |
| 250 | 10.52 | 34.59 | 0.41 | 148 | | | | | | | |
| 329 | 9.50 | 34.54 | 0.46 | 136 | | | | | | | |
| 427 | 7.74 | 34.43 | 0.30 | 117 | | | | | | | |
| 563 | 6.50 | 34.43 | 0.26 | 101 | | | | | | | |

137.50 BLACK DOUGLAS; October 19, 1958; 0953 GCT; 24°40'N, 114°01.5'W; sounding, 2000 fm; wind, calm; weather, rain; sea, smooth; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.98 | 34.32 | 4.71 | 531 | 0 | 25.98 | 34.32 | 4.71 | 22.55 | 531 | 0.00 |
| 10 | 25.92 | 34.31 | 4.69 | 529 | 10 | 25.92 | 34.31 | 4.69 | 22.56 | 529 | 0.05 |
| 29 | 24.55 | 34.04a) | 4.82 | 509 | 20 | 24.87 | 34.10 | 4.79 | 22.72 | 514 | 0.11 |
| 44 | 19.71 | 33.80 | 5.67 | 397 | 30 | 24.50 | 34.03 | 4.85 | 22.79 | 507 | 0.16 |
| 53 | 18.69 | 33.80 | 5.80 | 373 | 50 | 19.02 | 33.80 | 5.77 | 24.12 | 381 | 0.24 |
| 62 | 17.35 | 33.73 | 5.77 | 346 | 75 | 16.75 | 33.84 | 5.46 | 24.70 | 325 | 0.33 |
| 71 | 16.97 | 33.84 | 5.60 | 329 | 100 | 13.80 | 33.74 | 4.36 | 25.28 | 270 | 0.41 |
| 90 | 14.80 | 33.76 | 5.03 | 289 | 150 | 11.32 | 34.02 | 2.64 | 25.97 | 205 | 0.53 |
| 104 | 13.38 | 33.73 | 4.08 | 263 | 200 | 11.23 | 34.56 | 0.54 | 26.41 | 163 | 0.62 |
| 117 | 12.34 | 33.68 | 3.84 | 247 | 250 | 10.57 | 34.61 | 0.30 | 26.58 | 147 | 0.70 |
| 139 | 11.37 | 33.89 | 2.93 | 215 | 300 | 9.82 | 34.59 | 0.31 | 26.68 | 137 | 0.78 |
| 166 | 10.98 | 34.10 | 2.21 | 192 | 400 | 8.56 | 34.53 | 0.30 | 26.84 | 122 | 0.91 |
| 201 | 11.24 | 34.56 | 0.52 | 163 | 500 | 7.52 | 34.52 | 0.23 | 26.99 | 108 | 1.03 |
| 250 | 10.57 | 34.61 | 0.30 | 147 | | | | | | | |
| 327 | 9.40 | 34.58 | 0.32 | 131 | | | | | | | |
| 424 | 8.27 | 34.52 | 0.29 | 119 | | | | | | | |
| 560 | 6.92 | 34.52 | 0.18 | 100 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; October 19, 1958; 0350 GCT; 24°20'N, 114°39'W; sounding, 2000+ fm; wind, 300°, force 1; weather, partly cloudy; sea, moderate; wire angle, 00°. 137.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.70 | 33.97 | 4.85 | 518 | 0 | 24.70 | 33.97 | 4.85 | 22.67 | 518 | 0.00 |
| 9 | 23.71 | 33.91 | 5.01 | 495 | 10 | 23.63 | 33.91 | 5.03 | 22.95 | 492 | 0.05 |
| 28 | 23.04 | 33.93 | 5.11 | 475 | 20 | 23.23 | 33.92 | 5.08 | 23.07 | 481 | 0.10 |
| 43 | 20.68 | 33.86 | 5.41 | 417 | 30 | 22.97 | 33.93 | 5.12 | 23.15 | 473 | 0.15 |
| 52 | 18.44 | 33.69 | 5.78 | 375 | 50 | 18.94 | 33.73 | 5.69 | 24.08 | 384 | 0.23 |
| 61 | 16.76 | 33.65 | 5.93 | 339 | 75 | 16.53 | 33.91 | 5.60 | 24.82 | 314 | 0.32 |
| 71 | 16.65 | 33.92 | 5.76 | 317 | 100 | 12.23 | 33.77 | 3.70 | 25.60 | 239 | 0.39 |
| 89 | 13.94 | 33.77 | 4.30 | 271 | 150 | 11.47 | 34.27 | 1.42 | 26.14 | 188 | 0.50 |
| 103 | 12.03 | 33.78 | 3.54 | 234 | 200 | 10.88 | 34.49 | 0.76 | 26.42 | 162 | 0.59 |
| 117 | 11.98 | 33.92 | 2.87 | 223 | 250 | 9.96 | 34.50 | 0.58 | 26.59 | 146 | 0.67 |
| 139 | 11.53 | 34.22 | 1.61 | 193 | 300 | 9.31 | 34.50 | 0.40 | 26.69 | 136 | 0.74 |
| 165 | 11.28 | 34.36 | 1.13 | 178 | 400 | 8.18 | 34.48 | 0.25 | 26.86 | 120 | 0.87 |
| 201 | 10.86 | 34.49 | 0.75 | 162 | 500 | 7.24 | 34.49 | 0.20 | 27.00 | 106 | 0.99 |
| 249 | 9.98 | 34.50 | 0.59 | 146 | | | | | | | |
| 326 | 9.00 | 34.50 | 0.32 | 131 | | | | | | | |
| 423 | 7.90 | 34.47 | 0.24 | 117 | | | | | | | |
| 557 | 6.84 | 34.52 | 0.15 | 99 | | | | | | | |

BLACK DOUGLAS; October 20, 1958; 0857 GCT; 24°45.5'N, 112°24'W; sounding, 60 fm; wind, 240°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. 140.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.42 | 34.86 | 4.36 | 535 | 0 | 27.42 | 34.86 | 4.36 | 22.50 | 535 | 0.00 |
| 9 | 27.40 | 34.91 | 4.50 | 531 | 10 | 27.39 | 34.91 | 4.50 | 22.54 | 531 | 0.05 |
| 28 | 26.40 | 34.83 | 4.46 | 506 | 20 | 26.68 | 34.85 | 4.47 | 22.73 | 513 | 0.11 |
| 47 | 24.38 | 34.70 | 4.85 | 456 | 30 | 26.37 | 34.83 | 4.47 | 22.81 | 505 | 0.16 |
| 71 | 21.62 | 34.61 | 4.10 | 388 | 50 | 24.28 | 34.70 | 4.84 | 23.35 | 454 | 0.25 |

BLACK DOUGLAS; October 20, 1958; 1159 GCT; 24°36'N, 112°43'W; sounding, 500+ fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°. 140.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.52 | 34.60 | 4.56 | 526 | 0 | 26.52 | 34.60 | 4.56 | 22.59 | 526 | 0.00 |
| 10 | 26.51 | 34.58 | 4.47 | 527 | 10 | 26.51 | 34.58 | 4.47 | 22.58 | 527 | 0.05 |
| 29 | 25.69 | 34.52 | 4.73 | 508 | 20 | 25.93 | 34.54 | 4.65 | 22.73 | 513 | 0.10 |
| 43 | 23.07 | 34.22 | 5.19 | 454 | 30 | 25.64 | 34.51 | 4.75 | 22.80 | 506 | 0.16 |
| 53 | 22.05 | 34.16 | 5.32 | 431 | 50 | 22.47 | 34.18 | 5.28 | 23.48 | 442 | 0.25 |
| 62 | 20.93 | 34.30 | 4.68 | 392 | 75 | 19.77 | 34.59 | 4.43 | 24.53 | 342 | 0.35 |
| 72 | 20.34 | 34.61 | 3.54 | 354 | 100 | 16.52 | 34.59 | 1.62 | 25.34 | 265 | 0.43 |
| 90 | 17.38 | 34.53 | 2.07 | 289 | 150 | 14.92 | 34.85 | 0.72 | 25.89 | 212 | 0.54 |
| 104 | 16.30 | 34.61 | 1.40 | 259 | 200 | 11.79 | 34.57 | 0.70 | 26.32 | 171 | 0.64 |
| 117 | 15.98 | 34.75 | 0.92 | 241 | 250 | 11.34 | 34.68 | 0.38 | 26.48 | 156 | 0.73 |
| 140 | 14.98 | 34.79 | 0.72 | 217 | 300 | 10.57 | 34.66 | 0.15 | 26.61 | 144 | 0.80 |
| 166 | 12.60 | 34.52 | 1.00 | 190 | 400 | 8.58 | 34.52 | 0.25 | 26.83 | 123 | 0.94 |
| 202 | 11.78 | 34.59 | 0.68 | 170 | 500 | 7.21 | 34.46 | 0.24 | 26.99 | 108 | 1.06 |
| 253 | 11.32 | 34.69 | 0.24 | 155 | | | | | | | |
| 331 | 9.88 | 34.61 | 0.15 | 136 | | | | | | | |
| 428 | 8.01 | 34.49 | 0.27 | 117 | | | | | | | |
| 564 | 6.64 | 34.45 | 0.19 | 101 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

140.40 BLACK DOUGLAS; October 20, 1958; 1505 GCT; 24°25.5'N, 113°02'W; sounding, 2000+ fm; wind, 250°, force 1; weather, partly cloudy; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.06 | 34.76 | 4.63 | 531 | 0 | 27.06 | 34.76 | 4.63 | 22.54 | 531 | 0.00 |
| 10 | 27.06 | 34.76 | 4.70 | 531 | 10 | 27.06 | 34.76 | 4.70 | 22.54 | 531 | 0.05 |
| 29 | 27.02 | 34.78 | 4.68 | 528 | 20 | 27.05 | 34.77 | 4.70 | 22.56 | 530 | 0.11 |
| 43 | 26.90 | 34.78 | 4.70 | 525 | 30 | 27.01 | 34.78 | 4.68 | 22.57 | 528 | 0.16 |

140.50 BLACK DOUGLAS; October 20, 1958; 2041, 2058 GCT; 24°05.5'N, 113°39.5'W; sounding, 2000 fm; wind, 270°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.06 | 34.57 | 4.52 | 545 | 0 | 27.06 | 34.57 | 4.52 | 22.40 | 545 | 0.00 |
| 10 | 26.80 | - | 4.65 | | 10 | 26.80 | 34.58 | 4.65 | 22.48 | 537 | 0.05 |
| 28 | 26.12 | 34.58 | 4.71 | 516 | 20 | 26.17 | 34.58 | 4.70 | 22.68 | 517 | 0.11 |
| 44 | 23.00 | 34.34 | 5.36 | 444 | 30 | 26.09 | 34.58 | 4.72 | 22.72 | 514 | 0.16 |
| 53 | 20.82 | 34.12 | 5.50 | 402 | 50 | 21.00 | 34.13 | 5.50 | 23.85 | 406 | 0.25 |
| 62 | 19.42 | 34.19 | 5.49 | 362 | 75 | 17.22 | 34.09 | 4.67 | 24.79 | 317 | 0.34 |
| 72 | 17.70 | 34.12 | 4.85 | 326 | 100 | 14.60 | 34.13 | 2.35 | 25.40 | 258 | 0.41 |
| 90 | 15.36 | 33.98 | 3.40 | 284 | 150 | 12.63 | 34.50 | 0.73 | 26.10 | 192 | 0.53 |
| 104 | 14.35 | 34.19 | 2.03 | 248 | 200 | 11.60 | 34.64 | 0.26 | 26.40 | 164 | 0.62 |
| | | | | | 250 | 10.63 | 34.65 | 0.31 | 26.57 | 148 | 0.70 |
| 118 | 13.60 | 34.30 | 1.57 | 225 | 300 | 10.03 | 34.62 | 0.27 | 26.67 | 138 | 0.77 |
| 140 | 12.86 | 34.43 | 0.96 | 202 | 400 | 8.86 | 34.60 | 0.23 | 26.85 | 121 | 0.91 |
| 166 | 12.38 | 34.59 | 0.42 | 181 | 500 | 7.74 | 34.57 | 0.22 | 27.00 | 107 | 1.03 |
| 199 | 11.62 | 34.64 | 0.26 | 164 | | | | | | | |
| 248 | 10.78 | 34.65 | 0.31 | 148 | | | | | | | |
| 323 | 9.71 | 34.61 | 0.23 | 134 | | | | | | | |
| 419 | 8.67 | 34.60 | 0.22 | 118 | | | | | | | |
| 554 | 7.04 | 34.54 | 0.18 | 100 | | | | | | | |

140.60 BLACK DOUGLAS; October 28, 1958; 1320 GCT; 23°37'N, 114°25'W; sounding, 2000 fm; wind, 320°, force 5; weather, cloudy; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.20 | 34.29 | | 481 | 0 | 24.20 | 34.29 | | 23.06 | 481 | 0.00 |
| 10 | 24.19 | 34.29 | | 481 | 10 | 24.19 | 34.29 | | 23.06 | 481 | 0.05 |
| 29 | 24.20 | 34.31 | | 480 | 20 | 24.20 | 34.30 | | 23.07 | 480 | 0.10 |
| 42 | 23.29 | 34.27 | | 457 | 30 | 24.20 | 34.31 | | 23.08 | 480 | 0.14 |
| 51 | 20.13 | 33.89 | | 401 | 50 | 20.31 | 33.91 | | 23.87 | 404 | 0.23 |
| 60 | 18.76 | - | | | 75 | 17.00 | 33.78 | | 24.60 | 335 | 0.32 |
| 69 | 17.82 | - | | | 100 | 13.70 | 33.86 | | 25.38 | 260 | 0.40 |
| 86 | 15.50 | 33.76 | | 304 | 150 | 11.78 | 34.34 | | 26.14 | 189 | 0.51 |
| 99 | 13.86 | 33.85 | | 264 | 200 | 10.64 | 34.47 | | 26.45 | 159 | 0.60 |
| 112 | 13.25 | 34.04 | | 238 | 250 | 10.32 | 34.58 | | 26.58 | 146 | 0.68 |
| 131 | 12.32 | 34.16 | | 211 | 300 | 9.55 | 34.56 | | 26.70 | 135 | 0.75 |
| 155 | 11.61 | 34.36 | | 184 | 400 | 8.59 | 34.54 | | 26.85 | 121 | 0.89 |
| 187 | 11.20 | 34.51 | | 166 | 500 | 7.52 | 34.52 | | 26.99 | 108 | 1.01 |
| 233 | 10.58 | 34.58 | | 150 | | | | | | | |
| 304 | 9.49 | 34.56 | | 134 | | | | | | | |
| 396 | 8.63 | 34.54 | | 122 | | | | | | | |
| 524 | 7.24 | 34.52 | | 104 | | | | | | | |

143.26 BLACK DOUGLAS; October 22, 1958; 0340 GCT; 24°19'N, 111°48'W; sounding, 37 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.77 | 34.88 | 4.34 | 544 | 0 | 27.77 | 34.88 | 4.34 | 22.40 | 544 | 0.00 |
| 9 | 27.76 | 34.90 | 4.05 | 542 | 10 | 27.76 | 34.90 | 4.05 | 22.42 | 542 | 0.05 |
| 28 | 27.50 | 34.88 | 4.37 | 536 | 20 | 27.75 | 34.90 | 4.06 | 22.42 | 542 | 0.11 |
| 48 | 26.76 | 34.79 | 4.62 | 520 | 30 | 27.48 | 34.88 | 4.39 | 22.49 | 536 | 0.16 |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; October 21, 1958; 1451 GCT; 24°11'N, 112°03'W; sounding, 110 fm; wind, 360°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°. 143.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.78 | 34.79 | 4.83 | 552 | 0 | 27.78 | 34.79 | 4.83 | 22.33 | 552 | 0.00 |
| 9 | 27.76 | 34.79 | 4.54 | 551 | 10 | 27.76 | 34.79 | 4.54 | 22.34 | 551 | 0.06 |
| 28 | 27.67 | 34.78 | 4.54 | 548 | 20 | 27.71 | 34.78 | 4.54 | 22.36 | 549 | 0.11 |
| 47 | 26.84 | 34.86 | 4.51 | 517 | 30 | 27.66 | 34.78 | 4.54 | 22.37 | 548 | 0.16 |
| 85a) | 19.81b) | 34.58 | 4.28 | | | | | | | | |
| 108a) | 18.09 | 34.58 | 2.96 | | | | | | | | |
| 129a) | 16.50 | 34.62 | 1.47 | | | | | | | | |

BLACK DOUGLAS; October 21, 1958; 1151 GCT; 24°01'N, 112°22'W; sounding, 750 fm; wind, 320°, force 1; weather, clear; sea, smooth; wire angle, 00°. 143.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.78 | 34.78 | 4.54 | 552 | 0 | 27.78 | 34.78 | 4.54 | 22.32 | 552 | 0.00 |
| 10 | 27.79 | 34.78 | 4.53 | 552 | 10 | 27.79 | 34.78 | 4.53 | 22.32 | 552 | 0.06 |
| 29 | 27.54 | 34.81 | 4.61 | 542 | 20 | 27.73 | 34.79 | 4.56 | 22.34 | 550 | 0.11 |
| 44 | 26.05 | 34.65 | 5.10 | 509 | 30 | 27.50 | 34.81 | 4.63 | 22.44 | 541 | 0.16 |
| 53 | 22.50 | 34.64 | 5.30 | 409 | 50 | 24.63 | 34.65 | 5.22 | 23.20 | 468 | 0.27 |
| 62 | 21.16 | 34.60 | 4.78 | 376 | 75 | 19.78 | 34.53 | 4.88 | 24.48 | 346 | 0.37 |
| 72 | 20.12 | 34.55 | 4.08 | 353 | 100 | 17.58 | 34.55 | 2.30 | 25.06 | 291 | 0.45 |
| 91 | 18.15 | 34.46 | 3.02 | 312 | 150 | 14.30 | 34.75 | 0.65 | 25.95 | 206 | 0.57 |
| 105 | 17.20 | 34.63 | 1.50 | 277 | 200 | 12.57 | 34.75 | 0.40 | 26.30 | 173 | 0.67 |
| 119 | 16.00 | 34.69 | 1.16 | 246 | 250 | 11.59 | 34.72 | 0.25 | 26.47 | 157 | 0.75 |
| 141 | 14.73 | 34.76 | 0.69 | 214 | 300 | 10.46 | 34.62 | 0.35 | 26.60 | 145 | 0.83 |
| 167 | 13.16 | 34.71 | 0.60 | 187 | 400 | 8.93 | 34.57 | 0.26 | 26.81 | 125 | 0.97 |
| 203 | 12.65 | 34.78 | 0.32 | 172 | | | | | | | |
| 253 | 11.52 | 34.72 | 0.24 | 156 | | | | | | | |
| 330 | 9.79 | 34.56 | 0.42 | 139 | | | | | | | |
| 427 | 8.69 | 34.57 | 0.18 | 121 | | | | | | | |

BLACK DOUGLAS; October 21, 1958; 0835 GCT; 23°51'N, 112°40.5'W; sounding, 1600 fm; wind, 320°, force 1; weather, clear; sea, smooth; wire angle, 05°. 143.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.04 | 34.58 | 5.15 | 544 | 0 | 27.04 | 34.58 | 5.15 | 22.41 | 544 | 0.00 |
| 10 | 26.91 | 34.67 | 4.57 | 533 | 10 | 26.91 | 34.67 | 4.57 | 22.52 | 533 | 0.05 |
| 29 | 25.94 | 34.45 | 4.65 | 520 | 20 | 26.18 | 34.49 | 4.62 | 22.61 | 524 | 0.11 |
| 43 | 23.44 | 34.52 | 5.14 | 443 | 30 | 25.93 | 34.45 | 4.66 | 22.66 | 520 | 0.16 |
| 53 | 21.96 | 34.49 | 5.02 | 405 | 50 | 22.49 | 34.51 | 5.08 | 23.72 | 418 | 0.25 |
| 62 | 19.76 | 34.21 | 5.07 | 369 | 75 | 16.20 | 33.96 | 4.80 | 24.92 | 304 | 0.34 |
| 72 | 18.04 | 34.09 | 5.08 | 336 | 100 | 16.51 | 34.45 | 2.40 | 25.24 | 274 | 0.42 |
| 90 | 16.86 | 34.23 | 3.47 | 299 | 150 | 12.96 | 34.38 | 1.24 | 25.94 | 207 | 0.54 |
| 103 | 16.08 | 34.46 | 2.09 | 265 | 200 | 11.29 | 34.49 | 0.84 | 26.34 | 169 | 0.63 |
| 117 | 15.02 | 34.44 | 1.80 | 244 | 250 | 10.04 | 34.45 | 0.80 | 26.54 | 151 | 0.72 |
| 139 | 13.34 | 34.31 | 1.40 | 220 | 300 | 9.53 | 34.50 | 0.48 | 26.66 | 139 | 0.79 |
| 165 | 12.24 | 34.48 | 0.89 | 187 | 400 | 8.40 | 34.50 | 0.27 | 26.84 | 122 | 0.92 |
| 200 | 11.29 | 34.49 | 0.84 | 169 | 500 | 7.28 | 34.56 | 0.27 | 27.05 | 102 | 1.04 |
| 249 | 10.05 | 34.45 | 0.82 | 151 | | | | | | | |
| 325 | 9.35 | 34.52 | 0.38 | 135 | | | | | | | |
| 422 | 8.12 | 34.49 | 0.27 | 118 | | | | | | | |
| 558 | 6.68 | 34.67 | 0.28 | 86 | | | | | | | |

a) Pretrip; depth too uncertain for interpolation.
b) Alternate value, 20.07°C.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |
| **143.50** | BLACK DOUGLAS; October 21, 1958; 0223 GCT; 23°31'N, 113°18'W; sounding, 1750 fm; wind, 260°, force 1; weather, partly cloudy; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 0 | 28.10 | 34.84 | 4.72 | 558 | 0 | 28.10 | 34.84 | 4.72 | 22.26 | 558 | 0.00 |
| 9 | 28.09 | 34.87 | 4.72 | 555 | 10 | 28.09 | 34.87 | 4.72 | 22.29 | 555 | 0.06 |
| 28 | 27.88 | 34.88 | 4.47 | 548 | 20 | 28.03 | 34.88 | 4.60 | 22.32 | 553 | 0.11 |
| 42 | 24.00 | 34.49 | 5.02 | 461 | 30 | 27.87 | 34.88 | 4.47 | 22.37 | 548 | 0.17 |
| 51 | 21.20 | 34.33 | 5.21 | 397 | 50 | 21.40 | 34.34 | 5.20 | 23.90 | 401 | 0.26 |
| 61 | 19.33 | 34.18 | 5.20 | 361 | 75 | 17.99 | 34.23 | 4.47 | 24.70 | 325 | 0.35 |
| 70 | 18.38 | 34.20 | 4.85 | 336 | 100 | 15.70 | 34.46 | 1.90 | 25.41 | 258 | 0.43 |
| 89 | 16.74 | 34.34 | 2.61 | 288 | 150 | 13.60 | 34.67 | 0.65 | 26.04 | 198 | 0.54 |
| 102 | 15.56 | 34.47 | 1.79 | 253 | 200 | 11.62 | 34.60 | 0.50 | 26.38 | 166 | 0.64 |
| 116 | 14.78 | 34.47 | 1.07 | 237 | 250 | 11.30 | 34.70 | 0.14 | 26.51 | 154 | 0.72 |
| 138 | 14.00 | 34.65 | 0.63 | 208 | 300 | 10.66 | 34.70 | 0.29 | 26.62 | 143 | 0.80 |
| 164 | 13.06 | 34.70 | 0.68 | 186 | 400 | 8.85 | 34.55 | 0.24 | 26.81 | 125 | 0.93 |
| 199 | 11.64 | 34.60 | 0.50 | 167 | 500 | 7.39 | 34.47 | 0.18 | 26.97 | 109 | 1.06 |
| 248 | 11.32 | 34.70 | 0.13 | 154 | | | | | | | |
| 326 | 10.22 | 34.69 | 0.38 | 136 | | | | | | | |
| 422 | 8.43 | 34.52 | 0.21 | 121 | | | | | | | |
| 556 | 6.70 | 34.45 | 0.17 | 102 | | | | | | | |
| **143.60** | BLACK DOUGLAS; October 28, 1958; 0117 GCT; 23°07.5'N, 113°55.5'W; sounding, 2000+ fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 13°. | | | | | | | | | | |
| 0 | 26.38 | 34.65 | | 518 | 0 | 26.38 | 34.65 | | 22.68 | 518 | 0.00 |
| 10 | 26.38 | 34.66 | | 518 | 10 | 26.38 | 34.66 | | 22.68 | 518 | 0.05 |
| 29 | 26.40 | 34.67 | | 518 | 20 | 26.39 | 34.66 | | 22.68 | 518 | 0.10 |
| 42 | 26.12 | 34.72 | | 506 | 30 | 26.41 | 34.67 | | 22.68 | 518 | 0.16 |
| 51 | 21.80 | 34.30 | | 415 | 50 | 22.23 | 34.33 | | 23.66 | 424 | 0.25 |
| 61 | 20.06 | 34.47 | | 358 | 75 | 17.00 | 34.27 | | 24.98 | 299 | 0.34 |
| 69 | 18.42 | 34.40 | | 323 | 100 | 14.20 | 34.20 | | 25.55 | 245 | 0.41 |
| 87 | 14.71 | 34.07 | | 264 | 150 | 12.00 | 34.46 | | 26.19 | 184 | 0.52 |
| 100 | 14.20 | 34.20 | | 245 | 200 | 11.56 | 34.66 | | 26.43 | 161 | 0.60 |
| 113 | 13.19 | 34.25 | | 221 | 250 | 10.72 | 34.65 | | 26.58 | 147 | 0.68 |
| 134 | 12.48 | 34.40 | | 197 | 300 | 9.90 | 34.62 | | 26.69 | 136 | 0.76 |
| 158 | 11.92 | 34.53 | | 177 | 400 | 8.56 | 34.56 | | 26.87 | 119 | 0.89 |
| 191 | 11.67 | 34.66 | | 163 | 500 | 7.30 | 34.51 | | 27.01 | 106 | 1.01 |
| 238 | 10.92 | 34.66 | | 150 | | | | | | | |
| 312 | 9.69 | 34.61 | | 133 | | | | | | | |
| 406 | 8.46 | 34.56 | | 118 | | | | | | | |
| 539 | 6.76 | 34.48 | | 101 | | | | | | | |
| **147.20** | BLACK DOUGLAS; October 22, 1958; 0930 GCT; 23°56'N, 111°03.5'W; sounding, 140 fm; wind, 340°, force 2; weather, clear; sea, smooth; wire angle, 00°. | | | | | | | | | | |
| 0 | 28.04 | 34.70 | 4.35 | 566 | 0 | 28.04 | 34.70 | 4.35 | 22.18 | 566 | 0.00 |
| 9 | 28.04 | 34.70 | 4.51 | 566 | 10 | 28.04 | 34.70 | 4.33 | 22.18 | 566 | 0.06 |
| 28 | 28.06 | 34.67 | 4.38 | 569 | 20 | 28.05 | 34.69 | 4.45 | 22.16 | 568 | 0.11 |
| 47 | 24.98 | 34.75 | 4.63 | 470 | 30 | 28.04 | 34.67 | 4.39 | 22.15 | 569 | 0.17 |
| **147.25** | BLACK DOUGLAS; October 22, 1958; 1220 GCT; 23°46.5'N, 111°22.5'W; sounding, 180 fm; wind, 360°, force 3; weather, clear; sea, smooth; wire angle, 05°. | | | | | | | | | | |
| 0 | 28.00 | 34.78 | 4.56 | 559 | 0 | 28.00 | 34.78 | 4.56 | 22.25 | 559 | 0.00 |
| 9 | 28.00 | 34.78 | 4.43 | 559 | 10 | 28.00 | 34.78 | 4.43 | 22.25 | 559 | 0.06 |
| 28 | 26.97 | 34.87 | 4.59 | 520 | 20 | 27.95 | 34.79 | 4.42 | 22.27 | 557 | 0.11 |
| 47 | 22.84 | 34.67 | 4.68 | 416 | 30 | 26.89 | 34.87 | 4.60 | 22.68 | 518 | 0.17 |
| 71 | 20.42 | 34.51 | 3.49 | 364 | 50 | 22.66 | 34.66 | 4.66 | 23.79 | 412 | 0.26 |
| | | | | | 75 | (20.00) | (34.49) | | (24.39) | (355) | (0.35) |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m | |

BLACK DOUGLAS; October 22, 1958; 1548 GCT; 23°36'N, 111°41.5'W; sounding, 280 fm; wind, 280°, force 2; weather, partly cloudy; sea, rough; wire angle, 00°. 147.30

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.67 | 34.89 | 4.58 | 541 | 0 | 27.67 | 34.89 | 4.58 | 22.43 | 541 | 0.00 | |
| 10 | 27.66 | 34.88 | 4.56 | 541 | 10 | 27.66 | 34.88 | 4.56 | 22.43 | 541 | 0.05 | |
| 29 | 27.60 | 34.88 | 4.46 | 539 | 20 | 27.66 | 34.88 | 4.55 | 22.43 | 541 | 0.11 | |
| 48 | 25.74 | 34.74 | 4.74 | 493 | 30 | 27.60 | 34.88 | 4.46 | 22.46 | 539 | 0.16 | |
| 72 | 20.92 | 34.61 | 3.97 | 369 | 50 | 25.18 | 34.72 | 4.66 | 23.10 | 478 | 0.26 | |
| 95 | 17.60 | 34.61 | 2.02 | 288 | 75 | 20.02 | 34.58 | 3.76 | 24.45 | 349 | 0.37 | |
| 117 | 14.59 | 34.38 | 1.40 | 240 | 100 | 16.93 | 34.56 | 1.79 | 25.21 | 276 | 0.45 | |
| 153 | 13.74 | 34.79 | 0.44 | 192 | 150 | 13.86 | 34.78 | 0.46 | 26.07 | 195 | 0.56 | |
| 187 | 12.38 | 34.74 | 0.27 | 170 | 200 | 12.14 | 34.75 | 0.22 | 26.39 | 164 | 0.66 | |
| 231 | 11.82 | 34.76 | 0.16 | 158 | 250 | 11.39 | 34.74 | 0.15 | 26.52 | 152 | 0.74 | |
| 275 | 10.60 | 34.69 | 0.15 | 142 | | | | | | | | |

BLACK DOUGLAS; October 22, 1958; 2142 GCT; 23°16'N, 112°19'W; sounding, 1600 fm; wind, direction missing, force 1; weather, cloudy; sea, rough; wire angle, 03°. 147.40

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.66 | 34.72 | 4.36 | 584 | 0 | 28.66 | 34.72 | 4.36 | 21.99 | 584 | 0.00 | |
| 11 | 28.20 | 34.69 | 4.27 | 572 | 10 | 28.21 | 34.69 | 4.26 | 22.11 | 572 | 0.06 | |
| 30 | 28.11 | 34.69 | 4.34 | 569 | 20 | 28.16 | 34.69 | 4.29 | 22.12 | 571 | 0.11 | |
| 44 | 27.74 | 34.76 | 4.64 | 552 | 30 | 28.11 | 34.69 | 4.34 | 22.15 | 569 | 0.17 | |
| 54 | 23.58 | 34.52 | 4.75 | 447 | 50 | 27.06 | 34.72 | 4.67 | 22.52 | 533 | 0.28 | |
| 63 | 21.81 | 34.54 | 3.68 | 397 | 75 | 19.67 | 34.47 | 3.75 | 24.47 | 347 | 0.39 | |
| 73 | 19.96 | 34.49 | 3.75 | 353 | 100 | 16.60 | 34.30 | 3.30 | 25.10 | 288 | 0.47 | |
| 91 | 17.46 | 34.29 | 3.72 | 308 | 150 | 13.81 | 34.69 | 0.74 | 26.01 | 201 | 0.60 | |
| 105 | 15.84 | 34.31 | 2.52 | 271 | 200 | 12.48 | 34.78 | 0.25 | 26.34 | 170 | 0.69 | |
| 118 | 15.24 | 34.48 | 1.06 | 245 | 250 | 11.49 | 34.71 | 0.14 | 26.48 | 156 | 0.77 | |
| 140 | 14.26 | 34.67 | 0.90 | 211 | 300 | 10.44 | 34.63 | 0.18 | 26.61 | 144 | 0.85 | |
| 167 | 13.08 | 34.71 | 0.38 | 185 | 400 | 8.90 | 34.59 | 0.15 | 26.83 | 123 | 0.99 | |
| 202 | 12.46 | 34.78 | 0.25 | 169 | 500 | 7.56 | 34.54 | 0.15 | 27.00 | 107 | 1.11 | |
| 251 | 11.46 | 34.71 | 0.14 | 156 | | | | | | | | |
| 331 | 9.80 | 34.60 | 0.22 | 136 | | | | | | | | |
| 426 | 8.60 | 34.58 | 0.15 | 119 | | | | | | | | |
| 561 | 6.60 | 34.51 | 0.18 | 96 | | | | | | | | |

BLACK DOUGLAS; October 23, 1958; 0330 GCT; 22°56'N, 112°56.5'W; sounding, 2000 fm; wind, 320°, force 3; weather, partly cloudy; sea, rough; wire angle, 00°. 147.50

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.95 | 34.79 | 4.49 | 557 | 0 | 27.95 | 34.79 | 4.49 | 22.27 | 557 | 0.00 | |
| 9 | 27.94 | 34.83 | 4.57 | 553 | 10 | 27.94 | 34.83 | 4.57 | 22.31 | 553 | 0.06 | |
| 28 | 27.61 | 34.88 | 4.57 | 540 | 20 | 27.80 | 34.86 | 4.57 | 22.38 | 547 | 0.11 | |
| 43 | 25.28 | 34.40 | 4.90 | 504 | 30 | 27.54 | 34.87 | 4.57 | 22.46 | 538 | 0.16 | |
| 52 | 22.66 | 34.27 | 5.39 | 440 | 50 | 23.16 | 34.29 | 5.28 | 23.38 | 451 | 0.26 | |
| 62 | 20.42 | 34.23 | 5.50 | 384 | 75 | 18.52 | 34.20 | 4.91 | 24.54 | 340 | 0.36 | |
| 71 | 19.17 | 34.26 | 4.91 | 350 | 100 | 15.82 | 34.32 | 2.65 | 25.28 | 270 | 0.44 | |
| 90 | 15.94 | 33.91 | 4.96 | 302 | 150 | 13.06 | 34.63 | 0.30 | 26.12 | 190 | 0.56 | |
| 103 | 15.60 | 34.38 | 2.03 | 260 | 200 | 11.94 | 34.72 | 0.14 | 26.41 | 163 | 0.64 | |
| 117 | 14.02 | 34.34 | 1.65 | 231 | 250 | 11.09 | 34.72 | 0.10 | 26.56 | 148 | 0.73 | |
| 139 | 13.48 | 34.60 | 0.46 | 201 | 300 | 10.41 | 34.70 | 0.09 | 26.67 | 138 | 0.80 | |
| 165 | 12.49 | 34.67 | 0.26 | 177 | 400 | 8.90 | 34.60 | 0.10 | 26.84 | 122 | 0.94 | |
| 200 | 11.94 | 34.72 | 0.14 | 163 | 500 | 7.55 | 34.55 | 0.15 | 27.01 | 106 | 1.06 | |
| 248 | 11.13 | 34.72 | 0.10 | 149 | | | | | | | | |
| 325 | 10.07 | 34.69 | 0.09 | 134 | | | | | | | | |
| 421 | 8.60 | 34.58 | 0.10 | 119 | | | | | | | | |
| 556 | 6.91 | 34.54 | 0.20 | 98 | | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |

147.60 BLACK DOUGLAS; October 23, 1958; 0957 GCT; 22°36'N, 113°34'W; sounding, 2000+ fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.19 | 34.85 | 4.61 | 529 | 0 | 27.19 | 34.85 | 4.61 | 22.56 | 529 | 0.00 |
| 9 | 27.19 | 34.83 | 4.72 | 530 | 10 | 27.17 | 34.83 | 4.72 | 22.54 | 531 | 0.05 |
| 29 | 27.00 | 34.75 | 4.71 | 530 | 20 | 27.08 | 34.78 | 4.71 | 22.54 | 531 | 0.11 |
| 43 | 25.82 | 34.81 | 4.95 | 490 | 30 | 27.00 | 34.76 | 4.71 | 22.55 | 530 | 0.16 |
| 53 | 20.10 | 34.52 | 4.72 | 355 | 50 | 22.29 | 34.62 | 4.86 | 23.87 | 404 | 0.25 |
| 62 | 18.43 | 34.47 | 3.54 | 318 | 75 | 16.80 | 34.51 | 2.02 | 25.20 | 277 | 0.34 |
| 71 | 17.28 | 34.53 | 2.17 | 286 | 100 | 14.88 | 34.52 | 1.21 | 25.65 | 235 | 0.40 |
| 89 | 15.42 | 34.43 | 1.80 | 253 | 150 | 11.94 | 34.47 | 0.82 | 26.21 | 182 | 0.51 |
| 103 | 14.74 | 34.54 | 1.13 | 231 | 200 | 11.08 | 34.63 | 0.47 | 26.49 | 155 | 0.59 |
| 116 | 13.78 | 34.56 | 1.03 | 210 | 250 | 10.16 | 34.60 | 0.44 | 26.63 | 142 | 0.67 |
| 138 | 12.25 | 34.45 | 0.85 | 189 | 300 | 9.50 | 34.57 | 0.35 | 26.72 | 133 | 0.74 |
| 164 | 11.66 | 34.52 | 0.81 | 173 | 400 | 8.09 | 34.49 | 0.25 | 26.88 | 118 | 0.87 |
| 198 | 11.13 | 34.63 | 0.49 | 156 | 500 | 7.02 | 34.50 | 0.25 | 27.04 | 103 | 0.99 |
| 247 | 10.20 | 34.60 | 0.45 | 142 | | | | | | | |
| 322 | 9.21 | 34.56 | 0.32 | 130 | | | | | | | |
| 418 | 7.81 | 34.48 | 0.24 | 115 | | | | | | | |
| 552 | 6.66 | 34.52 | 0.27 | 97 | | | | | | | |

150.19 BLACK DOUGLAS; October 24, 1958; 2011 GCT; 23°23.5'N, 110°38'W; sounding, 110 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.88 | 34.78 | 4.59 | 556 | 0 | 27.88 | 34.78 | 4.59 | 22.28 | 556 | 0.00 |
| 10 | 27.88 | 34.79 | 4.74 | 555 | 10 | 27.88 | 34.79 | 4.74 | 22.29 | 555 | 0.06 |
| 29 | 27.64 | 34.83 | 4.64 | 544 | 20 | 27.88 | 34.80 | 4.74 | 22.30 | 554 | 0.11 |
| 47 | 24.87 | 34.71 | 4.85 | 470 | 30 | 27.53 | 34.83 | 4.66 | 22.44 | 540 | 0.17 |
| 70 | 20.36 | 34.65 | 3.60 | 352 | 50 | 24.28 | 34.70 | 4.80 | 23.35 | 454 | 0.27 |
| 93 | 17.38 | 34.57 | 2.62 | 286 | 75 | 19.62 | 34.63 | 3.35 | 24.60 | 335 | 0.36 |
| 116 | 15.73 | 34.60 | 1.63 | 247 | 100 | 16.87 | 34.58 | 2.35 | 25.24 | 274 | 0.44 |
| 143 | 14.36 | 34.65 | 0.83 | 215 | 150 | (14.00) | (34.65) | (0.83) | (25.94) | (208) | (0.56) |

150.25 BLACK DOUGLAS; October 24, 1958; 1507 GCT; 23°11.5'N, 111°05'W; sounding, 620 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.09 | 34.69 | 4.78 | 568 | 0 | 28.09 | 34.69 | 4.78 | 22.16 | 568 | 0.00 |
| 9 | 28.14 | 34.73 | 4.50 | 567 | 10 | 28.14 | 34.73 | 4.50 | 22.16 | 567 | 0.06 |
| 28 | 28.08 | 34.70 | 4.57 | 568 | 20 | 28.10 | 34.71 | 4.54 | 22.16 | 567 | 0.11 |
| 41 | 26.86 | 34.71 | 4.73 | 529 | 30 | 28.07 | 34.70 | 4.57 | 22.17 | 567 | 0.17 |
| 50 | 24.20 | 34.70 | 5.07 | 451 | 50 | 24.20 | 34.70 | 5.07 | 23.38 | 451 | 0.27 |
| 60 | 23.08 | 34.77 | 4.60 | 416 | 75 | 21.18 | 34.73 | 3.57 | 24.26 | 368 | 0.37 |
| 69 | 21.98 | 34.72 | 4.09 | 389 | 100 | 18.41 | 34.77 | 1.71 | 25.02 | 295 | 0.46 |
| 87 | 19.37 | 34.79 | 2.30 | 317 | 150 | 13.80 | 34.54 | 0.92 | 25.89 | 212 | 0.59 |
| 100 | 18.41 | 34.77 | 1.71 | 295 | 200 | 11.82 | 34.62 | 0.43 | 26.35 | 168 | 0.68 |
| 113 | 17.36 | 34.73 | 1.36 | 274 | 250 | 11.25 | 34.69 | 0.27 | 26.52 | 153 | 0.77 |
| 136 | 14.54 | 34.52 | 1.19 | 228 | 300 | 10.73 | 34.71 | 0.16 | 26.62 | 143 | 0.85 |
| 161 | 12.81 | 34.43 | 0.90 | 201 | 400 | 8.99 | 34.60 | 0.20 | 26.83 | 123 | 0.98 |
| 195 | 11.87 | 34.60 | 0.44 | 171 | 500 | 7.45 | 34.57 | 0.20 | 27.04 | 103 | 1.11 |
| 243 | 11.38 | 34.69 | 0.30 | 156 | | | | | | | |
| 318 | 10.55 | 34.71 | 0.15 | 140 | | | | | | | |
| 414 | 8.71 | 34.59 | 0.20 | 120 | | | | | | | |
| 547 | 6.80 | 34.56 | 0.19 | 95 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m |

BLACK DOUGLAS; October 24, 1958; 1110 GCT; 23°04'N, 111°23'W; sounding, 1500 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 23°. 150.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.98 | 34.81 | 4.64 | 556 | 0 | 27.98 | 34.81 | 4.64 | 22.28 | 556 | 0.00 |
| 11 | 28.00 | 34.84 | 4.71 | 555 | 10 | 28.00 | 34.83 | 4.70 | 22.29 | 555 | 0.06 |
| 29 | 27.93 | 34.82 | 4.70 | 554 | 20 | 27.98 | 34.83 | 4.71 | 22.30 | 554 | 0.11 |
| 43 | 26.24 | 34.59 | 5.04 | 520 | 30 | 27.92 | 34.82 | 4.70 | 22.31 | 554 | 0.17 |
| 52 | 21.92 | 34.18 | 5.62 | 427 | 50 | 23.00 | 34.26 | 5.54 | 23.40 | 449 | 0.27 |
| 61 | 21.99 | 34.60 | 5.24 | 398 | 75 | 20.36 | 34.60 | 4.34 | 24.39 | 355 | 0.37 |
| 70 | 21.14 | 34.69 | 4.47 | 369 | 100 | 16.60 | 34.30 | 3.18 | 25.10 | 288 | 0.45 |
| 87 | 18.11 | 34.36 | 4.02 | 318 | 150 | 14.96 | 34.71 | 0.55 | 25.77 | 223 | 0.58 |
| 99 | 16.68 | 34.31 | 3.19 | 290 | 200 | 13.08 | 34.81 | 0.21 | 26.25 | 178 | 0.68 |
| 112 | 16.08 | 34.40 | 2.37 | 270 | 250 | 12.00 | 34.90 | 0.19 | 26.52 | 152 | 0.76 |
| 132 | 15.21 | 34.60 | 1.07 | 236 | 300 | 11.14 | 34.80 | 0.15 | 26.62 | 143 | 0.84 |
| 155 | 14.88 | 34.73 | 0.42 | 220 | 400 | 9.13 | 34.63 | 0.10 | 26.83 | 123 | 0.98 |
| 186 | 13.50 | 34.76 | 0.21 | 190 | 500 | 7.27 | 34.57 | 0.10 | 27.07 | 100 | 1.10 |
| 232 | 12.33 | 34.92 | 0.19 | 156 | | | | | | | |
| 305 | 11.02 | 34.79 | 0.14 | 142 | | | | | | | |
| 396 | 9.20 | 34.63 | 0.10 | 124 | | | | | | | |
| 526 | 6.76 | 34.56 | 0.11 | 94 | | | | | | | |

BLACK DOUGLAS; October 24, 1958; 0452 GCT; 22°43.5'N, 111°59'W; sounding, 1750 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 02°. 150.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.18 | 34.69 | 4.48 | 571 | 0 | 28.18 | 34.69 | 4.48 | 22.12 | 571 | 0.00 |
| 10 | - | 34.71 | 4.65 | | 10 | 28.18 | 34.71 | 4.65 | 22.14 | 569 | 0.06 |
| 29 | 28.06 | 34.87 | 4.58 | 555 | 20 | 28.17 | 34.74 | 4.62 | 22.17 | 567 | 0.11 |
| 44 | 27.33 | 34.76 | 4.71 | 540 | 30 | 28.05 | 34.87 | 4.59 | 22.31 | 554 | 0.17 |
| 53 | 24.52 | 34.58 | 5.22 | 469 | 50 | 26.47 | 34.69 | 4.87 | 22.68 | 518 | 0.28 |
| 62 | 22.79 | 34.53 | 5.24 | 425 | 75 | 19.10 | 34.48 | 3.97 | 24.62 | 333 | 0.38 |
| 72 | 20.09 | 34.49 | 4.38 | 357 | 100 | 16.78 | 34.59 | 1.52 | 25.27 | 271 | 0.46 |
| 91 | 17.75 | 34.56 | 2.22 | 295 | 150 | 12.59 | 34.51 | 0.70 | 26.11 | 191 | 0.58 |
| 105 | 16.08 | 34.60 | 1.19 | 255 | 200 | 12.32 | 34.76 | 0.20 | 26.36 | 167 | 0.67 |
| 118 | 15.05 | 34.53 | 0.97 | 238 | 250 | 11.32 | 34.76 | 0.12 | 26.55 | 150 | 0.75 |
| 141 | 13.08 | 34.52 | 0.74 | 199 | 300 | 10.48 | 34.69 | 0.12 | 26.65 | 140 | 0.83 |
| 167 | 12.69 | 34.69 | 0.39 | 180 | 400 | 8.78 | 34.59 | 0.19 | 26.85 | 121 | 0.96 |
| 202 | 12.26 | 34.76 | 0.19 | 166 | 500 | 7.47 | 34.57 | 0.19 | 27.04 | 103 | 1.08 |
| 252 | 11.28 | 34.76 | 0.11 | 149 | | | | | | | |
| 329 | 10.00 | 34.64 | 0.13 | 136 | | | | | | | |
| 426 | 8.29 | 34.58 | 0.20 | 114 | | | | | | | |
| 560 | 6.82 | 34.57 | 0.14 | 95 | | | | | | | |

BLACK DOUGLAS; October 23, 1958; 2144 GCT; 22°22'N, 112°35'W; sounding, 2000 fm; wind, 340°, force 3; weather, partly cloudy; sea, very rough; wire angle, 05°. 150.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.18 | 34.67 | 4.51 | 572 | 0 | 28.18 | 34.67 | 4.51 | 22.11 | 572 | 0.00 |
| 11 | 28.14 | 34.70 | 4.69 | 569 | 10 | 28.15 | 34.70 | 4.68 | 22.14 | 570 | 0.06 |
| 30 | 27.84 | 34.81 | 4.63 | 552 | 20 | 28.13 | 34.72 | 4.70 | 22.17 | 567 | 0.11 |
| 45 | 25.32 | 34.60 | 4.97 | 491 | 30 | 27.84 | 34.81 | 4.63 | 22.32 | 552 | 0.17 |
| 54 | 22.94 | 34.54 | 4.84 | 428 | 50 | 24.10 | 34.56 | 4.92 | 23.30 | 459 | 0.27 |
| 63 | 19.92 | 34.54 | 4.19 | 349 | 75 | 18.88 | 34.59 | 2.82 | 24.76 | 320 | 0.37 |
| 73 | 19.08 | 34.60 | 2.87 | 324 | 100 | 15.42 | 34.26 | 2.28 | 25.33 | 266 | 0.44 |
| 91 | 16.46 | 34.33 | 2.52 | 283 | 150 | 13.59 | 34.68 | 0.36 | 26.05 | 197 | 0.56 |
| 105 | 14.84 | 34.22 | 2.10 | 257 | 200 | 12.23 | 34.76 | 0.13 | 26.38 | 166 | 0.65 |
| 118 | 13.79 | 34.21 | 1.94 | 236 | 250 | 11.27 | 34.72 | 0.07 | 26.53 | 152 | 0.74 |
| 140 | 13.46 | 34.58 | 0.48 | 202 | 300 | 10.48 | 34.64 | 0.12 | 26.62 | 143 | 0.81 |
| 167 | 12.89 | 34.69 | 0.33 | 183 | 400 | 8.90 | 34.60 | 0.18 | 26.85 | 121 | 0.95 |
| 201 | 12.22 | 34.76 | 0.12 | 166 | 500 | 7.60 | 34.56 | 0.20 | 27.01 | 106 | 1.07 |
| 250 | 11.27 | 34.72 | 0.07 | 152 | | | | | | | |
| 326 | 10.04 | 34.61 | 0.14 | 139 | | | | | | | |
| 422 | 8.58 | 34.60 | 0.20 | 117 | | | | | | | |
| 557 | 6.97 | 34.53 | 0.18 | 100 | | | | | | | |

SIO
CCOFI
5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |
| **150.60** | BLACK DOUGLAS; October 23, 1958; 1551 GCT; 22°02'N, 113°13'W; sounding, 1900 fm; wind, 320°, force 1; weather, partly cloudy; sea, moderate; wire angle, 06°. | | | | | | | | | | |
| 0 | 26.74 | 34.63 | 4.66 | 531 | 0 | 26.74 | 34.63 | 4.66 | 22.54 | 531 | 0.00 |
| 10 | 26.70 | 34.63 | 4.71 | 530 | 10 | 26.70 | 34.63 | 4.71 | 22.55 | 530 | 0.05 |
| 29 | 26.54 | 34.69 | 4.72 | 520 | 20 | 26.63 | 34.66 | 4.72 | 22.60 | 525 | 0.11 |
| 43 | 26.22 | 34.65 | 4.71 | 514 | 30 | 26.53 | 34.69 | 4.72 | 22.66 | 520 | 0.16 |
| 53 | 21.88 | 34.14 | 5.54 | 428 | 50 | 25.76 | 34.59 | 4.80 | 22.82 | 505 | 0.26 |
| 62 | 20.53 | 34.05 | 5.62 | 400 | 75 | 19.34 | 34.18 | 5.10 | 24.32 | 361 | 0.37 |
| 71 | 19.38 | 34.09 | 5.49 | 368 | 100 | 15.10 | 33.88 | 4.70 | 25.10 | 287 | 0.45 |
| 90 | 16.69 | 34.03 | 4.74 | 310 | 150 | 12.00 | 34.20 | 2.25 | 25.99 | 203 | 0.58 |
| 103 | 15.16 | 33 93 | 4.28 | 284 | 200 | 10.93 | 34.46 | 0.93 | 26.39 | 165 | 0.67 |
| 116 | 14.96 | 34.25 | 2.33 | 256 | 250 | 10.22 | 34.57 | 0.51 | 26.59 | 145 | 0.75 |
| 138 | 12.36 | 34.09 | 2.26 | 217 | 300 | 9.82 | 34.64 | 0.26 | 26.72 | 134 | 0.82 |
| 164 | 11.36 | 34.24 | 1.71 | 188 | 400 | 8.52 | 34.59 | 0.22 | 26.90 | 117 | 0.95 |
| 199 | 10.94 | 34.46 | 0.94 | 165 | 500 | 7.28 | 34.56 | 0.26 | 27.05 | 102 | 1.07 |
| 247 | 10.25 | 34.56 | 0.53 | 146 | | | | | | | |
| 323 | 9.63 | 34.65 | 0.20 | 130 | | | | | | | |
| 419 | 8.23 | 34.58 | 0.23 | 114 | | | | | | | |
| 553 | 6.66 | 34.55 | 0.27 | 94 | | | | | | | |
| **153.16** | BLACK DOUGLAS; October 25, 1958; 1310 GCT; 22°55'N, 110°07'W; sounding, 220 fm; wind, 320°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°. | | | | | | | | | | |
| 0 | 27.90 | 34.77 | 4.52 | 557 | 0 | 27.90 | 34.77 | 4.52 | 22.27 | 557 | 0.00 |
| 8 | 27.92 | 34.79 | 4.61 | 556 | 10 | 27.92 | 34.78 | 4.61 | 22.28 | 556 | 0.06 |
| 25 | 27.91 | 34.76 | 4.69 | 558 | 20 | 27.91 | 34.77 | 4.66 | 22.27 | 557 | 0.11 |
| 41 | 27.52 | 34.81 | 4.64 | 542 | 30 | 27.90 | 34.76 | 4.69 | 22.27 | 557 | 0.17 |
| 63 | 25.30 | 34.81 | 4.35 | 475 | 50 | 26.37 | 34.81 | 4.51 | 22.80 | 506 | 0.27 |
| 83 | 19.42 | 34.56 | 2.81 | 335 | 75 | 20.42 | 34.57 | 3.09 | 24.34 | 359 | 0.38 |
| 104 | 16.24 | 34.55 | 1.76 | 262 | 100 | 16.81 | 34.55 | 1.94 | 25.23 | 275 | 0.46 |
| 137 | 13.82 | 34.56 | 0.89 | 211 | 150 | 13.06 | 34.57 | 0.78 | 26.07 | 195 | 0.58 |
| 170 | 12.64 | 34.63 | 0.46 | 183 | 200 | 12.08 | 34.69 | 0.24 | 26.35 | 168 | 0.67 |
| 212 | 11.88 | 34.70 | 0.19 | 164 | 250 | 11.07 | 34.70 | 0.14 | 26.55 | 150 | 0.76 |
| 254 | 11.00 | 34.70 | 0.14 | 148 | | | | | | | |
| **153.20** | BLACK DOUGLAS; October 25, 1958; 1609 GCT; 22°47.5'N, 110°22'W; sounding, 340 fm; wind, 320°, force 6; weather, partly cloudy; sea, rough; wire angle, 13°. | | | | | | | | | | |
| 0 | 27.82 | 34.72 | 4.69 | 558 | 0 | 27.82 | 34.72 | 4.69 | 22.26 | 558 | 0.00 |
| 10 | 27.84 | 34.75 | 4.60 | 557 | 10 | 27.84 | 34.75 | 4.60 | 22.27 | 557 | 0.06 |
| 29 | 27.82 | 34.78 | 4.77 | 554 | 20 | 27.83 | 34.77 | 4.63 | 22.30 | 554 | 0.11 |
| 43 | 25.74 | 34.65 | 5.14 | 500 | 30 | 27.82 | 34.78 | 4.78 | 22.31 | 553 | 0.17 |
| 52 | 23.14 | 34.61 | 4.89 | 428 | 50 | 23.60 | 34.62 | 4.99 | 23.49 | 441 | 0.27 |
| 61 | 21.80 | 34.61 | 4.03 | 392 | 75 | 19.37 | 34.63 | 2.66 | 24.67 | 328 | 0.36 |
| 70 | 20.04 | 34.63 | 3.06 | 346 | 100 | 16.60 | 34.58 | 1.40 | 25.30 | 268 | 0.44 |
| 89 | 17.84 | 34.64 | 1.91 | 292 | 150 | 13.36 | 34.76 | 0.44 | 26.16 | 186 | 0.55 |
| 102 | 16.30 | 34.56 | 1.32 | 262 | 200 | 12.20 | 34.83 | 0.21 | 26.44 | 160 | 0.64 |
| 115 | 15.29 | 34.63 | 0.99 | 236 | 250 | 11.37 | 34.82 | 0.16 | 26.59 | 146 | 0.72 |
| 137 | 13.69 | 34.69 | 0.60 | 199 | 300 | 10.61 | 34.73 | 0.14 | 26.66 | 139 | 0.79 |
| 164 | 13.01 | 34.81 | 0.27 | 177 | 400 | 9.17 | 34.63 | 0.15 | 26.83 | 123 | 0.93 |
| 199 | 12.22 | 34.83 | 0.24 | 160 | 500 | 7.52 | 34.56 | 0.14 | 27.02 | 105 | 1.05 |
| 247 | 11.41 | 34.83 | 0.16 | 146 | | | | | | | |
| 323 | 10.26 | 34.69 | 0.14 | 136 | | | | | | | |
| 418 | 8.88 | 34.62 | 0.15 | 120 | | | | | | | |
| 550 | 6.60 | 34.52 | 0.14 | 96 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

153.30

BLACK DOUGLAS; October 25, 1958; 2252 GCT; 22°30'N, 111°02'W; sounding, 1700 fm; wind, 320°, force 5; weather, cloudy; sea, very rough; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.54 | 34.86 | 4.90 | 539 | 0 | 27.54 | 34.86 | 4.90 | 22.46 | 539 | 0.00 |
| 10 | 27.54 | 34.81 | 4.60 | 543 | 10 | 27.54 | 34.81 | 4.60 | 22.42 | 543 | 0.05 |
| 29 | 27.54 | 34.85 | 4.60 | 539 | 20 | 27.54 | 34.83 | 4.60 | 22.44 | 541 | 0.11 |
| 43 | 27.04 | 34.77 | 4.60 | 530 | 30 | 27.54 | 34.85 | 4.60 | 22.46 | 539 | 0.16 |
| 52 | 23.00 | 34.32 | 5.60 | 445 | 50 | 23.31 | 34.35 | 5.55 | 23.37 | 452 | 0.26 |
| 61 | 20.90 | 34.18 | 5.60 | 400 | 75 | 19.20 | 34.12 | 5.28 | 24.31 | 362 | 0.36 |
| 70 | 19.61 | 34.07 | 5.47 | 375 | 100 | 17.37 | 34.56 | 2.10 | 25.11 | 286 | 0.45 |
| 89 | 18.28 | 34.37 | 3.57 | 322 | 150 | 13.62 | 34.69 | 0.49 | 26.05 | 197 | 0.57 |
| 103 | 17.12 | 34.59 | 1.81 | 279 | 200 | 11.96 | 34.65 | 0.35 | 26.34 | 169 | 0.66 |
| 116 | 16.10 | 34.63 | 1.30 | 253 | 250 | 11.28 | 34.72 | 0.19 | 26.53 | 151 | 0.74 |
| 137 | 14.43 | 34.66 | 0.71 | 216 | 300 | 10.52 | 34.67 | 0.19 | 26.63 | 142 | 0.82 |
| 163 | 13.17 | 34.72 | 0.39 | 186 | 400 | 8.89 | 34.61 | 0.16 | 26.85 | 121 | 0.96 |
| 196 | 12.06 | 34.65 | 0.36 | 171 | 500 | 7.60 | 34.55 | 0.17 | 27.00 | 107 | 1.08 |
| 243 | 11.39 | 34.73 | 0.20 | 153 | | | | | | | |
| 318 | 10.26 | 34.66 | 0.19 | 139 | | | | | | | |
| 412 | 8.70 | 34.60 | 0.16 | 119 | | | | | | | |
| 546 | 7.04 | 34.52 | 0.18 | 102 | | | | | | | |

153.40

BLACK DOUGLAS; October 26, 1958; 0535 GCT; 22°08'N, 111°37'W; sounding, 1600 fm; wind, 310°, force 5; weather, partly cloudy; sea, very rough; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.18 | 34.74 | 4.71 | 536 | 0 | 27.18 | 34.74 | 4.71 | 22.49 | 536 | 0.00 |
| 11 | 27.20 | 34.74 | 4.66 | 537 | 10 | 27.20 | 34.74 | 4.67 | 22.48 | 537 | 0.05 |
| 30 | 27.18 | 34.75 | 4.59 | 536 | 20 | 27.19 | 34.75 | 4.60 | 22.49 | 536 | 0.11 |
| 44 | 25.02 | 34.49 | 5.03 | 490 | 30 | 27.18 | 34.75 | 4.59 | 22.49 | 536 | 0.16 |
| 53 | 21.54 | 34.26 | 5.28 | 411 | 50 | 22.45 | 34.30 | 5.18 | 23.58 | 432 | 0.26 |
| 62 | 19.64 | 34.20 | 5.53 | 367 | 75 | 17.53 | 34.06 | 5.30 | 24.68 | 327 | 0.35 |
| 71 | 18.47 | 34.09 | 5.30 | 346 | 100 | 16.40 | 34.46 | 1.91 | 25.26 | 272 | 0.43 |
| 92 | 17.30 | 34.40 | 2.71 | 296 | 150 | 13.57 | 34.72 | 0.42 | 26.08 | 194 | 0.55 |
| 103 | 15.90 | 34.48 | 1.63 | 260 | 200 | 12.17 | 34.76 | 0.31 | 26.39 | 165 | 0.64 |
| 116 | 15.10 | 34.53 | 1.07 | 239 | 250 | 11.28 | 34.71 | 0.12 | 26.52 | 152 | 0.72 |
| 138 | 13.99 | 34.64 | 0.56 | 208 | 300 | 10.52 | 34.66 | 0.14 | 26.62 | 143 | 0.80 |
| 163 | 13.13 | 34.76 | 0.35 | 183 | 400 | 8.98 | 34.58 | 0.14 | 26.82 | 124 | 0.94 |
| 196 | 12.22 | 34.76 | 0.32 | 166 | 500 | 7.62 | | 0.16 | | | |
| 242 | 11.40 | 34.72 | 0.12 | 154 | | | | | | | |
| 316 | 10.25 | 34.64 | 0.14 | 140 | | | | | | | |
| 409 | 8.82 | 34.58 | 0.14 | 122 | | | | | | | |
| 539 | 7.11 | 34.80r | 0.18 | | | | | | | | |

153.50

BLACK DOUGLAS; October 26, 1958; 1147 GCT; 21°47.5'N, 112°14.5'W; sounding, 2000 fm; wind, 320°, force 4; weather, partly cloudy; sea, rough; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.06 | 34.78 | 4.71 | 530 | 0 | 27.06 | 34.78 | 4.71 | 22.55 | 530 | 0.00 |
| 12 | 27.07 | 34.76 | 4.76 | 532 | 10 | 27.07 | 34.77 | 4.75 | 22.54 | 531 | 0.05 |
| 31 | 27.04 | 34.78 | 4.74 | 529 | 20 | 27.06 | 34.76 | 4.74 | 22.54 | 531 | 0.11 |
| 44 | 23.40 | 34.35 | 5.50 | 454 | 30 | 27.04 | 34.78 | 4.74 | 22.56 | 529 | 0.16 |
| 53 | 21.32 | 34.20 | 5.69 | 409 | 50 | 21.94 | 34.24 | 5.66 | 23.68 | 423 | 0.25 |
| 62 | 19.41 | 34.08 | 5.72 | 370 | 75 | 17.18 | 34.06 | | 24.76 | 319 | 0.35 |
| 71 | 17.66 | 34.07 | - | 329 | 100 | 14.08 | 34.03 | | 25.44 | 255 | 0.42 |
| 89 | 15.47 | 33.99 | - | 286 | 150 | 12.09 | 34.51 | | 26.22 | 181 | 0.53 |
| 103 | 13.76 | 34.04 | - | 248 | 200 | 11.58 | 34.65 | | 26.42 | 162 | 0.62 |
| 115 | 13.22 | 34.11 | - | 232 | 250 | 11.08 | 34.70 | | 26.55 | 150 | 0.70 |
| 137 | 12.35 | 34.42 | - | 193 | 300 | 10.52 | 34.66 | | 26.62 | 143 | 0.78 |
| 162 | 11.87 | 34.56 | - | 174 | 400 | 8.90 | 34.61 | | 26.85 | 121 | 0.91 |
| 196 | 11.62 | 34.65 | - | 163 | 500 | 7.61 | 34.57 | | 27.02 | 105 | 1.03 |
| 244 | 11.14 | 34.70 | - | 151 | | | | | | | |
| 319 | 10.30 | 34.65 | - | 140 | | | | | | | |
| 414 | 8.68 | 34.60 | - | 119 | | | | | | | |
| 546 | 7.08 | 34.56 | - | 99 | | | | | | | |

SIO

CCOFI 5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **153.60** | BLACK DOUGLAS; October 26, 1958; 1815 GCT; 21°28'N, 112°53'W; sounding, 2000+ fm; wind, 330°, force 3; weather, partly cloudy; sea, high; wire angle, 14°. | | | | | | | | | | |
| 0 | 26.23 | 34.52 | 4.65a) | 524 | 0 | 26.23 | 34.52 | 4.65 | 22.62 | 524 | 0.00 |
| 10 | 26.21 | 34.58 | 4.65 | 519 | 10 | 26.21 | 34.58 | 4.65 | 22.67 | 519 | 0.05 |
| 29 | 26.20 | 34.54 | 4.68 | 521 | 20 | 26.20 | 34.56 | 4.66 | 22.66 | 520 | 0.10 |
| 43 | 25.75 | 34.50 | 4.78 | 511 | 30 | 26.20 | 34.54 | 4.68 | 22.65 | 521 | 0.16 |
| 52 | 23.32 | 34.29 | 5.30 | 457 | 50 | 23.94 | 34.34 | 5.17 | 23.18 | 470 | 0.26 |
| 61 | 20.88 | 34.16 | 5.66 | 401 | 75 | 18.87 | 34.10 | 5.43 | 24.38 | 355 | 0.36 |
| 70 | 20.30 | 34.17 | 5.56 | 385 | 100 | 15.71 | 34.02 | 4.22 | 25.08 | 289 | 0.44 |
| 88 | 17.69 | 34.15 | 4.97 | 324 | 150 | 12.70 | 34.45 | 0.88 | 26.05 | 197 | 0.56 |
| 101 | 15.40 | 34.00 | 4.10 | 284 | 200 | 11.80 | 34.69 | 0.25 | 26.41 | 163 | 0.65 |
| 114 | 13.53 | 33.91 | 3.79 | 253 | 250 | 10.89 | 34.65 | 0.28 | 26.54 | 150 | 0.74 |
| 135 | 13.13 | 34.27 | 1.60 | 219 | 300 | 10.18 | 34.65 | 0.24 | 26.67 | 138 | 0.81 |
| 159 | 12.49 | 34.56 | 0.56 | 186 | 400 | 8.87 | 34.60 | 0.19 | 26.85 | 121 | 0.95 |
| 191 | 11.96 | 34.70 | 0.26 | 165 | 500 | 7.51 | 34.57 | 0.16 | 27.03 | 104 | 1.06 |
| 236 | 11.08 | 34.65 | 0.29 | 153 | | | | | | | |
| 307 | 10.07 | 34.65 | 0.24 | 136 | | | | | | | |
| 399 | 8.88 | 34.60 | 0.19 | 122 | | | | | | | |
| 528 | 7.09 | 34.56 | 0.16 | 99 | | | | | | | |
| **153.70** | BLACK DOUGLAS; October 26, 1958; 2338 GCT; 21°07'N, 113°28'W; sounding, 2000+ fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 26.24 | 34.56 | 4.70a) | 522 | 0 | 26.24 | 34.56 | 4.70 | 22.64 | 522 | 0.00 |
| 11 | 26.22 | 34.54 | 4.70 | 522 | 10 | 26.22 | 34.54 | 4.70 | 22.64 | 522 | 0.05 |
| 30 | 26.22 | 34.59 | 4.71 | 518 | 20 | 26.22 | 34.57 | 4.71 | 22.66 | 520 | 0.10 |
| 44 | 23.92 | 34.49 | 4.98 | 459 | 30 | 26.22 | 34.59 | 4.71 | 22.67 | 518 | 0.16 |
| 53 | 23.29 | 34.45 | 5.05 | 445 | 50 | 23.53 | 34.46 | 5.02 | 23.40 | 449 | 0.25 |
| 62 | 22.16 | 34.36 | 5.22 | 420 | 75 | 20.00 | 34.21 | 5.43 | 24.18 | 375 | 0.36 |
| 71 | 20.38 | 34.23 | 5.43 | 383 | 100 | 17.80 | 34.13 | 4.97 | 24.67 | 328 | 0.45 |
| 89 | 18.87 | 34.16 | 5.42 | 351 | 150 | 13.42 | 34.34 | 0.97 | 25.82 | 220 | 0.58 |
| 102 | 17.62 | 34.12 | 4.90 | 324 | 200 | 12.07 | 34.70 | 0.24 | 26.36 | 168 | 0.68 |
| 115 | 15.48 | 33.98 | 4.15 | 287 | 250 | 11.21 | 34.74 | 0.09 | 26.55 | 149 | 0.76 |
| 137 | 13.42 | 34.13 | 0.97 | 235 | 300 | 10.40 | 34.67 | 0.11 | 26.65 | 140 | 0.84 |
| 162 | 12.43 | 34.45 | 1.01 | 192 | 400 | 8.93 | 34.58 | 0.16 | 26.82 | 124 | 0.98 |
| 195 | 12.10 | 34.67 | 0.27 | 170 | 500 | 7.63 | 34.56 | 0.15 | 27.00 | 106 | 1.10 |
| 242 | 11.40 | 34.75 | 0.08 | 152 | | | | | | | |
| 316 | 10.16 | 34.65 | 0.12 | 138 | | | | | | | |
| 410 | 8.78 | 34.57 | 0.16 | 122 | | | | | | | |
| 542 | 7.14 | 34.56 | 0.13 | 100 | | | | | | | |
| **153.80** | BLACK DOUGLAS; October 27, 1958; 0504 GCT; 20°47'N, 114°05'W; sounding, 2000+ fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 0 | 27.24 | 34.23 | 4.61a) | 575 | 0 | 27.24 | 34.23 | 4.61 | 22.08 | 575 | 0.00 |
| 10 | 27.22 | 34.25 | 4.57 | 573 | 10 | 27.22 | 34.25 | 4.57 | 22.10 | 573 | 0.06 |
| 43 | 26.36 | 34.56 | 4.70 | 524 | 20 | 27.22 | 34.26 | 4.57 | 22.11 | 573 | 0.11 |
| 51 | 23.00 | 34.04 | 5.48 | 466 | 30 | 27.20 | 34.27 | 4.57 | 22.12 | 571 | 0.17 |
| 61 | 21.75 | 33.90 | 5.52 | 442 | 50 | 23.20 | 34.07 | 5.46 | 23.19 | 469 | 0.28 |
| 71 | 20.56 | 34.04 | 5.57 | 401 | 75 | 20.00 | 34.05 | 5.59 | 24.05 | 387 | 0.38 |
| 89 | 18.00 | 34.06 | 5.64 | 338 | 100 | 17.50 | 34.10 | 5.00 | 24.73 | 323 | 0.47 |
| 102 | 16.04 | 34.01 | 4.30 | 297 | 150 | 11.86 | 34.07 | 2.32 | 25.91 | 210 | 0.61 |
| 116 | 15.06 | 34.13 | 2.87 | 268 | 200 | 11.32 | 34.53 | 0.57 | 26.37 | 167 | 0.70 |
| 138 | 12.63 | 34.04 | 2.40 | 226 | 250 | 10.68 | 34.60 | 0.32 | 26.54 | 150 | 0.78 |
| 162 | 11.75 | 34.34 | 1.09 | 188 | 300 | 9.87 | 34.56 | 0.27 | 26.66 | 140 | 0.86 |
| 198 | 11.36 | 34.53 | 0.61 | 167 | 400 | 8.48 | 34.56 | 0.19 | 26.88 | 119 | 1.00 |
| 247 | 10.72 | 34.60 | 0.33 | 151 | 500 | 7.31 | 34.53 | 0.13 | 27.03 | 104 | 1.11 |
| 323 | 9.47 | 34.55 | 0.24 | 134 | | | | | | | |
| 419 | 8.21 | 34.56 | 0.18 | 115 | | | | | | | |
| 553 | 6.73 | 34.51 | 0.11 | 98 | | | | | | | |

a) Nine-day interval between treating the oxygen samples with reagents and titration of samples.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| HORIZON; October 14-15, 1958; 2349, 0013 GCT; 34°50'N, 122°10'W; sounding, 2105 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 33°, 42°. | | | | | | | | | | | D-1 (75.66) |
| 0 | 17.14 | 33.35 | 5.53 | 369 | 0 | 17.14 | 33.35 | 5.53 | 24.24 | 369 | 0.00 |
| 8 | 17.13 | 33.36 | 5.43 | 368 | 10 | 17.14 | 33.37 | 5.43 | 24.25 | 368 | 0.04 |
| 22 | 17.28 | 33.46 | 5.47 | 364 | 20 | 17.23 | 33.41 | 5.45 | 24.27 | 366 | 0.07 |
| 35 | 13.69 | 33.04 | 6.03 | 320 | 30 | 15.75 | 33.27 | 5.75 | 24.50 | 344 | 0.11 |
| 65 | 11.82 | 33.10 | 5.53 | 281 | 50 | 12.28 | 33.01 | 5.28 | 25.02 | 295 | 0.17 |
| 85 | 9.92 | 33.40 | 4.55 | 226 | 75 | 10.95 | 33.25 | 5.11 | 25.44 | 254 | 0.24 |
| 110 | 9.28 | 33.49 | 4.26 | 210 | 100 | 9.51 | 33.46 | 4.36 | 25.85 | 216 | 0.30 |
| 137 | 9.04 | 33.71 | 3.36 | 190 | 150 | 8.74 | 33.79 | 3.50 | 26.23 | 180 | 0.40 |
| 159 | 8.55 | 33.84 | 3.59 | 172 | 200 | 8.02 | 34.01 | 2.43 | 26.52 | 152 | 0.49 |
| 178 | 8.56 | 33.96 | 2.39 | 164 | 250 | 7.29 | 34.05 | 2.19 | 26.65 | 140 | 0.56 |
| 209 | 7.83 | 34.02 | 2.44 | 150 | 300 | 6.79 | 34.08 | 1.89 | 26.74 | 131 | 0.63 |
| | | | | | 400 | 6.26 | | 0.99 | | | |
| 234 | 7.53 | 34.04 | 2.22 | 144 | 500 | 6.05 | | 0.50 | | | |
| 269 | 7.04 | 34.05 | 2.17 | 137 | 600 | 5.43 | | 0.30 | | | |
| 316 | 6.66 | 34.09 | 1.48 | 128 | 700 | 4.97 | | 0.30 | | | |
| 354 | 6.65 | 34.20 | 1.02 | 120 | 800 | 4.52 | | 0.31 | | | |
| 401 | 6.23 | - | 0.98 | | 1000 | (3.93) | | | | | |
| 445 | 5.92 | - | 0.81 | | | | | | | | |
| 509a) | 6.08 | - | 0.45 | | | | | | | | |
| 598 | 5.44 | - | 0.31 | | | | | | | | |
| 694 | 4.99 | - | 0.30 | | | | | | | | |
| 794 | 4.53 | - | 0.31 | | | | | | | | |
| 916 | 4.13 | - | 0.34 | | | | | | | | |
| 966 | 4.02 | - | 0.47 | | | | | | | | |
| HORIZON; October 15, 1958; 0320 GCT; 35°02.5'N, 122°17'W; sounding, 2175 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 10°. | | | | | | | | | | | D-2 (73.65) |
| 0 | 17.24 | 33.44 | 5.45 | 365 | 0 | 17.24 | 33.44 | 5.45 | 24.28 | 365 | 0.00 |
| 10 | 17.20 | 33.35 | 5.50 | 370 | 10 | 17.20 | 33.35 | 5.50 | 24.23 | 370 | 0.04 |
| 44 | 12.89 | 33.06 | 6.19 | 303 | 20 | 17.17 | 33.34 | 5.52 | 24.23 | 370 | 0.07 |
| 64 | 11.20 | 33.21 | 5.12 | 262 | 30 | 17.05 | 33.33 | 5.58 | 24.24 | 369 | 0.11 |
| 78 | 10.69 | 33.31 | 4.95 | 246 | 50 | 12.15 | 33.11 | 5.88 | 25.11 | 286 | 0.18 |
| 108 | 9.32 | 33.54 | 4.40 | 206 | 75 | 10.80 | 33.29 | 5.00 | 25.50 | 249 | 0.24 |
| 137 | 9.13 | 33.80 | 3.19 | 184 | 100 | 9.62 | 33.48 | 4.52 | 25.84 | 217 | 0.30 |
| 176 | 8.45 | 33.98 | 2.46 | 161 | 150 | 9.05 | 33.91 | 2.83 | 26.27 | 176 | 0.40 |
| 211 | 7.98 | 34.04 | 2.11 | 149 | 200 | 8.10 | 34.03 | 2.12 | 26.52 | 152 | 0.48 |
| 236 | 7.51 | 34.04 | 2.20 | 143 | 250 | 7.30 | 34.05 | 2.14 | 26.65 | 140 | 0.56 |
| 286 | 6.84 | 34.07 | 1.86 | 132 | 300 | 6.78 | 34.08 | 1.71 | 26.75 | 131 | 0.63 |
| 326 | 6.62 | 34.08 | 1.46 | 129 | 400 | 6.35 | 34.20 | 0.85 | 26.90 | 116 | 0.76 |
| 381 | 6.50 | 34.19 | 1.00 | 119 | 500 | 5.68 | 34.29 | 0.58 | 27.06 | 101 | 0.87 |
| 441 | 6.00 | 34.20 | 0.64 | 112 | 600 | 5.29 | 34.35 | 0.30 | 27.15 | 93 | 0.97 |
| 506 | 5.62 | 34.30 | 0.57 | 100 | 700 | 4.84 | 34.39 | 0.32 | 27.23 | 85 | 1.07 |
| 571 | 5.37 | 34.34 | 0.35 | 94 | 800 | 4.45 | 34.40 | 0.33 | 27.28 | 80 | 1.16 |
| 626 | 5.20 | 34.36 | 0.28 | 91 | 1000 | 3.77 | 34.50 | 0.62 | 27.44 | 65 | 1.32 |
| 710 | 4.80 | 34.39 | 0.33 | 84 | | | | | | | |
| 824 | 4.36 | 34.42 | 0.35 | 77 | | | | | | | |
| 943 | 3.95 | 34.49 | 0.47 | 68 | | | | | | | |
| 1043 | 3.63 | 34.51 | 0.72 | 64 | | | | | | | |
| 1187 | 3.30 | 34.56 | 1.00 | 57 | | | | | | | |
| 1237 | 3.24 | 34.55 | 1.01 | 57 | | | | | | | |

a) Note similar feature on Station D-3 (72.66).

SIO

CCOFI 5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |
| **D-3 (72.66)** | HORIZON; October 15, 1958; 0700 GCT; 35°16.5'N, 122°29'W; sounding, 1955 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | 17.03 | 33.42 | 5.53 | 362 | 0 | 17.03 | 33.42 | 5.53 | 24.32 | 362 | 0.00 |
| 9 | 17.05 | 33.38 | 5.62 | 365 | 10 | 17.05 | 33.38 | 5.62 | 24.28 | 365 | 0.04 |
| 37 | 14.90 | 33.21 | 5.92 | 331 | 20 | 17.02 | 33.37 | 5.66 | 24.28 | 365 | 0.07 |
| 55 | 12.71 | 33.44 | 4.82 | 271 | 30 | 16.90 | 33.36 | 5.69 | 24.30 | 363 | 0.11 |
| 69 | 11.27 | 33.53 | 4.03 | 240 | 50 | 12.58 | 33.27 | 5.23 | 25.16 | 282 | 0.17 |
| 92 | 10.28 | 33.65 | 3.64 | 214 | 75 | 10.98 | 33.56 | 3.91 | 25.68 | 232 | 0.24 |
| 120 | 9.78 | 33.84 | 2.89 | 191 | 100 | 10.09 | 33.70 | 3.14 | 25.94 | 207 | 0.29 |
| 152 | 9.37 | 33.93 | 2.66 | 178 | 150 | 9.39 | 33.92 | 2.68 | 26.23 | 179 | 0.39 |
| 180 | 9.01 | 34.02 | 2.37 | 167 | 200 | 8.75 | 34.07 | 2.28 | 26.45 | 159 | 0.48 |
| 203 | 8.67 | 34.07 | 2.27 | 158 | 250 | 7.80 | 34.05 | 2.40 | 26.58 | 146 | 0.56 |
| 240 | 7.84 | 34.04 | 2.44 | 148 | 300 | 7.55 | 34.18 | 1.39 | 26.72 | 134 | 0.63 |
| 286 | 7.72 | 34.18 | 1.39 | 136 | 400 | 6.84 | 34.25 | 0.87 | 26.88 | 118 | 0.76 |
| 328 | 7.20 | 34.16 | 1.40 | 130 | 500 | 6.02 | 34.28 | 0.50 | 27.00 | 106 | 0.87 |
| 384 | 7.04 | 34.27 | 0.86 | 120 | 600 | 5.26 | 34.34 | 0.28 | 27.14 | 93 | 0.98 |
| 430 | 6.26 | 34.22 | 0.98 | 114 | 700 | 4.77 | 34.40 | 0.33 | 27.25 | 83 | 1.07 |
| 484a,b) | 6.2 | 34.29 | 0.57 | 108 | 800 | 4.41 | 34.43 | 0.37 | 27.31 | 77 | 1.16 |
| 535 | 5.59 | 34.26 | 0.43 | 103 | 1000 | 3.75 | 34.50 | 0.52 | 27.44 | 65 | 1.32 |
| 609 | 5 22 | 34.34 | 0.28 | 93 | | | | | | | |
| 714 | 4.70 | 34.40 | 0.33 | 82 | | | | | | | |
| 814 | 4.36 | 34.43 | 0.38 | 76 | | | | | | | |
| 925 | 3.98 | 34.47 | 0.41 | 70 | | | | | | | |
| 1050 | 3.61 | 34.52 | 0.58 | 62 | | | | | | | |
| 1096 | 3.48 | 34.53 | 0.63 | 60 | | | | | | | |
| **D-4 (71 5.66)** | HORIZON; October 15, 1958; 0938 GCT; 35°25'N, 122°36.5'W; sounding, 1915 fm; wind, 340°, force 4; weather, clear; sea, moderate; wire angle, 30°. | | | | | | | | | | |
| 0 | 17.45 | 33.55 | 5.50 | 362 | 0 | 17.45 | 33.55 | 5.50 | 24.32 | 362 | 0.00 |
| 8 | 17.44 | 33.50 | 5.57 | 365 | 10 | 17.44 | 33.50 | 5.57 | 24.28 | 365 | 0.04 |
| 35 | 14.14 | 33.47 | 5.28 | 296 | 20 | 17.43 | 33.50 | 5.57 | 24.28 | 365 | 0.07 |
| 52 | 11.97 | 33.44 | 4.61 | 258 | 30 | 16.83 | 33.48 | 5.52 | 24.40 | 354 | 0.11 |
| 65 | 11.09 | 33.56 | 4.00 | 234 | 50 | 12.18 | 33.44 | 4.70 | 25.36 | 262 | 0.17 |
| 88 | 9.75 | 33.55 | 4.56 | 212 | 75 | 10.40 | 33.56 | 4.27 | 25.78 | 222 | 0.23 |
| 113 | 9.68 | 33.72 | 3.21 | 199 | 100 | 9.70 | 33.63 | 3.90 | 25.96 | 206 | 0.29 |
| 143 | 9.30 | 33.89 | 2.67 | 180 | 150 | 9.19 | 33.92 | 2.60 | 26.27 | 176 | 0.38 |
| 170 | 8.92 | 33.99 | 2.45 | 167 | 200 | 8.28 | 34.06 | 2.05 | 26.52 | 153 | 0.47 |
| 191 | 8.36 | 33.98 | 3.08 | 159 | 250 | 8.06 | 34.12 | 1.74 | 26.60 | 145 | 0.54 |
| 225 | 8 26 | 34.10 | 1.94 | 149 | 300 | 7.78 | 34.20 | 1.29 | 26.70 | 135 | 0.62 |
| 269 | 7.94 | 34.14 | 1.56 | 142 | 400 | 7.04 | 34.26 | 0.76 | 26.85 | 121 | 0.75 |
| 308 | 7.68 | 34.22 | 1.20 | 132 | 500 | 6.11 | 34.30 | 0.47 | 27.01 | 106 | 0.87 |
| 361 | 7.26 | 34.24 | 0.90 | 125 | 600 | 5.31 | 34.33 | 0.32 | 27.13 | 94 | 0.97 |
| 406 | 7.00 | 34.26 | 0.73 | 120 | 700 | 4 85 | 34.36 | 0.27 | 27.20 | 87 | 1.07 |
| 459 | 6.48 | 34.27 | 0.57 | 113 | 800 | 4.46 | 34.42 | 0.43 | 27.30 | 78 | 1.16 |
| 508 | 6.02 | 34.30 | 0.45 | 105 | 1000 | 3.85 | 34.49 | 0.58 | 27.42 | 67 | 1.32 |
| 581 | 5.41 | 34.32 | 0.33 | 96 | | | | | | | |
| 682 | 4.92 | 34.35 | 0.25 | 88 | | | | | | | |
| 786 | 4.50 | 34.42 | 0.41 | 78 | | | | | | | |
| 891 | 4.18 | 34.44 | 0.48 | 74 | | | | | | | |
| 1017 | 3.80 | 34.49 | 0.61 | 67 | | | | | | | |
| 1067 | 3.69 | 34.50 | 0.57 | 65 | | | | | | | |

a) Note similar feature on Station D-1 (75.66).

b) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth value was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | $\Delta D$ |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

D-5
(71.66)

HORIZON; October 15, 1958; 1320 GCT; 35°30'N, 122°40'W; sounding, 1685 fm; wind, 340°, force 4; weather, clear; sea, slight; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.71 | 33.42 | 5.47 | 354 | 0 | 16.71 | 33.42 | 5.47 | 24.40 | 354 | 0.00 |
| 9 | 16.70 | 33.39 | 5.59 | 356 | 10 | 16.70 | 33.39 | 5.59 | 24.37 | 356 | 0.04 |
| 42 | 13.28 | 33.42 | 5.05 | 284 | 20 | 16.68 | 33.39 | 5.59 | 24.38 | 356 | 0.07 |
| 61 | 11.85 | 33.56 | 4.15 | 247 | 30 | 15.48 | 33.40 | 5.39 | 24.64 | 331 | 0.10 |
| 76 | 10.96 | 33.51 | 4.26 | 235 | 50 | 12.48 | 33.47 | 4.55 | 25.34 | 265 | 0.16 |
| 103 | 10.02 | 33.62 | 3.64 | 212 | 75 | 11.00 | 33.51 | 4.24 | 25.64 | 236 | 0.23 |
| 131 | 9.49 | 33.78 | 3.14 | 192 | 100 | 10.15 | 33.60 | 3.74 | 25.85 | 216 | 0.28 |
| 168 | 9.10 | 33.96 | 2.46 | 172 | 150 | 9.25 | 33.89 | 2.75 | 26.22 | 180 | 0.38 |
| 201 | 8.82 | 34.05 | 2.21 | 162 | 200 | 8.83 | 34.04 | 2.22 | 26.42 | 162 | 0.47 |
| 224 | 8.50 | 34.10 | 1.96 | 153 | 250 | 8.27 | 34.14 | 1.73 | 26.58 | 147 | 0.55 |
| 270 | 8.08 | 34.16 | 1.60 | 142 | 300 | 7.80 | 34.18 | 1.43 | 26.68 | 137 | 0.62 |
| 309 | 7.71 | 34.18 | 1.39 | 135 | 400 | 6.69 | 34.20 | 1.00 | 26.85 | 121 | 0.76 |
| 360 | 7.27 | 34.22 | 1.09 | 127 | 500 | 6.00 | 34.26 | 0.50 | 26.99 | 108 | 0.88 |
| 415 | 6.48 | 34.19 | 0.99 | 119 | 600 | 5.36 | 34.32 | 0.38 | 27.12 | 96 | 0.98 |
| 477 | 6.08 | 34.22 | 0.69 | 112 | 700 | 4.81 | 34.39 | 0.29 | 27.24 | 84 | 1.08 |
| 536 | 5.91 | 34.31 | 0.39 | 103 | 800 | 4.49 | 34.46 | 0.35 | 27.32 | 76 | 1.18 |
| 588 | 5.46 | 34.31 | 0.41 | 98 | 1000 | 3.85 | 34.47 | 0.50 | 27.40 | 69 | 1.33 |
| 667 | 4.94 | 34.36 | 0.29 | 88 | | | | | | | |
| 776 | 4.56 | 34.45 | 0.32 | 77 | | | | | | | |
| 890 | 4.20 | 34.47 | 0.43 | 72 | | | | | | | |
| 986 | 3.90 | 34.47 | 0.48 | 69 | | | | | | | |
| 1128 | 3.39 | 34.54 | 0.68 | 59 | | | | | | | |
| 1178 | 3.33 | 34.56 | 0.68 | 57 | | | | | | | |

D-6
(70$^{5}$.65)

HORIZON; October 15, 1958; 1614, 1805 GCT; 35°38'N, 122°40.5'W; sounding, 1610 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.80 | 33.37 | 5.63 | 360 | 0 | (16.80) | (33.37) | (5.63) | (24.33) | (360) | (0.00) |
| 12 | 16.81 | 33.39 | 5.62 | 359 | 10 | 16.80 | 33.39 | 5.62 | 24.34 | 360 | 0.04 |
| 31 | 12.38 | 33.35 | 4.79 | 272 | 20 | 16.77 | 33.39 | 5.61 | 24.35 | 358 | 0.07 |
| 45 | 11.76 | 33.42 | 4.36 | 256 | 30 | 12.45 | 33.35 | 4.81 | 25.24 | 274 | 0.10 |
| 78 | 10.12 | 33.54 | 3.85 | 220 | 50 | 11.46 | 33.44 | 4.25 | 25.50 | 249 | 0.15 |
| 105 | 9.44 | 33.62 | 3.58 | 203 | 75 | 10.22 | 33.53 | 3.89 | 25.79 | 222 | 0.21 |
| 133 | 9.06 | 33.75 | 3.14 | 187 | 100 | 9.58 | 33.61 | 3.61 | 25.96 | 206 | 0.27 |
| 169 | 8.94 | 33.97 | 2.24 | 169 | 150 | 9.00 | 33.82 | 2.89 | 26.22 | 181 | 0.37 |
| 203 | 8.79 | 34.03 | 2.06 | 162 | 200 | 8.80 | 34.03 | 2.07 | 26.42 | 162 | 0.45 |
| 226 | 8.52 | 34.05 | 2.07 | 156 | 250 | 8.39 | 34.09 | 1.92 | 26.52 | 152 | 0.53 |
| 273 | 8.22 | 34.15 | 1.58 | 145 | 300 | 7.82 | 34.18 | 1.37 | 26.67 | 138 | 0.61 |
| 310 | 7.62 | 34.18 | 1.29 | 135 | 400 | 6.85 | 34.22 | 0.78 | 26.85 | 121 | 0.74 |
| 362 | 7.10 | 34.22 | 0.94 | 124 | 500 | 6.12 | 34.25 | 0.57 | 26.97 | 110 | 0.86 |
| 418 | 6.76 | 34.22 | 0.70 | 120 | 600 | 5.48 | 34.32 | 0.36 | 27.10 | 97 | 0.97 |
| 479 | 6.28 | 34.23 | 0.62 | 113 | 700 | 4.97 | 34.37 | 0.30 | 27.21 | 87 | 1.07 |
| 542a) | 5.8 | 34.28 | 0.44 | 103 | 800 | 4.47 | 34.42 | 0.35 | 27.29 | 79 | 1.16 |
| | | | | | 1000 | 3.83 | 34.49 | 0.54 | 27.42 | 67 | 1.32 |
| 695 | 4.98 | 34.37 | 0.30 | 87 | | | | | | | |
| 809 | 4.44 | 34.42 | 0.36 | 78 | | | | | | | |
| 928 | 4.04 | 34.49 | 0.47 | 69 | | | | | | | |
| 1026 | 3.75 | 34.49 | 0.59 | 66 | | | | | | | |
| 1169 | 3.30 | 34.51 | 0.73 | 60 | | | | | | | |
| 1219 | 3.20 | 34.54 | 0.81 | 57 | | | | | | | |

a) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_{-5}^{3}$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_{-5}^{3}$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

D-7
(70.65)

HORIZON; October 15, 1958; 2005 GCT; 35°43'N, 122°44'W; sounding, 760 fm; wind, 350°, force 4; weather, partly cloudy; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.68 | 33.43 | 5.65 | 354 | 0 | 16.68 | 33.43 | 5.65 | 24.40 | 354 | 0.00 |
| 10 | 16.58 | 33.37 | 5.63 | 355 | 10 | 16.58 | 33.37 | 5.63 | 24.39 | 355 | 0.04 |
| 39 | 12.27 | 33.49 | 4.47 | 260 | 20 | 15.98 | 33.38 | 5.50 | 24.52 | 342 | 0.07 |
| 58 | 11.00 | 33.62 | 3.81 | 228 | 30 | 14.55 | 33.42 | 5.13 | 24.88 | 308 | 0.10 |
| 72 | 10.55 | 33.64 | 3.59 | 218 | 50 | 11.40 | 33.55 | 4.02 | 25.59 | 240 | 0.16 |
| 95 | 10.00 | 33.73 | 3.19 | 204 | 75 | 10.42 | 33.65 | 3.52 | 25.85 | 216 | 0.21 |
| 125 | 9.72 | 33.79 | 2.90 | 194 | 100 | 9.97 | 33.74 | 3.13 | 26.01 | 201 | 0.27 |
| 158 | 9.26 | 33.87 | 2.57 | 182 | 150 | 9.39 | 33.85 | 2.66 | 26.18 | 185 | 0.37 |
| 187 | 9.02 | 33.97 | 2.33 | 170 | 200 | 8.95 | 34.01 | 2.22 | 26.37 | 166 | 0.46 |
| 211 | 8.82 | 34.03 | 2.12 | 163 | 250 | 8.45 | 34.04 | 1.93 | 26.47 | 157 | 0.54 |
| 249 | 8.46 | 34.03 | 1.94 | 158 | 300 | 8.10 | 34.14 | 1.49 | 26.61 | 144 | 0.62 |
| 296 | 8.18 | 34.14 | 1.52 | 145 | 400 | 6.91 | 34.16 | 1.01 | 26.80 | 126 | 0.76 |
| 339 | 7.68 | 34.16 | 1.18 | 137 | 500 | 6.30 | 34.25 | 0.59 | 26.94 | 112 | 0.88 |
| 397 | 6.92 | 34.16 | 1.02 | 126 | 600 | 5.55 | 34.32 | 0.36 | 27.09 | 98 | 0.99 |
| 445 | 6.72 | 34.22 | 0.74 | 120 | 700 | 5.13 | 34.36 | 0.30 | 27.18 | 90 | 1.09 |
| 502a) | 6.3 | 34.25 | 0.55 | 112 | 800 | 4.63 | 34.41 | 0.28 | 27.27 | 81 | 1.18 |
| 556 | 5.72 | 34.30 | 0.39 | 101 | 1000 | 3.93 | 34.48 | 0.49 | 27.40 | 69 | 1.35 |
| 633 | 5.43 | 34.32 | 0.33 | 97 | | | | | | | |
| 740 | 4.94 | 34.39 | 0.28 | 86 | | | | | | | |
| 847 | 4.42 | 34.42 | 0.30 | 78 | | | | | | | |
| 954 | 4.06 | 34.47 | 0.46 | 71 | | | | | | | |
| 1082 | 3.71 | 34.48 | 0.54 | 66 | | | | | | | |
| 1131 | 3.61 | 34.48 | 0.61 | 66 | | | | | | | |

D-8
(69$^{5}$.65)

HORIZON; October 15, 1958; 2257 GCT; 35°47'N, 122°46'W; sounding, 1810 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.14 | 33.41 | 5.73 | 343 | 0 | 16.14 | 33.41 | 5.73 | 24.52 | 343 | 0.00 |
| 9 | 16.06 | 33.40 | 5.73 | 342 | 10 | 16.04 | 33.40 | 5.73 | 24.53 | 342 | 0.03 |
| 38 | 10.98 | 33.60 | 3.61 | 229 | 20 | 15.60 | 33.41 | 5.63 | 24.64 | 331 | 0.07 |
| 57 | 10.60 | 33.62 | 3.39 | 221 | 30 | 13.85 | 33.49 | 4.98 | 25.06 | 291 | 0.10 |
| 72 | 10.30 | 33.68 | 3.20 | 212 | 50 | 10.69 | 33.61 | 3.46 | 25.77 | 224 | 0.15 |
| 95 | 9.82 | 33.78 | 2.96 | 197 | 75 | 10.22 | 33.69 | 3.17 | 25.91 | 210 | 0.20 |
| 123 | 9.58 | 33.87 | 2.60 | 186 | 100 | 9.79 | 33.80 | 2.90 | 26.07 | 195 | 0.26 |
| 157 | 9.35 | 33.95 | 2.31 | 176 | 150 | 9.40 | 33.94 | 2.37 | 26.24 | 178 | 0.35 |
| 185 | 9.12 | 33.96 | 2.15 | 172 | 200 | 8.98 | 33.99 | 2.23 | 26.36 | 168 | 0.44 |
| 208 | 8.94 | 34.02 | 2.27 | 165 | 250 | 8.86 | 34.16 | 1.35 | 26.50 | 154 | 0.52 |
| 245 | 8.89 | 34.16 | 1.34 | 154 | 300 | 8.38 | 34.16 | 1.62 | 26.58 | 146 | 0.60 |
| 291 | 8.47 | 34.16 | 1.63 | 148 | 400 | 7.40 | 34.22 | 1.08 | 26.78 | 128 | 0.74 |
| 333 | 7.86 | 34.16 | 1.45 | 140 | 500 | 6.22 | 34.24 | 0.56 | 26.94 | 112 | 0.86 |
| 388 | 7.56 | 34.21 | 1.17 | 131 | 600 | 5.58 | 34.33 | 0.37 | 27.10 | 97 | 0.98 |
| 432 | 6.89 | 34.25 | 0.88 | 120 | 700 | 5.00 | 34.36 | 0.36 | 27.19 | 88 | 1.07 |
| 487 | 6.30 | 34.23 | 0.59 | 114 | 800 | 4.68 | 34.38 | 0.35 | 27.24 | 84 | 1.17 |
| 537 | 6.04 | 34.27 | 0.50 | 108 | 1000 | 3.91 | 34.50 | 0.48 | 27.42 | 67 | 1.32 |
| 612 | 5.49 | 34.33 | 0.36 | 96 | | | | | | | |
| 716 | 4.92 | 34.36 | 0.36 | 88 | | | | | | | |
| 821 | 4.62 | 34.38 | 0.33 | 84 | | | | | | | |
| 929 | 4.22 | 34.45 | 0.42 | 74 | | | | | | | |
| 1055 | 3.70 | 34.52 | 0.55 | 63 | | | | | | | |
| 1105 | 3.60 | 34.51 | 0.61 | 63 | | | | | | | |

a) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

D-9
(69.65)

HORIZON; October 16, 1958; 0112 GCT; 35°52'N, 122°50'W; sounding, 1900 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 21°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.16 | 33.36 | 5.84 | 347 | 0 | 16.16 | 33.36 | 5.84 | 24.47 | 347 | 0.00 |
| 10 | 16.13 | 33.38 | 5.83 | 345 | 10 | 16.13 | 33.38 | 5.83 | 24.49 | 345 | 0.03 |
| 38 | 12.02 | 33.49 | 4.22 | 255 | 20 | 16.00 | 33.39 | 5.80 | 24.53 | 341 | 0.07 |
| 56 | 10.93 | 33.58 | 3.62 | 230 | 30 | 12.60 | 33.41 | 4.75 | 25.26 | 272 | 0.10 |
| 70 | 10.40 | 33.61 | 3.44 | 218 | 50 | 11.62 | 33.55 | 3.81 | 25.55 | 244 | 0.15 |
| 94 | 10.04 | 33.68 | 3.10 | 208 | 75 | 10.30 | 33.63 | 3.35 | 25.85 | 216 | 0.21 |
| 120 | 9.72 | 33.79 | 2.78 | 194 | 100 | 9.99 | 33.70 | 3.03 | 25.97 | 205 | 0.26 |
| 151 | 9.52 | 33.88 | 2.43 | 184 | 150 | 9.53 | 33.88 | 2.44 | 26.18 | 184 | 0.36 |
| 177 | 9.36 | 33.93 | 2.27 | 178 | 200 | 9.15 | 33.96 | 2.12 | 26.30 | 173 | 0.45 |
| 200 | 9.15 | 33.96 | 2.12 | 173 | 250 | 8.92 | 34.18 | 1.77 | 26.51 | 153 | 0.53 |
| 235 | 8.94 | 34.08 | 1.89 | 161 | 300 | 8.78 | 34.24 | 1.50 | 26.58 | 146 | 0.61 |
| 280 | 8.84 | 34.25a) | 1.57 | 147 | 400 | 7.59 | 34.23 | 1.19 | 26.75 | 130 | 0.75 |
| 320 | 8.65 | 34.22a) | 1.42 | 146 | 500 | 6.55 | 34.26 | 0.68 | 26.92 | 114 | 0.88 |
| 375 | 7.78 | 34.23 | 1.30 | 133 | 600 | 5.69 | 34.31 | 0.35 | 27.07 | 100 | 1.00 |
| 420 | 7.42 | 34.23 | 1.07 | 128 | 700 | 5.12 | 34.34 | 0.28 | 27.16 | 91 | 1.10 |
| 474 | 6.77 | 34.25 | 0.80 | 118 | 800 | 4.62 | 34.36 | 0.28 | 27.23 | 84 | 1.19 |
| 524 | 6.36 | 34.26 | 0.59 | 112 | 1000 | 3.91 | (34.50) | 0.45 | (27.42) | (67) | (1.36) |
| 599 | 5.70 | 34.31 | 0.35 | 100 | | | | | | | |
| 701 | 5.10 | 34.34 | 0.28 | 91 | | | | | | | |
| 803 | 4.62 | 34.36 | 0.28 | 84 | | | | | | | |
| 907 | 4.26 | 34.44 | 0.38 | 75 | | | | | | | |
| 1031 | 3.80 | 34.54u | 0.50 | | | | | | | | |
| 1080 | 3.67 | 34.51u | 0.58 | | | | | | | | |

D-10
(68$^{5}$.65)

HORIZON; October 16, 1958; 0340 GCT; 36°00'N, 122°56'W; sounding, 1870 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.12 | 33.43 | 5.77 | 341 | 0 | 16.12 | 33.43 | 5.77 | 24.54 | 341 | 0.00 |
| 9 | 16.13 | 33.40 | 5.78 | 343 | 10 | 16.13 | 33.40 | 5.78 | 24.51 | 343 | 0.03 |
| 27 | 12.86 | 33.40 | 5.76 | 278 | 20 | 16.01 | 33.40 | 5.78 | 24.54 | 341 | 0.07 |
| 40 | 11.32 | 33.60 | 5.34 | 235 | 30 | 12.38 | 33.45 | 5.66 | 25.34 | 265 | 0.10 |
| 73 | 10.14 | 33.69 | 3.16 | 208 | 50 | 10.85 | 33.64 | 4.75 | 25.76 | 224 | 0.15 |
| 101 | 9.91 | 33.75 | 2.95 | 200 | 75 | 10.07 | 33.70 | 3.12 | 25.94 | 207 | 0.20 |
| 127 | 9.76 | 33.82 | 2.82 | 193 | 100 | 9.93 | 33.75 | 2.96 | 26.01 | 201 | 0.25 |
| 163 | 9.46 | 33.89 | 2.45 | 184 | 150 | 9.56 | 33.87 | 2.56 | 26.16 | 186 | 0.35 |
| 195 | 9.27 | 33.96 | 2.23 | 175 | 200 | 9.25 | 33.98 | 2.20 | 26.30 | 173 | 0.44 |
| 217 | 9.13 | 34.02 | 2.03 | 168 | 250 | 8.87 | 34.11 | 1.82 | 26.46 | 158 | 0.53 |
| 263 | 8.79 | 34.14 | 1.75 | 154 | 300 | 8.45 | 34.17 | 1.54 | 26.57 | 147 | 0.60 |
| 299 | 8.46 | 34.17 | 1.54 | 147 | 400 | 7.54 | 34.20 | 1.11 | 26.73 | 132 | 0.75 |
| 348 | 8.03 | 34.18 | 1.39 | 140 | 500 | 6.42 | 34.24 | 0.71 | 26.92 | 114 | 0.88 |
| 403 | 7.50 | 34.20 | 1.09 | 132 | 600 | 5.60 | 34.30 | 0.39 | 27.07 | 100 | 0.99 |
| 462 | 6.84 | 34.23 | 0.90 | 120 | 700 | 5.04 | 34.36 | 0.39 | 27.19 | 89 | 1.09 |
| 520b) | 6.2 | 34.25 | 0.59 | 111 | 800 | 4.58 | 34.40 | 0.34 | 27.27 | 81 | 1.18 |
| 571b) | 5.8 | 34.29 | 0.38 | 103 | 1000 | 3.88 | 34.47 | 0.45 | 27.40 | 69 | 1.35 |
| 648 | 5.28 | 34.33 | 0.39 | 94 | | | | | | | |
| 754 | 4.78 | 34.40 | 0.39 | 84 | | | | | | | |
| 867 | 4.32 | 34.40 | 0.28 | 78 | | | | | | | |
| 962 | 4.02 | 34.45 | 0.39 | 72 | | | | | | | |
| 1102 | 3.57 | 34.52 | 0.62 | 62 | | | | | | | |
| 1150 | 3.49 | 34.54 | 0.64 | 60 | | | | | | | |

a) The use of these values results in an unusual density structure, but nevertheless values were accepted in drawing the property curve.

b) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature value was determined by calculation, using the unprotected thermometer reading.

SIO

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **D-11 (68.65)** | HORIZON; October 16, 1958; 0703 GCT; 36°09'N, 123°02.5'W; sounding, 1860 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 16.70 | 33.39 | 5.68 | 357 | 0 | 16.70 | 33.39 | 5.68 | 24.37 | 357 | 0.00 |
| 9 | 16.64 | 33.37 | 5.71 | 357 | 10 | 16.63 | 33.37 | 5.70 | 24.37 | 357 | 0.04 |
| 42 | 11.02 | 33.58 | 3.58 | 231 | 20 | 16.00 | 33.40 | 5.48 | 24.54 | 341 | 0.07 |
| 61 | 10.46 | 33.68 | 3.24 | 214 | 30 | 13.40 | 33.49 | 4.46 | 25.17 | 281 | 0.10 |
| 75 | 10.15 | 33.66 | 3.24 | 211 | 50 | 10.76 | 33.62 | 3.41 | 25.77 | 224 | 0.15 |
| 104 | 9.79 | 33.77 | 2.98 | 197 | 75 | 10.15 | 33.66 | 3.24 | 25.90 | 211 | 0.21 |
| 132 | 9.50 | 33.86 | 2.64 | 186 | 100 | 9.82 | 33.74 | 3.01 | 26.03 | 199 | 0.26 |
| 170 | 9.22 | 33.98 | 2.14 | 173 | 150 | 9.38 | 33.92 | 2.32 | 26.23 | 180 | 0.35 |
| 203 | 9.02 | 34.07 | 1.96 | 163 | 200 | 9.03 | 34.06 | 1.99 | 26.40 | 164 | 0.44 |
| 227 | 8.81 | 34.12 | 1.89 | 156 | 250 | 8.69 | 34.13 | 1.75 | 26.51 | 153 | 0.52 |
| 275 | 8.56 | 34.14 | 1.59 | 151 | 300 | 8.30 | 34.17 | 1.50 | 26.60 | 145 | 0.60 |
| 312 | 8.21 | 34.18 | 1.48 | 143 | 400 | 7.30 | 34.22 | 1.10 | 26.78 | 127 | 0.74 |
| 365 | 7.70 | 34.19 | 1.20 | 135 | 500 | 6.41 | 34.23 | 0.63 | 26.91 | 115 | 0.87 |
| 421 | 7.06 | 34.23 | 1.05 | 124 | 600 | 5.54 | 34.31 | 0.38 | 27.09 | 98 | 0.98 |
| 483 | 6.56 | 34.23 | 0.68 | 116 | 700 | 4.98 | 34.30 | 0.33 | 27.15 | 92 | 1.08 |
| 545a) | 6.0 | 34.25 | 0.50 | 108 | 800 | 4.64 | 34.34 | 0.32 | 27.22 | 86 | 1.18 |
| 598 | 5.54 | 34.31 | 0.38 | 98 | 1000 | 3.95 | 34.50 | 0.48 | 27.41 | 68 | 1.34 |
| 678 | 5.06 | 34.30 | 0.54u | 94 | | | | | | | |
| 789 | 4.68 | 34.34 | 0.32 | 87 | | | | | | | |
| 905 | 4.22 | 34.47 | 0.35 | 72 | | | | | | | |
| 1001 | 3.94 | 34.50 | 0.48 | 67 | | | | | | | |
| 1144 | 3.58 | 34.49 | 0.55 | 64 | | | | | | | |
| 1195 | 3.50 | 34.55 | 0.66 | 59 | | | | | | | |
| **D-12 (67.65)** | HORIZON; October 16, 1958; 1058 GCT; 36°17'N, 123°09'W; sounding, 1890 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 08°. | | | | | | | | | | |
| 0 | 16.45 | 33.48 | 5.58 | 345 | 0 | 16.45 | 33.48 | 5.58 | 24.50 | 345 | 0.00 |
| 10 | 16.46 | 33.42 | 5.48 | 349 | 10 | 16.46 | 33.42 | 5.48 | 24.45 | 349 | 0.03 |
| 40 | 13.86 | 33.48 | 4.87 | 290 | 20 | 16.43 | 33.42 | 5.42 | 24.46 | 348 | 0.07 |
| 60 | 11.29 | 33.58 | 3.88 | 236 | 30 | 16.20 | 33.42 | 5.28 | 24.52 | 343 | 0.10 |
| 75 | 10.36 | 33.64 | 3.75 | 216 | 50 | 12.48 | 33.53 | 4.38 | 25.38 | 261 | 0.16 |
| 100 | 9.68 | 33.75 | 3.26 | 196 | 75 | 10.36 | 33.64 | 3.75 | 25.85 | 216 | 0.22 |
| 130 | 9.33 | 33.95 | 2.55 | 176 | 100 | 9.68 | 33.75 | 3.26 | 26.06 | 196 | 0.28 |
| 165 | 8.80 | 34.02 | 2.24 | 163 | 150 | 9.02 | 33.99 | 2.38 | 26.34 | 169 | 0.37 |
| 194 | 8.66 | 34.16 | 1.91 | 151 | 200 | 8.69 | 34.17 | 1.82 | 26.54 | 150 | 0.45 |
| 220 | 8.82 | 34.29 | 1.59 | 144 | 250 | 8.45 | 34.25 | 1.61 | 26.64 | 141 | 0.52 |
| 259 | 8.32 | 34.23 | 1.63 | 140 | 300 | 7.86 | 34.24 | 1.37 | 26.72 | 134 | 0.60 |
| 309 | 7.75 | 34.24 | 1.30 | 132 | 400 | 6.84 | 34.24 | 0.82 | 26.86 | 120 | 0.72 |
| 353 | 7.42 | 34.25 | 1.01 | 127 | 500 | 6.10 | 34.29 | 0.51 | 27.00 | 107 | 0.84 |
| 412 | 6.69 | 34.24 | 0.78 | 118 | 600 | 5.50 | 34.34 | 0.37 | 27.11 | 96 | 0.95 |
| 463 | 6.44 | 34.31 | 0.66 | 109 | 700 | 4.98 | 34.37 | 0.30 | 27.20 | 87 | 1.05 |
| 521 | 5.94 | 34.27 | 0.44 | 106 | 800 | 4.57 | 34.40 | 0.30 | 27.28 | 80 | 1.14 |
| 577 | 5.65 | 34.32 | 0.38 | 99 | 1000 | 3.95 | (34.52) | 0.48 | (27.43) | (66) | (1.30) |
| 655 | 5.16 | 34.36 | 0.33 | 90 | | | | | | | |
| 764 | 4.72 | 34.39 | 0.28 | 83 | | | | | | | |
| 874 | 4.28 | 34.43 | 0.32 | 76 | | | | | | | |
| 982 | 4.00 | 34.51 | 0.43 | 67 | | | | | | | |
| 1112 | 3.60 | 34.56u | 0.62 | | | | | | | | |
| 1162 | 3.46 | 34.52u | 0.59 | | | | | | | | |

a) Both protected reversing thermometers at this level malfunctioned; since a satisfactory depth was obtained, the temperature was determined by calculation, using the unprotected thermometer reading.

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5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| HORIZON; October 16, 1958; 1852 GCT; 35°12'N, 123°47.5'W; sounding, 2150 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 27°. | | | | | | | | | | | D-13 (70.80) |
| 0 | 16.72 | 33.43 | 5.63 | 354 | 0 | 16.72 | 33.43 | 5.63 | 24.40 | 354 | 0.00 |
| 9 | 16.72 | 33.38 | 5.63 | 358 | 10 | 16.72 | 33.38 | 5.63 | 24.36 | 358 | 0.04 |
| 40 | 12.64 | 33.39 | 4.98 | 274 | 20 | 16.67 | 33.38 | 5.62 | 24.37 | 357 | 0.07 |
| 58 | 10.64 | 33.41 | 4.60 | 238 | 30 | 16.50 | 33.38 | 5.58 | 24.41 | 353 | 0.11 |
| 71 | 9.94 | 33.44 | 4.70 | 224 | 50 | 11.43 | 33.40 | 4.75 | 25.47 | 252 | 0.17 |
| 97 | 9.16 | 33.64 | 4.38 | 197 | 75 | 9.65 | 33.46 | 4.68 | 25.83 | 218 | 0.23 |
| 124 | 8.94 | 33.85 | 2.96 | 178 | 100 | 9.13 | 33.69 | 4.30 | 26.09 | 193 | 0.28 |
| 159 | 8.38 | 33.96 | 2.69 | 161 | 150 | 8.52 | 33.93 | 2.74 | 26.38 | 166 | 0.37 |
| 190 | 8.02 | 34.05 | 2.14 | 150 | 200 | 7.97 | 34.06 | 2.10 | 26.57 | 148 | 0.45 |
| 213 | 7.83 | 34.08 | 1.98 | 145 | 250 | 7.15 | 34.07 | 1.91 | 26.69 | 136 | 0.52 |
| 256 | 7.04 | 34.07 | 1.90 | 135 | 300 | 6.82 | 34.14 | 1.35 | 26.79 | 127 | 0.59 |
| 290 | 6.93 | 34.13 | 1.46 | 129 | 400 | 6.28 | 34.21 | 0.70 | 26.91 | 115 | 0.71 |
| 338 | 6.57 | 34.16 | 1.04 | 122 | 500 | 5.75 | 34.34 | 0.39 | 27.08 | 99 | 0.83 |
| 391 | 6.34 | 34.20 | 0.73 | 116 | 600 | 5.08 | 34.36 | 0.35 | 27.18 | 90 | 0.93 |
| 448 | 6.00 | 34.25 | 0.56 | 108 | 700 | 4.68 | 34.41 | 0.35 | 27.26 | 82 | 1.02 |
| 505 | 5.74 | 34.34 | 0.37 | 98 | 800 | 4.28 | 34.43 | 0.43 | 27.33 | 76 | 1.10 |
| 556 | 5.36 | 34.34 | 0.35 | 94 | 1000 | 3.62 | 34.49 | 0.45 | 27.44 | 65 | 1.26 |
| 634 | 4.90 | 34.38 | 0.35 | 86 | | | | | | | |
| 741 | 4.54 | 34.43 | 0.38 | 78 | | | | | | | |
| 856 | 4.06 | 34.44 | 0.46 | 73 | | | | | | | |
| 954 | 3.75 | 34.49 | 0.42 | 66 | | | | | | | |
| 1095 | 3.38 | 34.50 | 0.57 | 62 | | | | | | | |
| 1145 | 3.30 | 34.54 | 0.69 | 58 | | | | | | | |
| HORIZON; October 16, 1958; 2226, 2250, 2344 GCT; 35°23'N, 123°26.5'W; sounding, 1950 fm; wind, 320°, force 4; weather, cloudy; sea, rough; wire angle, 10°, 14°, 14°. | | | | | | | | | | | D-14 (70.75) |
| 0 | 16.94 | 33.42 | 5.44 | 360 | 0 | 16.94 | 33.42 | 5.44 | 24.34 | 360 | 0.00 |
| 11 | 16.86 | 33.37 | 5.52 | 362 | 10 | 16.86 | 33.37 | 5.52 | 24.32 | 362 | 0.04 |
| 45 | 13.00 | 33.43 | 4.67 | 278 | 20 | 16.79 | 33.37 | 5.52 | 24.34 | 360 | 0.07 |
| | | | | | 30 | 16.65 | 33.37 | 5.50 | 24.37 | 357 | 0.11 |
| 64 | 11.94 | 33.49 | 4.19 | 254 | 50 | 12.63 | 33.45 | 4.51 | 25.28 | 270 | 0.17 |
| 78 | 10.82 | 33.58 | 3.74 | 228 | 75 | 11.12 | 33.56 | 3.86 | 25.66 | 234 | 0.23 |
| 108 | 9.76 | 33.73 | 3.32 | 199 | 100 | 9.80 | 33.69 | 3.45 | 25.99 | 203 | 0.29 |
| 137 | 9.23 | 33.91 | 2.70 | 178 | 150 | 9.10 | 33.96 | 2.52 | 26.31 | 172 | 0.38 |
| 176 | 8.86 | 34.06 | 2.17 | 161 | 200 | 8.59 | 34.09 | 1.98 | 26.49 | 155 | 0.47 |
| | | | | | 250 | 8.19 | 34.18 | 1.51 | 26.63 | 142 | 0.54 |
| 215 | 8.38 | 34.10 | 1.86 | 151 | 300 | 7.67 | 34.23 | 1.16 | 26.74 | 132 | 0.61 |
| 240 | 8.24 | 34.16 | 1.58 | 144 | 400 | 6.38 | 34.18 | 0.97 | 26.88 | 118 | 0.74 |
| 289 | 7.81 | 34.23 | 1.21 | 134 | 500 | 5.88 | 34.30 | 0.44 | 27.03 | 104 | 0.86 |
| 330 | 7.32 | 34.22 | 1.06 | 128 | 600 | 5.26 | 34.39 | 0.29 | 27.18 | 90 | 0.96 |
| 385 | 6.43 | 34.16 | 1.07 | 121 | 700 | 4.85 | 34.43 | 0.26 | 27.26 | 82 | 1.05 |
| 444 | 6.30 | 34.27 | 0.60 | 110 | 800 | 4.46 | 34.45 | 0.32 | 27.32 | 76 | 1.14 |
| 510 | 5.82 | 34.30 | 0.42 | 102 | 1000 | 3.84 | 34.51 | 0.50 | 27.43 | 66 | 1.29 |
| 573 | 5.38 | 34.35 | 0.32 | 93 | | | | | | | |
| 629 | 5.14 | 34.42 | 0.26 | 86 | | | | | | | |
| 712 | 4.80 | 34.43 | 0.28 | 81 | | | | | | | |
| 826 | 4.37 | 34.51u | 0.34 | | | | | | | | |
| 945 | 3.98 | 34.45u | 0.45 | | | | | | | | |
| 1044 | 3.72 | 34.52 | 0.57 | 64 | | | | | | | |
| 1188 | 3.32 | 34.54 | 0.74 | 58 | | | | | | | |
| 1239 | 3.23 | 34.57 | 0.81 | 56 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ 10 cm/g | ΔD dyn. m |

D-15
(70.73)

HORIZON; October 17, 1958; 0213, 0225, 0310 GCT; 35°28'N, 123°16.5'W; sounding, 2025 fm; wind, 350°, force 3; weather, cloudy; sea, rough; wire angle, 10°, 10°, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.92 | 33.46 | 5.56 | 356 | 0 | 16.92 | 33.46 | 5.56 | 24.38 | 356 | 0.00 |
| 10 | 16.90 | 33.42 | 5.56 | 358 | 10 | 16.90 | 33.42 | 5.56 | 24.35 | 358 | 0.04 |
| 39 | 13.59 | 33.17 | 6.00 | 308 | 20 | 16.87 | 33.41 | 5.57 | 24.35 | 358 | 0.07 |
| | | | | | 30 | 16.65 | 33.39 | 5.63 | 24.38 | 356 | 0.11 |
| 60 | 11.09 | 33.24 | 5.04 | 258 | 50 | 12.02 | 33.20 | 5.46 | 25.21 | 277 | 0.17 |
| 75 | 9.84 | 33.39 | 4.54 | 226 | 75 | 9.84 | 33.39 | 4.54 | 25.74 | 226 | 0.23 |
| 99 | 9.40 | 33.68 | 3.83 | 198 | 100 | 9.39 | 33.69 | 3.80 | 26.06 | 196 | 0.29 |
| 129 | 9.09 | 33.86 | 3.03 | 180 | 150 | 8.95 | 33.95 | 2.59 | 26.32 | 171 | 0.38 |
| 163 | 8.84 | 34.00 | 2.26 | 166 | 200 | 8.59 | 34.08 | 1.79 | 26.48 | 156 | 0.46 |
| 194 | 8.63 | 34.06 | 1.80 | 158 | 250 | 7.46 | 34.03 | 2.30 | 26.62 | 143 | 0.54 |
| 218 | 8.36 | 34.11 | 1.77 | 150 | 300 | 6.80 | 34.04 | 1.90 | 26.71 | 134 | 0.61 |
| 258 | 7.24 | 34.02 | 2.42 | 142 | 400 | 6.67 | 34.28 | 0.87 | 26.92 | 114 | 0.74 |
| 308 | 6.77 | 34.04 | 1.77 | 134 | 500 | 5.85 | 34.27 | 0.47 | 27.02 | 105 | 0.85 |
| 352 | 7.09 | 34.20 | 1.01 | 126 | 600 | 5.23 | 34.32 | 0.41 | 27.13 | 94 | 0.97 |
| 413 | 6.58 | 34.28 | 0.82 | 113 | 700 | 4.75 | 34.37 | 0.33 | 27.23 | 85 | 1.05 |
| 463 | 6.12 | 34.25 | 0.51 | 110 | 800 | 4.38 | (34.43) | 0.32 | (27.32) | (76) | (1.14) |
| 522 | 5.69 | 34.29 | 0.44 | 102 | 1000 | 3.80 | (34.50) | 0.52 | (27.43) | (66) | (1.30) |
| 653 | 4.95 | 34.34 | 0.37 | 90 | | | | | | | |
| 761 | 4.52 | 34.40 | 0.29 | 80 | | | | | | | |
| 870 | 4.15 | 34.26r | 0.38 | | | | | | | | |
| 978 | 3.85 | 34.30r | 0.50 | | | | | | | | |
| 1107 | 3.58 | 34.51a) | 0.61 | 63 | | | | | | | |
| 1157 | 3.44 | 34.52 | 0.70 | 61 | | | | | | | |

D-16
(70.70)

HORIZON; October 17, 1958; 0522, 0615, 0657 GCT; 35°32.5'N, 123°05'W; sounding, 1980 fm; wind, 310°, force 3; weather, cloudy; sea, rough; wire angle, 24°, 26°, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.78 | 33.40a) | 5.55 | 358 | 0 | 16.78 | 33.40 | 5.55 | 24.36 | 358 | 0.00 |
| 10 | 16.74 | 33.40 | 5.37 | 356 | 10 | 16.74 | 33.40 | 5.37 | 24.38 | 356 | 0.04 |
| 38 | 13.22 | 33.35 | 4.97 | 288 | 20 | 16.62 | 33.40 | 5.31 | 24.40 | 354 | 0.07 |
| 56 | 11.53 | 33.53 | 3.96 | 244 | 30 | 15.80 | 33.38 | 5.19 | 24.58 | 337 | 0.10 |
| 69 | 10.74 | 33.56 | 3.73 | 228 | 50 | 11.99 | 33.47 | 4.25 | 25.42 | 256 | 0.16 |
| 92 | 10.04 | 33.68 | 3.22 | 208 | 75 | 10.49 | 33.60 | 3.58 | 25.79 | 222 | 0.22 |
| 120 | 9.63 | 33.77 | 2.80 | 194 | 100 | 9.95 | 33.71 | 3.12 | 25.98 | 203 | 0.28 |
| 153 | 9.16 | 33.88a) | 2.57 | 180 | 150 | 9.20 | 33.88 | 2.61 | 26.23 | 180 | 0.38 |
| 181 | 9.07 | 34.00 | 2.20 | 169 | 200 | 8.82 | 34.04 | 2.01 | 26.42 | 162 | 0.46 |
| 204 | 8.79 | 34.05 | 2.00 | 161 | 250 | 8.10 | 34.05 | 2.20 | 26.54 | 151 | 0.54 |
| 242 | 8.18 | 34.04 | 2.21 | 153 | 300 | 7.60 | 34.13 | 1.77 | 26.67 | 138 | 0.62 |
| 287 | 7.84 | 34.13 | 1.79 | 141 | 400 | 6.83 | 34.19 | 0.90 | 26.82 | 124 | 0.75 |
| 330 | 7.05 | 34.11 | 1.74 | 132 | 500 | 6.03 | 34.25 | 0.48 | 26.98 | 109 | 0.87 |
| | | | | | 600 | 5.40 | 34.35 | 0.35 | 27.14 | 94 | 0.98 |
| 391 | 6.90 | 34.18 | 0.96 | 125 | 700 | 4.93 | 34.40 | 0.30 | 27.22 | 85 | 1.08 |
| 440 | 6.62 | 34.23 | 0.65 | 118 | 800 | 4.46 | 34.43 | 0.31 | 27.30 | 78 | 1.16 |
| 499 | 6.03 | 34.25 | 0.48 | 109 | 1000 | 3.80 | 34.48 | 0.50 | 27.42 | 67 | 1.32 |
| 554 | 5.61 | 34.33 | 0.36 | 98 | | | | | | | |
| 636 | 5.25 | 34.31u | 0.34 | | | | | | | | |
| 745 | 4.70 | 34.42 | 0.28 | 81 | | | | | | | |
| 852 | 4.26 | 34.43 | 0.33 | 76 | | | | | | | |
| 961 | 3.91 | 34.47 | 0.45 | 69 | | | | | | | |
| 1089 | 3.54 | 34.52 | 0.59 | 62 | | | | | | | |
| 1139 | 3.40 | 34.52 | 0.61 | 61 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta_{T}{}^{-5}{}_{3}$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta_{T}{}^{-5}{}_{3}$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

D-17
(70.67)

HORIZON; October 17, 1958; 0918 GCT; 35°38'N, 122°55'W; sounding, 1965 fm; wind, 320°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.82 | 33.50 | 5.48 | 352 | 0 | 16.82 | 33.50 | 5.48 | 24.42 | 352 | 0.00 |
| 11 | 16.82 | 33.46 | 5.23 | 354 | 10 | 16.82 | 33.46 | 5.25 | 24.40 | 354 | 0.04 |
| 40 | 14.55 | 33.43 | 5.10 | 308 | 20 | 16.81 | 33.46 | 5.21 | 24.40 | 354 | 0.07 |
| 60 | 11.63 | 33.34 | 4.41 | 260 | 30 | 16.59 | 33.45 | 5.16 | 24.44 | 350 | 0.10 |
| 75 | 10.82 | 33.58 | 3.64 | 228 | 50 | 12.80 | 33.37 | 4.80 | 25.20 | 278 | 0.17 |
| 99 | 9.92 | 33.65 | 3.43 | 208 | 75 | 10.82 | 33.58 | 3.64 | 25.72 | 228 | 0.23 |
| 128 | 9.32 | 33.84 | 2.90 | 185 | 100 | 9.90 | 33.65 | 3.42 | 25.94 | 207 | 0.29 |
| 163 | 9.10 | 34.00 | 2.28 | 170 | 150 | 9.18 | 33.97 | 2.46 | 26.30 | 173 | 0.38 |
| 191 | 8.90 | 34.11 | 2.02 | 158 | 200 | 8.85 | 34.13 | 1.96 | 26.48 | 156 | 0.47 |
| 217 | 8.76 | 34.14 | 1.77 | 154 | 250 | 8.41 | 34.14 | 1.62 | 26.56 | 149 | 0.54 |
| 256 | 8.33 | 34.14 | 1.59 | 148 | 300 | 7.82 | 34.16 | 1.53 | 26.67 | 138 | 0.62 |
| 305 | 7.76 | 34.17 | 1.52 | 137 | 400 | 7.15 | 34.24 | 0.85 | 26.83 | 123 | 0.75 |
| 350 | 7.16 | 34.21 | 1.35 | 126 | 500 | 6.20 | 34.31 | 0.56 | 27.00 | 106 | 0.87 |
| 409 | 7.14 | 34.30 | 0.76 | 119 | 600 | 5.55 | 34.39 | 0.35 | 27.15 | 92 | 0.98 |
| 458 | 6.38 | 34.25 | 0.72 | 113 | 700 | 5.06 | 34.41 | 0.29 | 27.22 | 86 | 1.07 |
| 519 | 6.13 | 34.33 | 0.49 | 104 | 800 | 4.56 | 34.46 | 0.32 | 27.32 | 76 | 1.16 |
| 573 | 5.70 | 34.39 | 0.37 | 94 | 1000 | 3.79 | 34.55 | 0.52 | 27.47 | 62 | 1.31 |
| 652 | 5.29 | 34.39 | 0.29 | 90 | | | | | | | |
| 762 | 4.72 | 34.45 | 0.31 | 79 | | | | | | | |
| 871 | 4.27 | 34.47 | 0.33 | 73 | | | | | | | |
| 980 | 3.85 | 34.54 | 0.50 | 64 | | | | | | | |
| 1110 | 3.46 | 34.56 | 0.56 | 58 | | | | | | | |
| 1160 | 3.35 | 34.55 | 0.61 | 57 | | | | | | | |

D-18
(70.66)

HORIZON; October 17, 1958; 1133 GCT; 35°40.5'N, 122°49'W; sounding, 1745 fm; wind, 300°, force 4; weather, cloudy; sea, rough; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.84 | 33.42 | 5.28 | 358 | 0 | 16.84 | 33.42 | 5.28 | 24.36 | 358 | 0.00 |
| 10 | 16.82 | 33.44 | 5.29 | 356 | 10 | 16.82 | 33.44 | 5.29 | 24.38 | 356 | 0.04 |
| 38 | 12.49 | 33.23 | 4.92 | 283 | 20 | 16.68 | 33.44 | 5.28 | 24.41 | 353 | 0.07 |
| 56 | 11.53 | 33.37 | 4.42 | 256 | 30 | 14.82 | 33.32 | 5.14 | 24.74 | 322 | 0.10 |
| 71 | 11.12 | 33.48 | 3.94 | 240 | 50 | 11.82 | 33.31 | 4.60 | 25.34 | 265 | 0.16 |
| 94 | 9.64 | 33.68 | 3.38 | 202 | 75 | 10.93 | 33.51 | 3.82 | 25.66 | 234 | 0.23 |
| 121 | 9.23 | 33.81 | 2.78 | 186 | 100 | 9.54 | 33.70 | 3.24 | 26.04 | 198 | 0.28 |
| 154 | 8.88 | 33.93 | 2.36 | 171 | 150 | 8.93 | 33.91 | 2.42 | 26.30 | 173 | 0.38 |
| 182 | 8.72 | 33.96 | 2.20 | 166 | 200 | 8.52 | 34.00 | 2.08 | 26.44 | 160 | 0.46 |
| 204 | 8.48 | 34.01 | 2.04 | 160 | 250 | 8.21 | 34.09 | 1.80 | 26.55 | 149 | 0.54 |
| 240 | 8.31 | 34.08 | 1.83 | 151 | 300 | 7.72 | 34.16 | 1.37 | 26.68 | 137 | 0.61 |
| 286 | 7.82 | 34.15 | 1.48 | 140 | 400 | 6.98 | 34.21 | 0.82 | 26.82 | 124 | 0.75 |
| 327 | 7.48 | 34.18 | 1.14 | 133 | 500 | 6.35 | 34.26 | 0.57 | 26.95 | 112 | 0.87 |
| 382 | 7.08 | 34.20 | 0.89 | 126 | 600 | 5.61 | 34.30 | 0.36 | 27.07 | 100 | 0.98 |
| 428 | 6.78 | 34.22 | 0.72 | 120 | 700 | 4.99 | 34.36 | 0.27 | 27.19 | 88 | 1.08 |
| 482 | 6.48 | 34.25 | 0.61 | 114 | 800 | 4.46 | 34.43 | 0.28 | 27.30 | 78 | 1.17 |
| 533 | 6.08 | 34.27 | 0.46 | 108 | 1000 | 3.82 | 34.48 | 0.45 | 27.41 | 68 | 1.33 |
| 606 | 5.57 | 34.30 | 0.34 | 100 | | | | | | | |
| 708 | 4.94 | 34.36 | 0.26 | 88 | | | | | | | |
| 812 | 4.42 | 34.43 | 0.28 | 78 | | | | | | | |
| 919 | 4.08 | 34.45 | 0.40 | 72 | | | | | | | |
| 1046 | 3.66 | 34.50 | 0.48 | 64 | | | | | | | |
| 1097 | 3.54 | 34.51 | 0.59 | 62 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

D-19
(70.65)

HORIZON; October 17, 1958; 1440 GCT; 35°43'N, 122°43.5'W; sounding, 730 fm; wind, 320°, force 3; weather, overcast; sea, rough; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.36 | 33.37 | 5.67 | 350 | 0 | 16.36 | 33.37 | 5.67 | 24.44 | 350 | 0.00 |
| 10 | 16.36 | 33.38a) | 5.69 | 350 | 10 | 16.36 | 33.38 | 5.69 | 24.44 | 350 | 0.04 |
| 44 | 12.43 | 33.46 | 4.36 | 266 | 20 | 16.35 | 33.38 | 5.68 | 24.45 | 349 | 0.07 |
| 63 | 10.90 | 33.58 | 3.29 | 229 | 30 | 16.31 | 33.38 | 5.66 | 24.46 | 348 | 0.10 |
| 77 | 10.46 | 33.64 | 3.24 | 218 | 50 | 11.85 | 33.50 | 3.96 | 25.47 | 252 | 0.16 |
| 106 | 9.98 | 33.73 | 2.82 | 203 | 75 | 10.50 | 33.64 | 3.25 | 25.82 | 218 | 0.22 |
| 136 | 9.46 | 33.84 | 2.67 | 187 | 100 | 10.05 | 33.72 | 2.88 | 25.96 | 205 | 0.28 |
| 174 | 9.12 | 33.94 | 2.36 | 174 | 150 | 9.32 | 33.88 | 2.54 | 26.21 | 182 | 0.38 |
| 209 | 8.72 | 34.03 | 1.94 | 161 | 200 | 8.82 | 34.00 | 2.07 | 26.39 | 165 | 0.46 |
| 233 | 8.54 | 34.04 | 1.76 | 158 | 250 | 8.42 | 34.07 | 1.64 | 26.50 | 154 | 0.54 |
| 282 | 8.24 | 34.20 | 1.45 | 142 | 300 | 8.02 | 34.22 | 1.32 | 26.68 | 137 | 0.62 |
| 321 | 7.75 | 34.23 | 1.15 | 132 | 400 | 6.83 | 34.23 | 0.88 | 26.86 | 120 | 0.75 |
| 375 | 6.94 | 34.17 | 1.07 | 126 | 500 | 6.25 | 34.29 | 0.51 | 26.99 | 108 | 0.87 |
| 433 | 6.80 | 34.25 | 0.73 | 118 | 600 | 5.40 | 34.38 | 0.34 | 27.16 | 92 | 0.98 |
| 496 | 6.28 | 34.29 | 0.52 | 109 | 700 | 4.87 | 34.36 | 0.28 | 27.21 | 87 | 1.07 |
| 560 | 5.68 | 34.33 | 0.38 | 99 | 800 | 4.48 | 34.41 | 0.33 | 27.29 | 80 | 1.16 |
| 613 | 5.31 | 34.38 | 0.32 | 90 | 1000 | 3.84 | 34.47 | 0.43 | 27.40 | 69 | 1.33 |
| 696 | 4.88 | 34.36 | 0.28 | 87 | | | | | | | |
| 807 | 4.45 | 34.41 | 0.34 | 80 | | | | | | | |
| 923 | 4.04 | 34.47 | 0.36 | 71 | | | | | | | |
| 1020 | 3.78 | 34.47 | 0.48 | 68 | | | | | | | |
| 1162 | 3.40 | - | - | | | | | | | | |
| 1211 | 3.30 | 34.52 | 0.66 | 60 | | | | | | | |

D-20
(70.63)

HORIZON; October 17, 1958; 1730 GCT; 35°45'N, 122°38.5'W; sounding, 1270 fm; wind, 330°, force 3; weather, fog; sea, moderate; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.12 | 33.37 | 5.49 | 345 | 0 | 16.12 | 33.37 | 5.49 | 24.49 | 345 | 0.00 |
| 9 | 16.10 | 33.37 | 5.61 | 345 | 10 | 16.10 | 33.37 | 5.61 | 24.49 | 345 | 0.03 |
| 39 | 11.85 | 33.48 | 4.20 | 253 | 20 | 16.08 | 33.37 | 5.59 | 24.50 | 344 | 0.07 |
| 59 | 10.97 | 33.58 | 3.44 | 230 | 30 | 15.95 | 33.37 | 5.55 | 24.52 | 342 | 0.10 |
| 73 | 10.43 | 33.67 | 3.12 | 214 | 50 | 11.29 | 33.54 | 3.81 | 25.60 | 239 | 0.16 |
| 98 | 9.76 | 33.80 | 2.78 | 194 | 75 | 10.40 | 33.68 | 3.10 | 25.87 | 214 | 0.22 |
| 128 | 9.34 | 33.86 | 2.54 | 182 | 100 | 9.73 | 33.80 | 2.77 | 26.09 | 193 | 0.27 |
| 162 | 9.15 | 33.98 | 2.22 | 172 | 150 | 9.22 | 33.88 | 2.40 | 26.23 | 180 | 0.36 |
| 191 | 8.75 | 34.09 | 1.87 | 157 | 200 | 8.67 | 34.11 | 1.79 | 26.50 | 154 | 0.45 |
| 217 | 8.52 | 34.14 | 1.66 | 150 | 250 | 8.15 | 34.16 | 1.43 | 26.62 | 143 | 0.52 |
| 255 | 8.10 | 34.17 | 1.39 | 142 | 300 | 7.77 | 34.20 | 1.18 | 26.71 | 134 | 0.60 |
| 304 | 7.74 | 34.21 | 1.15 | 134 | 400 | 6.98 | 34.22 | 0.90 | 26.83 | 123 | 0.73 |
| 350 | 7.38 | 34.22 | 0.99 | 128 | 500 | 6.22 | 34.27 | 0.48 | 26.97 | 110 | 0.85 |
| 409 | 6.88 | 34.22 | 0.90 | 122 | 600 | 5.41 | 34.33 | 0.35 | 27.12 | 96 | 0.96 |
| 457 | 6.53 | 34.25 | 0.61 | 115 | 700 | 4.96 | 34.35 | 0.34 | 27.19 | 89 | 1.06 |
| 517 | 6.10 | 34.28 | 0.44 | 107 | 800 | 4.53 | 34.38 | 0.34 | 27.26 | 82 | 1.15 |
| 569 | 5.57 | 34.32 | 0.35 | 98 | 1000 | 3.83 | 34.49 | 0.51 | 27.42 | 67 | 1.31 |
| 649 | 5.20 | 34.34 | 0.36 | 92 | | | | | | | |
| 758 | 4.70 | 34.36 | 0.33 | 86 | | | | | | | |
| 866 | 4.28 | 34.42 | 0.35 | 77 | | | | | | | |
| 975 | 3.92 | 34.49 | 0.48 | 68 | | | | | | | |
| 1104 | 3.52 | 34.51 | 0.64 | 62 | | | | | | | |
| 1154 | 3.43 | 34.52 | 0.67 | 61 | | | | | | | |

a) Loose bottle cap; value falls on property curve.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}{}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

D-21
(70.62)

HORIZON; October 17, 1958; 1947 GCT; 35°48'N, 122°33'W; sounding, 1755 fm; wind, 320°, force 3; weather, fog; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.18 | 33.40 | 5.98 | 344 | 0 | 16.18 | 33.40 | 5.98 | 24.50 | 344 | 0.00 |
| 10 | 16.14 | 33.40 | 6.04 | 343 | 10 | 16.14 | 33.40 | 6.04 | 24.51 | 343 | 0.03 |
| 39 | 12.22 | 33.50 | 4.36 | 258 | 20 | 16.10 | 33.40 | 6.03 | 24.52 | 342 | 0.07 |
| 59 | 10.86 | 33.58 | 3.57 | 229 | 30 | 15.00 | 33.42 | 5.54 | 24.78 | 318 | 0.10 |
| 75 | 10.38 | 33.64 | 3.24 | 216 | 50 | 11.40 | 33.55 | 3.88 | 25.59 | 240 | 0.16 |
| 98 | 9.92 | 33.73 | 3.04 | 202 | 75 | 10.38 | 33.64 | 3.24 | 25.85 | 216 | 0.21 |
| 128 | 9.58 | 33.85 | 2.54 | 188 | 100 | 9.90 | 33.74 | 3.03 | 26.01 | 201 | 0.27 |
| 163 | 9.14 | 33.94 | 2.32 | 174 | 150 | 9.32 | 33.90 | 2.41 | 26.23 | 180 | 0.36 |
| 192 | 8.88 | 34.05 | 1.98 | 162 | 200 | 8.78 | 34.07 | 1.89 | 26.45 | 159 | 0.45 |
| 217 | 8.56 | 34.11 | 1.74 | 153 | 250 | 8.45 | 34.14 | 1.51 | 26.55 | 150 | 0.53 |
| 257 | 8.44 | 34.14 | 1.49 | 150 | 300 | 7.86 | 34.17 | 1.32 | 26.67 | 138 | 0.60 |
| 305 | 7.77 | 34.18 | 1.29 | 136 | 400 | 6.99 | 34.23 | 0.85 | 26.84 | 122 | 0.74 |
| 349 | 7.24 | 34.19 | 1.12 | 129 | 500 | 6.10 | 34.25 | 0.54 | 26.97 | 110 | 0.86 |
| 407 | 6.93 | 34.24 | 0.79 | 120 | 600 | 5.42 | 34.29 | 0.33 | 27.08 | 99 | 0.97 |
| 457 | 6.42 | 34.25 | 0.69 | 114 | 700 | 4.96 | 34.34 | 0.29 | 27.18 | 90 | 1.07 |
| 516 | 5.99 | 34.25 | 0.48 | 108 | 800 | 4.58 | 34.40 | 0.27 | 27.27 | 81 | 1.17 |
| 569 | 5.62 | 34.28 | 0.35 | 102 | 1000 | 3.94 | 34.49 | 0.46 | 27.40 | 68 | 1.32 |
| 646 | 5.18 | 34.30 | 0.31 | 95 | | | | | | | |
| 756 | 4.74 | 34.38 | 0.29 | 84 | | | | | | | |
| 865 | 4.34 | 34.42 | 0.29 | 77 | | | | | | | |
| 974 | 4.02 | 34.47 | 0.43 | 70 | | | | | | | |
| 1104 | 3.59 | 34.52 | 0.57 | 62 | | | | | | | |
| 1153 | 3.48 | 34.53 | 0.66 | 61 | | | | | | | |

D-22
(70.60)

HORIZON; October 17, 1958; 2202 GCT; 35°53'N, 122°23'W; sounding, 1715 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 20°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.16 | 33.37 | 5.33 | 346 | 0 | 16.16 | 33.37 | 5.33 | 24.48 | 346 | 0.00 |
| 10 | 16.00 | 33.37 | 4.97u | 343 | 10 | 16.00 | 33.37 | 5.52 | 24.51 | 343 | 0.03 |
| 24 | 15.88 | 33.38 | 5.67 | 340 | 20 | 15.92 | 33.38 | 5.61 | 24.54 | 340 | 0.07 |
| 39 | 12.74 | 33.29 | 4.83 | 283 | 30 | 15.60 | 33.37 | 5.60 | 24.61 | 334 | 0.10 |
| 72 | 10.92 | 33.55 | 3.59 | 232 | 50 | 12.00 | 33.37 | 4.42 | 25.34 | 264 | 0.16 |
| 96 | 10.24 | 33.68 | 3.14 | 211 | 75 | 10.79 | 33.57 | 3.49 | 25.72 | 228 | 0.22 |
| 123 | 9.62 | 33.80 | 2.78 | 192 | 100 | 10.15 | 33.71 | 3.07 | 25.94 | 207 | 0.28 |
| 155 | 9.16 | 33.89 | 2.47 | 178 | 150 | 9.21 | 33.87 | 2.51 | 26.22 | 181 | 0.38 |
| 183 | 8.86 | 34.02 | 2.03 | 165 | 200 | 8.72 | 34.02 | 2.05 | 26.42 | 162 | 0.46 |
| 206 | 8.64 | 34.02 | 2.05 | 161 | 250 | 8.26 | 34.13 | 1.70 | 26.58 | 147 | 0.54 |
| 243 | 8.32 | 34.12 | 1.73 | 148 | 300 | 7.68 | 34.16 | 1.37 | 26.68 | 137 | 0.62 |
| 290 | 7.80 | 34.16 | 1.42 | 138 | 400 | 6.80 | 34.23 | 0.80 | 26.86 | 120 | 0.75 |
| 332 | 7.38 | 34.18 | 1.12 | 131 | 500 | 6.15 | 34.30 | 0.47 | 27.01 | 106 | 0.87 |
| 388 | 6.88 | 34.21 | 0.89 | 122 | 600 | 5.49 | 34.33 | 0.32 | 27.10 | 97 | 0.97 |
| 435 | 6.58 | 34.27 | 0.59 | 114 | 700 | 5.00 | 34.37 | 0.25 | 27.20 | 88 | 1.07 |
| 491 | 6.24 | 34.29 | 0.50 | 109 | 800 | 4.61 | 34.44 | 0.26 | 27.29 | 79 | 1.16 |
| 542 | 5.77 | 34.33 | 0.40 | 99 | 1000 | 3.94 | 34.51 | 0.43 | 27.42 | 66 | 1.32 |
| 617 | 5.42 | 34.33 | 0.30 | 96 | | | | | | | |
| 721 | 4.89 | 34.38 | 0.23 | 86 | | | | | | | |
| 827 | 4.52 | 34.45 | 0.28 | 76 | | | | | | | |
| 934 | 4.18 | 34.49 | 0.39 | 70 | | | | | | | |
| 1060 | 3.73 | 34.53 | 0.49 | 63 | | | | | | | |
| 1109 | 3.61 | 34.55 | 0.59 | 60 | | | | | | | |

SIO

CCOFI 5810

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

D-23 (70.58)

HORIZON; October 18, 1958; 0032 GCT; 35°58'N, 122°12'W; sounding, 970 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.39 | 33.51 | 5.29 | 340 | 0 | 16.39 | 33.51 | 5.29 | 24.54 | 340 | 0.00 |
| 9 | 16.34 | 33.49 | 5.43 | 341 | 10 | 16.34 | 33.49 | 5.43 | 24.53 | 341 | 0.03 |
| 38 | 12.95 | 33.39 | 4.50 | 280 | 20 | 16.23 | 33.48 | 5.42 | 24.54 | 340 | 0.07 |
| 57 | 11.61 | 33.53 | 3.84 | 245 | 30 | 15.18 | 33.44 | 5.11 | 24.76 | 320 | 0.10 |
| 72 | 10.96 | 33.62 | 3.43 | 227 | 50 | 11.87 | 33.48 | 3.98 | 25.45 | 254 | 0.16 |
| 96 | 10.11 | 33.62 | 3.47 | 213 | 75 | 10.81 | 33.62 | 3.43 | 25.76 | 225 | 0.22 |
| 124 | 9.42 | 33.83 | 2.95 | 187 | 100 | 10.02 | 33.64 | 3.43 | 25.91 | 210 | 0.27 |
| 157 | 9.24 | 33.93 | 2.40 | 177 | 150 | 9.25 | 33.93 | 2.41 | 26.26 | 177 | 0.37 |
| 187 | 8.88 | 34.00 | 2.23 | 166 | 200 | 8.76 | 34.07 | 1.97 | 26.45 | 159 | 0.45 |
| 211 | 8.66 | 34.09 | 1.81 | 156 | 250 | 8.30 | 34.14 | 1.59 | 26.58 | 147 | 0.53 |
| 249 | 8.30 | 34.14 | 1.59 | 147 | 300 | 7.59 | 34.13 | 1.51 | 26.67 | 138 | 0.61 |
| 298 | 7.60 | 34.13 | 1.53 | 138 | 400 | 6.70 | 34.18 | 0.90 | 26.84 | 122 | 0.74 |
| 341 | 7.18 | 34.14 | 1.25 | 131 | 500 | 6.07 | 34.29 | 0.46 | 27.00 | 106 | 0.86 |
| 399 | 6.70 | 34.18 | 0.90 | 122 | 600 | 5.48 | 34.30 | 0.34 | 27.09 | 98 | 0.97 |
| 447 | 6.43 | 34.27 | 0.59 | 112 | 700 | 5.03 | 34.38 | 0.30 | 27.20 | 88 | 1.07 |
| 504 | 6.02 | 34.29 | 0.42 | 106 | 800 | 4.57 | 34.43 | 0.31 | 27.30 | 78 | 1.16 |
| 557 | 5.60 | 34.29 | 0.39 | 100 | 1000 | 3.83 | 34.49 | 0.47 | 27.42 | 67 | 1.32 |
| 634 | 5.42 | 34.31 | 0.31 | 97 | | | | | | | |
| 741 | 4.79 | 34.42 | 0.30 | 82 | | | | | | | |
| 848 | 4.37 | 34.44 | 0.33 | 76 | | | | | | | |
| 956 | 3.96 | 34.48 | 0.45 | 68 | | | | | | | |
| 1085 | 3.59 | 34.52 | 0.55 | 62 | | | | | | | |
| 1135 | 3.48 | 34.55 | 0.64 | 59 | | | | | | | |

D-24 (70.55)

HORIZON; October 18, 1958; 0245 GCT; 36°03'N, 122°02'W; sounding, 690 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.14 | 33.47 | 5.51 | 317 | 0 | 15.14 | 33.47 | 5.51 | 24.79 | 317 | 0.00 |
| 9 | 15.11 | 33.41 | 5.68 | 321 | 10 | 15.10 | 33.41 | 5.68 | 24.75 | 321 | 0.03 |
| 38 | 14.02 | 33.46 | 5.14 | 296 | 20 | 14.95 | 33.41 | 5.60 | 24.79 | 317 | 0.06 |
| 57 | 11.52 | 33.38 | 4.48 | 254 | 30 | 14.68 | 33.43 | 5.48 | 24.86 | 310 | 0.10 |
| 72 | 10.55 | 33.40 | 4.37 | 237 | 50 | 13.74 | 33.45 | 5.04 | 25.07 | 290 | 0.16 |
| 95 | 9.89 | 33.56 | 3.97 | 214 | 75 | 10.44 | 33.42 | 4.32 | 25.66 | 234 | 0.22 |
| 123 | 9.54 | 33.78 | 3.15 | 192 | 100 | 9.80 | 33.60 | 3.83 | 25.91 | 210 | 0.28 |
| 157 | 9.38 | 33.95 | 2.50 | 177 | 150 | 9.41 | 33.89 | 2.62 | 26.21 | 182 | 0.38 |
| 186 | 8.90 | 34.04 | 2.24 | 163 | 200 | 8.80 | 34.05 | 2.12 | 26.43 | 161 | 0.46 |
| 209 | 8.75 | 34.06 | 2.04 | 159 | 250 | 8.15 | 34.12 | 1.65 | 26.58 | 146 | 0.54 |
| 248 | 8.15 | 34.12 | 1.65 | 146 | 300 | 7.78 | 34.22 | 1.26 | 26.72 | 133 | 0.61 |
| 298 | 7.78 | 34.22 | 1.26 | 133 | 400 | 6.98 | 34.23 | 0.88 | 26.84 | 122 | 0.74 |
| 341 | 7.59 | 34.23 | 0.99 | 130 | 500 | 6.15 | 34.30 | 0.65 | 27.00 | 106 | 0.86 |
| 400 | 6.98 | 34.23 | 0.88 | 122 | 600 | 5.53 | 34.31 | 0.40 | 27.09 | 98 | 0.97 |
| 448 | 6.60 | 34.25 | 0.73 | 116 | 700 | 5.18 | 34.36 | 0.29 | 27.17 | 90 | 1.07 |
| 506 | 6.09 | 34.30 | 0.64 | 106 | 800 | 4.76 | 34.41 | 0.37 | 27.26 | 82 | 1.17 |
| 560 | 5.71a) | 34.30 | 0.43 | 101 | 1000 | 3.92 | 34.52 | 0.48 | 27.43 | 66 | 1.33 |
| 639 | 5.39 | 34.33 | 0.35 | 95 | | | | | | | |
| 748 | 5.02 | 34.38 | 0.28 | 88 | | | | | | | |
| 857 | 4.46 | 34.43 | 0.43 | 78 | | | | | | | |
| 965 | 4.02 | 34.51 | 0.45 | 68 | | | | | | | |
| 1095 | 3.67 | 34.52 | 0.57 | 63 | | | | | | | |
| 1145 | 3.51 | 34.52 | 0.60 | 61 | | | | | | | |

a) Mean value of 5.68 and 5.74°C.

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 60.52-S | XI-1 | 1030 | 37°53.5' | 123°02.0' | 43 | calm | | overcast | slight | 14.10 | 33.26 |
| 63.55-S | 1 | 0330 | 37°16.0' | 122°50.0' | 120 | calm | | cloudy | rough | 14.99 | 33.46 |
| 67.50-S | X-30 | 1145 | 36°49.0' | 122°04.5' | 52 | calm | | fog | moderate | 14.86 | 33.41 |
| 67.55-S | 30 | 1433 | 36°39.0' | 122°26.0' | 1120 | 160° | 2 | fog | slight | 14.94 | - |
| 73.51-S | 30 | 0115 | 35°36.5' | 121°22.0' | 160 | 320° | 2 | fog | moderate | 15.56 | 33.39 |
| 77.50-S | 28 | 0430 | 35°04.0' | 120°52.0' | 72 | 340° | 5 | partly cloudy | very rough | 16.08 | 33.42 |
| 87.50-S | 24 | 0015 | 33°20.0' | 119°39.5' | 40 | 320° | 3 | cloudy | very rough | 17.78 | 33.48 |
| 93.35-S | 20 | 1015 | 32°40.0' | 117°52.0' | 300 | 240° | 3 | clear | rough | 20.81 | 33.64 |
| 93.45-S | 20 | 0415 | 32°20.0' | 118°32.0' | 700 | 320° | 6 | clear | high | 20.11 | 33.61 |
| 93.55-S | 19 | 2205 | 31°57.5' | 119°08.0' | 880 | 340° | 6 | cloudy | very rough | 19.52 | - |
| 97.35-S | 17 | 1055 | 32°05.5' | 117°29.0' | 525 | 320° | 3 | partly cloudy | moderate | 21.53 | 33.57 |
| 97.45-S | 17 | 1710 | 31°45.0' | 118°09.0' | 800 | 320° | 2 | partly cloudy | rough | 20.28 | 33.64 |
| 97.55-S | 18 | 0020 | 31°26.0' | 118°52.0' | 400 | 320° | 4 | fog | rough | 19.27 | 33.49 |
| 100.29-P | 20 | 1930 | 31°42.0' | 116°43.5' | 60 | 090° | 2 | cloudy | very rough | 17.41 | 33.57 |
| 100.35-P | 20 | 1454 | 31°30.5' | 117°10.5' | 620 | 340° | 4 | overcast | rough | 21.19 | 33.63 |
| 100.45-P | 20 | 0720 | 31°10.5' | 117°49.5' | 900 | 340° | 4 | partly cloudy | very rough | 21.09 | 33.77 |
| 100.55-P | 20 | 0110 | 30°52.0' | 118°29.5' | 1300 | 340° | 6 | overcast | high | 21.14 | 33.64 |
| 103.45-P | 17 | 1459 | 30°35.0' | 117°24.0' | 1300 | 280° | 2 | clear | moderate | 20.91 | 33.58 |
| 103.55-P | 17 | 2124 | 30°16.0' | 118°05.5' | 1400 | 280° | 2 | clear | moderate | 21.41 | 33.65 |



SIO
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TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107.45-P | X-16 | 1503 | 30°04.0' | 116°54.0' | 1100 | 340° | 3 | clear | moderate | 21.58 | 33.68 |
| 107.55-P | 16 | 0823 | 29°44.0' | 117°34.5' | 1800 | 340° | 3 | clear | moderate | 21.10 | 33.57 |
| 110.45-P | 13 | 2130 | 29°24.0' | 116°37.5' | 450 | 340° | 2 | fog | moderate | 21.30 | 33.62 |
| 110.55-P | 14 | 0400 | 29°02.5' | 117°16.0' | 2000 | 320° | 2 | fog | moderate | 21.64 | 33.71 |
| 113.45-P | 12 | 2110 | 28°57.0' | 116°15.5' | 500 | 330° | 5 | cloudy | rough | 21.15 | 33.64 |
| 113.55-P | 12 | 1335 | 28°34.5' | 116°50.5' | 1900 | 320° | 5 | cloudy | rough | 22.21 | 33.93 |
| 117.45-P | 10 | 0310 | 28°19.0' | 115°55.0' | 1700 | 320° | 3 | partly cloudy | moderate | 21.64 | 33.68 |
| 117.55-P | 10 | 1005 | 28°01.0' | 116°34.5' | 1900 | 320° | 3 | partly cloudy | moderate | 22.02 | 33.78 |
| 120.40-B | 10 | 2230 | 27°56.5' | 115°14.0' | 21 | 310° | 4 | partly cloudy | moderate | 22.76 | 33.82 |
| 120.55-B | 11 | 0825 | 27°23.0' | 116°12.5' | 2000 | 320° | 3 | partly cloudy | moderate | 22.18 | 33.75 |
| 123.45-B | 13 | 1210 | 27°10.0' | 115°10.0' | - | - | - | missing | missing | 22.88 | 34.04 |
| 123.55-B | 13 | 0525 | 26°48.0' | 115°49.5' | - | - | - | missing | missing | 22.24 | 33.76 |
| 127.45-B | 15 | 1015 | 26°33.5' | 114°48.5' | 1800 | 320° | 2 | clear | moderate | 25.22 | 34.57 |
| 127.55-B | 15 | 1640 | 26°13.5' | 115°27.0' | 2000+ | 340° | 4 | clear | moderate | 22.53 | 33.78 |
| 130.45-B | 17 | 0630 | 25°59.0' | 114°27.0' | 1700 | calm | | clear | calm | 24.77 | 34.25 |
| 130.55-B | 17 | 0000 | 25°38.0' | 115°03.0' | 2000+ | 320° | 2 | clear | rough | 25.18 | 34.45 |
| 133.35-B | 18 | 0550 | 25°45.0' | 113°23.0' | 380 | 130° | 2 | cloudy | slight | 26.15 | 34.43 |
| 133.45-B | 18 | 1240 | 25°24.5' | 114°04.5' | 2000 | calm | | partly cloudy | moderate | 25.14 | 34.21 |
| 133.55-B | 18 | 1910 | 25°05.0' | 114°42.0' | 2000 | 270° | 2 | cloudy | rough | 24.66 | 34.16 |

## TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 137.45-B | X-19 | 1300 | 24°51.0' | 113°42.5' | 1650 | 310° | 4 | cloudy | slight | 26.04 | 34.09 |
| 137.55-B | 19 | 0650 | 24°30.0' | 114°20.5' | 2000+ | 060° | 1 | cloudy | slight | 23.90 | 33.91 |
| 140.45-B | 20 | 1750 | 24°16.0' | 113°21.0' | 2000+ | 280° | 2 | overcast | moderate | 26.68 | 34.56 |
| 140.55-B | 28 | 1200 | 23°47.0' | 114°07.0' | 2000+ | 330° | 3 | overcast | rough | 26.60 | 34.89 |
| 143.45-B | 21 | 0530 | 23°41.5' | 112°59.5' | 1800 | 330° | 1 | cloudy | slight | 28.06 | 34.72 |
| 143.55-B | 28 | 0430 | 23°19.0' | 113°40.5' | 2000+ | 320° | 4 | partly cloudy | rough | 26.92 | 34.77 |
| 147.35-B | 22 | 1830 | 23°26.5' | 112°00.5' | 1600 | - | 1 | overcast | rough | 27.98 | 34.70 |
| 147.45-B | 23 | 0045 | 23°06.0' | 112°38.0' | 1800 | 320° | 3 | cloudy | rough | 28.32 | 34.67 |
| 147.55-B | 23 | 0630 | 22°46.0' | 113°15.5' | 2000 | 320° | 2 | partly cloudy | rough | 27.32 | 34.87 |
| 150.35-B | 24 | 0755 | 22°54.0' | 111°41.0' | 1600 | 320° | 2 | clear | rough | 27.90 | 34.81 |
| 150.45-B | 24 | 0050 | 22°32.5' | 112°17.5' | 1800 | 340° | 3 | partly cloudy | very rough | 28.23 | 34.75 |
| 150.55-B | 23 | 1845 | 22°12.0' | 112°54.0' | 1900 | 320° | 4 | partly cloudy | rough | 27.56 | 34.81 |
| 153.25-B | 25 | 1940 | 22°38.0' | 110°42.5' | 1300 | 340° | 5 | partly cloudy | very rough | 27.66 | 34.61 |
| 153.35-B | 26 | 0210 | 22°23.0' | 111°23.5' | 1800 | 320° | 5 | partly cloudy | rough | 27.88 | 34.73 |
| 153.45-B | 26 | 0845 | 21°58.0' | 111°56.0' | 1700 | 320° | 5 | partly cloudy | rough | 27.06 | - |
| 153.55-B | 26 | 1450 | 21°37.5' | 112°33.0' | 2000 | 320° | 5 | partly cloudy | rough | 26.44 | 34.54 |

S10

CCOFI 5811

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **80.51** | PAOLINA-T; November 22, 1958; 0228 GCT; 34°26.5'N, 120°31.5'W; sounding, 43 fm; wind, 290°, force 4; weather, missing; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 2 | 15.23 | 33.51 | 5.84 | 316 | 0 | (15.23) | (33.51) | (5.84) | (24.80) | (316) | (0.00) |
| 12 | 15.00 | 33.50 | 5.66 | 312 | 10 | 15.05 | 33.50 | 5.68 | 24.83 | 313 | 0.03 |
| 33 | 13.82 | 33.48 | 5.10 | 290 | 20 | 14.68 | 33.49 | 5.50 | 24.89 | 307 | 0.06 |
| 53 | 12.84 | 33.49 | 4.67 | 271 | 30 | 14.25 | 33.48 | 5.37 | 24.98 | 298 | 0.09 |
| | | | | | 50 | 12.86 | 33.49 | 4.68 | 25.26 | 272 | 0.15 |
| **80.55** | PAOLINA-T; November 22, 1958; 0513 GCT; 34°19'N, 120°48.5'W; sounding, 400 fm; wind, 320°, force 5; weather, missing; sea, rough; wire angle, 10°. | | | | | | | | | | |
| 2 | 15.30 | 33.39 | 6.21 | 327 | 0 | (15.30) | (33.39) | (6.21) | (24.68) | (327) | (0.00) |
| 12 | 15.32 | 33.39 | 6.18 | 327 | 10 | 15.31 | 33.39 | 6.20 | 24.68 | 327 | 0.03 |
| 32 | 15.25 | 33.39 | 6.24 | 325 | 20 | 15.30 | 33.39 | 6.21 | 24.69 | 326 | 0.06 |
| 48 | 12.40 | 33.19 | 6.24 | 285 | 30 | 15.27 | 33.39 | 6.21 | 24.69 | 326 | 0.10 |
| 57 | 11.58 | 33.22 | 6.04 | 268 | 50 | 12.33 | 33.19 | 6.22 | 25.14 | 283 | 0.16 |
| 67 | 10.87 | 33.32 | 5.78 | 248 | 75 | 10.45 | 33.38 | 5.29 | 25.62 | 237 | 0.22 |
| 77 | 10.39 | 33.39 | 5.16 | 234 | 100 | 9.49 | 33.53 | 4.63 | 25.91 | 210 | 0.28 |
| 96 | 9.59 | 33.51 | 4.67 | 213 | 150 | 8.68 | 33.80 | 4.03 | 26.25 | 178 | 0.38 |
| 111 | 9.22 | 33.62 | 4.58 | 200 | 200 | 8.12 | 33.94 | 3.21 | 26.44 | 160 | 0.46 |
| 125 | 8.97 | 33.72 | 4.51 | 188 | 250 | 7.30 | 34.01 | 2.49 | 26.62 | 143 | 0.54 |
| 150 | 8.68 | 33.80 | 4.03 | 178 | 300 | 6.78 | 34.09 | 2.02 | 26.76 | 130 | 0.61 |
| 179 | 8.38 | 33.89 | 3.55 | 167 | 400 | 6.20 | 34.22 | 1.03 | 26.94 | 113 | 0.74 |
| 218 | 7.84 | 33.97 | 2.90 | 153 | 500 | 5.65 | 34.26 | 0.65 | 27.04 | 103 | 0.85 |
| 273 | 6.96 | 34.04 | 2.28 | 136 | 600 | 5.11 | 34.32 | 0.50 | 27.15 | 93 | 0.95 |
| 358 | 6.42 | 34.20 | 1.31 | 117 | | | | | | | |
| 463 | 5.82 | 34.25 | 0.75 | 106 | | | | | | | |
| 609 | 5.04 | 34.33 | 0.48 | 92 | | | | | | | |
| **80.60** | PAOLINA-T; November 22, 1958; 0853 GCT; 34°09'N, 121°09'W; sounding, 1175 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 15°. | | | | | | | | | | |
| 2 | 14.72 | 33.38 | 5.66 | 315 | 0 | (14.72) | (33.38) | (5.66) | (24.81) | (315) | (0.00) |
| 11 | 14.70 | 33.38 | 5.68 | 315 | 10 | 14.70 | 33.38 | 5.67 | 24.82 | 314 | 0.03 |
| 31 | 14.71 | 33.39 | 5.57 | 314 | 20 | 14.70 | 33.39 | 5.62 | 24.82 | 314 | 0.06 |
| 46 | 14.26 | 33.35 | 5.37 | 308 | 30 | 14.71 | 33.39 | 5.60 | 24.82 | 314 | 0.09 |
| 55 | 11.80 | 33.40 | 4.62 | 258 | 50 | 13.10 | 33.36 | 5.00 | 25.13 | 285 | 0.15 |
| 64 | 11.41 | 33.47 | 4.48 | 246 | 75 | 10.09 | 33.36 | 4.52 | 25.67 | 233 | 0.22 |
| 74 | 10.18 | 33.36 | 4.52 | 234 | 100 | 9.40 | 33.61 | 3.98 | 25.98 | 203 | 0.27 |
| 94 | 9.57 | 33.48 | 4.30 | 215 | 150 | 9.30 | 33.92 | 2.44 | 26.24 | 178 | 0.37 |
| 107 | 9.76 | 33.80 | 3.01 | 194 | 200 | 8.81 | 34.03 | 2.01 | 26.41 | 163 | 0.46 |
| 121 | 9.58 | 33.84 | 2.83 | 188 | 250 | 7.87 | 34.10 | 1.90 | 26.61 | 144 | 0.53 |
| 147 | 9.36 | 33.91 | 2.49 | 180 | 300 | 7.25 | 34.13 | 1.57 | 26.72 | 134 | 0.61 |
| 175 | 9.06 | 33.99 | 2.22 | 170 | 400 | 6.39 | 34.19 | 0.86 | 26.88 | 118 | 0.74 |
| 213 | 8.64 | 34.05 | 1.91 | 159 | 500 | 5.69 | 34.26 | 0.62 | 27.03 | 104 | 0.85 |
| 266 | 7.57 | 34.11 | 1.87 | 139 | 600 | (5.21) | (34.40) | (0.32) | (27.20) | (88) | (0.95) |
| 349 | 6.82 | 34.16 | 1.06 | 125 | | | | | | | |
| 450 | 5.94 | 34.22 | 0.71 | 110 | | | | | | | |
| 594 | 5.24 | 34.39 | 0.35 | 89 | | | | | | | |
| **83.43** | PAOLINA-T; November 21, 1958; 1844 GCT; 34°08'N, 119°34'W; sounding, 134 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 2 | 16.68 | 33.57 | 5.38 | 344 | 0 | (16.68) | (33.57) | (5.38) | (24.50) | (344) | (0.00) |
| 7 | 16.62 | 33.58 | 5.31 | 342 | 10 | 16.61 | 33.57 | 5.32 | 24.52 | 342 | 0.03 |
| 12 | 16.60 | 33.56 | 5.33 | 342 | 20 | 16.48 | 33.57 | 5.39 | 24.56 | 338 | 0.07 |
| 18 | 16.52 | 33.57 | 5.40 | 340 | 30 | 14.28 | 33.51 | 4.85 | 25.00 | 296 | 0.10 |
| 23 | 16.26 | 33.57 | 5.35 | 334 | 50 | 12.65 | 33.50 | 4.48 | 25.32 | 266 | 0.16 |
| 32 | 13.88 | 33.50 | 4.74 | 290 | 75 | 11.12 | 33.61 | 3.90 | 25.69 | 231 | 0.22 |
| 42 | 12.78 | 33.49 | 4.40 | 269 | | | | | | | |
| 52 | 12.61 | 33.50 | 4.47 | 265 | | | | | | | |
| 62 | 11.90 | 33.58 | 4.08 | 247 | | | | | | | |
| 71 | 11.28 | 33.60 | 3.95 | 234 | | | | | | | |
| 86 | 10.83 | 33.65 | 3.78 | 223 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; November 22, 1958; 1449 GCT; 33°34'N, 120°45'W; sounding, 830 fm; wind, 320°, force 5; weather, overcast; sea, very rough; wire angle, 18°. 83.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 16.44 | 33.53 | 5.37 | 340 | 0 | 16.5 | (33.53) | (5.37) | (24.52) | (342) | (0.00) |
| 14 | 16.38 | 33.54 | 5.47 | 339 | 10 | 16.41 | 33.54 | 5.42 | 24.55 | 340 | 0.03 |
| 33 | 15.58 | 33.51 | 5.29 | 324 | 20 | 16.28 | 33.54 | 5.45 | 24.59 | 336 | 0.07 |
| 47 | 13.28 | 33.44 | 5.08 | 282 | 30 | 15.76 | 33.52 | 5.32 | 24.68 | 327 | 0.10 |
| 56 | 12.86 | 33.50 | 4.59 | 270 | 50 | 13.18 | 33.45 | 5.02 | 25.18 | 280 | 0.16 |
| 66 | 11.75 | 33.49 | 4.44 | 250 | 75 | 11.03 | 33.58 | 4.11 | 25.68 | 232 | 0.22 |
| 74 | 11.10 | 33.58 | 4.13 | 232 | 100 | 9.92 | 33.70 | 3.40 | 25.98 | 204 | 0.28 |
| 93 | 10.06 | 33.66 | 3.63 | 210 | 150 | 9.07 | 33.87 | 2.65 | 26.24 | 178 | 0.38 |
| 106 | 9.80 | 33.73 | 3.26 | 200 | 200 | 8.34 | 34.06 | 2.12 | 26.50 | 154 | 0.46 |
| 120 | 9.58 | 33.76 | 3.06 | 194 | 250 | 7.95 | 34.10 | 1.73 | 26.60 | 144 | 0.54 |
| 144 | 9.14 | 33.85 | 2.70 | 181 | 300 | 7.42 | 34.15 | | 26.70 | 135 | 0.61 |
| 169 | 8.82 | 34.02 | 2.45 | 164 | 400 | 6.39 | 34.20 | | 26.90 | 116 | 0.74 |
| 206 | 8.26 | 34.07 | 2.03 | 152 | 500 | 5.80 | 34.26 | 0.63 | 27.01 | 106 | 0.86 |
| 254 | 7.89 | 34.11 | 1.70 | 144 | | | | | | | |
| 333 | 7.05 | 34.17 | 0.62u | 128 | | | | | | | |
| 431 | 6.18 | 34.22 | 0.74 | 112 | | | | | | | |
| 572 | 5.42 | 34.31 | 0.46 | 97 | | | | | | | |

PAOLINA-T; November 23, 1958; 1931 GCT; 33°40'N, 118°59'W; sounding, 450 fm; wind, 090°, force 2; weather, haze; sea, moderate; wire angle, 02°. 87.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.92 | 33.55 | 5.34 | 350 | 0 | (16.92) | (33.55) | (5.34) | (24.44) | (350) | (0.00) |
| 11 | 16.50 | 33.53 | 5.47 | 342 | 10 | 16.51 | 33.53 | 5.47 | 24.52 | 343 | 0.03 |
| 22 | 16.33 | 33.51 | 5.37 | 339 | 20 | 16.38 | 33.52 | 5.38 | 24.54 | 340 | 0.07 |
| 32 | 15.70 | 33.49 | 5.37 | 328 | 30 | 15.83 | 33.50 | 5.37 | 24.64 | 330 | 0.10 |
| 37 | 15.40 | 33.50 | 5.21 | 321 | 50 | 13.32 | 33.48 | 4.92 | 25.17 | 281 | 0.16 |
| 42 | 15.02 | 33.48 | 5.16 | 315 | 75 | 11.70 | 33.65 | 3.70 | 25.62 | 238 | 0.23 |
| 47 | 13.98 | 33.48 | 5.09 | 293 | 100 | 10.93 | 33.70 | 3.32 | 25.79 | 221 | 0.29 |
| 52 | 13.07 | 33.48 | 4.79 | 276 | 150 | 9.56 | 33.89 | 2.72 | 26.18 | 184 | 0.39 |
| 57 | 12.90 | 33.48 | 4.66 | 272 | | | | | | | |
| 62 | 12.02 | 33.58 | 3.98 | 249 | | | | | | | |
| 67 | 11.92 | 33.64 | 3.90 | 242 | | | | | | | |
| 72 | 11.80 | 33.64 | 3.82 | 240 | | | | | | | |
| 82 | 11.48 | 33.68 | 3.42 | 232 | | | | | | | |
| 91 | 11.42 | 33.68 | 3.54 | 231 | | | | | | | |
| 101 | 10.92 | 33.70 | 3.31 | 221 | | | | | | | |
| 126 | 10.26 | 33.82 | 2.95 | 201 | | | | | | | |
| 150 | 9.56 | 33.89 | 2.72 | 184 | | | | | | | |

PAOLINA-T; November 23, 1958; 0514 GCT; 33°00'N, 120°21.5'W; sounding, 530 fm; wind, 280°, force 6; weather, partly cloudy; sea, very rough; wire angle, 08°. 87.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 14.92 | 33.50 | 5.54 | 310 | 0 | (14.92) | (33.50) | (5.54) | (24.86) | (310) | (0.00) |
| 12 | 14.92 | 33.51 | 5.46 | 310 | 10 | 14.92 | 33.51 | 5.48 | 24.86 | 310 | 0.03 |
| 32 | 14.02 | 33.47 | 5.16 | 294 | 20 | 14.92 | 33.51 | 5.41 | 24.86 | 310 | 0.06 |
| 47 | 12.17 | 33.48 | 4.58 | 259 | 30 | 14.04 | 33.47 | 5.17 | 25.01 | 296 | 0.09 |
| 57 | 11.48 | 33.46 | 4.57 | 248 | 50 | 11.65 | 33.47 | 4.57 | 25.48 | 251 | 0.15 |
| 67 | 10.61 | 33.48 | 4.36 | 232 | 75 | 10.32 | 33.51 | 4.07 | 25.75 | 225 | 0.21 |
| 76 | 10.32 | 33.51 | 4.06 | 225 | 100 | 9.59 | 33.80 | 3.01 | 26.10 | 192 | 0.26 |
| 96 | 9.66 | 33.77 | 3.09 | 195 | 150 | 9.01 | 34.02 | 2.24 | 26.36 | 167 | 0.35 |
| 110 | 9.40 | 33.86 | 2.82 | 184 | 200 | 8.60 | 34.11 | 1.95 | 26.51 | 153 | 0.43 |
| 124 | 9.22 | 33.97 | 2.47 | 177 | 250 | 8.04 | 34.16 | 1.50 | 26.63 | 142 | 0.51 |
| 149 | 9.04 | 34.01 | 2.25 | 168 | 300 | 7.42 | 34.21 | 1.16 | 26.76 | 130 | 0.58 |
| 177 | 8.78 | 34.09 | 2.11 | 158 | 400 | 6.80 | 34.28 | 0.77 | 26.90 | 116 | 0.70 |
| 236 | 8.30 | 34.14 | 1.69 | 147 | 500 | 6.20 | 34.33 | 0.47 | 27.02 | 105 | 0.82 |
| 268 | 7.78 | 34.18 | 1.33 | 136 | 600 | 5.60 | 34.38 | 0.33 | 27.14 | 94 | 0.92 |
| 352 | 7.06 | 34.26 | 0.92 | 121 | | | | | | | |
| 456 | 6.44 | 34.31 | 0.54 | 109 | | | | | | | |
| 600 | 5.60 | 34.38 | 0.33 | 94 | | | | | | | |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$ $-5$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$ $-5$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |
| **90.28** | PAOLINA-T; November 21, 1958; 0319 GCT; 33°28.5'N, 117°47'W; sounding, 210 fm; wind, 040°, force 2; weather, partly cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | |
| 1 | 16.50 | 33.49 | 5.44 | 345 | 0 | (16.50) | (33.49) | (5.44) | (24.50) | (345) | (0.00) |
| 11 | 15.10 | 33.47 | 5.62 | 316 | 10 | 15.15 | 33.47 | 5.61 | 24.77 | 318 | 0.03 |
| 32 | 14.24 | 33.49 | 5.00 | 298 | 20 | 14.72 | 33.48 | 5.40 | 24.88 | 308 | 0.06 |
| 52 | 13.32 | 33.55 | 4.49 | 275 | 30 | 14.30 | 33.49 | 5.06 | 24.98 | 299 | 0.09 |
| 77 | 12.42 | 33.58 | 4.29 | 256 | 50 | 13.39 | 33.55 | 4.50 | 25.22 | 276 | 0.15 |
| 102 | 10.82 | 33.72 | 3.20 | 218 | 75 | 12.65 | 33.60 | 4.33 | 25.40 | 259 | 0.22 |
| 126 | 10.46 | 33.87 | 2.72 | 201 | 100 | 10.90 | 33.71 | 3.28 | 25.81 | 220 | 0.28 |
| 165 | 9.72 | 33.96 | 2.41 | 182 | 150 | 10.00 | 33.93 | 2.53 | 26.13 | 189 | 0.38 |
| 206 | 9.19 | 34.07 | 2.07 | 165 | 200 | 9.36 | 34.06 | 2.14 | 26.36 | 168 | 0.47 |
| 256 | 8.44 | 34.14 | 1.66 | 149 | 250 | 8.54 | 34.13 | 1.70 | 26.54 | 151 | 0.56 |
| 306 | 7.94 | 34.22 | 1.31 | 136 | 300 | 8.00 | 34.20 | 1.38 | 26.67 | 138 | 0.63 |
| **90.30** | PAOLINA-T; November 21, 1958; 0119 GCT; 33°24.5'N, 117°55'W; sounding, 350 fm; wind, calm; weather, partly cloudy; sea, slight; wire angle, 07°. | | | | | | | | | | |
| 1 | 16.88 | 33.49 | 5.33 | 354 | 0 | (16.88) | (33.49) | (5.33) | (24.40) | (354) | (0.00) |
| 11 | 16.50 | 33.48 | 5.47 | 346 | 10 | 16.54 | 33.48 | 5.45 | 24.48 | 346 | 0.04 |
| 31 | 15.82 | 33.45 | 5.75a) | 333 | 20 | 16.20 | 33.47 | 5.58 | 24.54 | 340 | 0.07 |
| 41 | 15.14 | 33.43 | 5.29 | 320 | 30 | 15.90 | 33.45 | 5.72 | 24.60 | 334 | 0.10 |
| 51 | 14.14 | 33.46 | 4.98 | 298 | 50 | 14.12 | 33.46 | 5.00 | 24.98 | 298 | 0.17 |
| 61 | 13.40 | 33.54 | 4.48 | 277 | 75 | 13.03 | 33.53 | 4.27 | 25.27 | 271 | 0.24 |
| 70 | 13.16 | 33.53 | 4.35 | 273 | 100 | 12.32 | 33.58 | 3.82 | 25.45 | 254 | 0.30 |
| 86 | 12.74 | 33.53 | 4.07 | 265 | 150 | 10.41 | 33.76 | 2.94 | 25.93 | 208 | 0.42 |
| 101 | 12.28 | 33.58 | 3.81 | 254 | 200 | 8.77 | 34.14 | 1.77 | 26.50 | 154 | 0.51 |
| 115 | 11.80 | 33.61 | 3.54 | 242 | 250 | 8.15 | 34.32 | 1.44 | 26.74 | 132 | 0.59 |
| 140 | 10.94 | 33.68 | 3.17 | 222 | 300 | 7.80 | 34.30 | 1.08 | 26.78 | 128 | 0.66 |
| 170 | 9.31 | 34.01 | 2.23 | 172 | 400 | 6.98 | 34.32 | 0.56 | 26.90 | 116 | 0.78 |
| 204 | 8.70 | 34.14 | 1.74 | 153 | 500 | 6.18 | 34.36 | 0.34 | 27.05 | 103 | 0.90 |
| 252 | 8.14 | 34.32 | 1.42 | 132 | | | | | | | |
| 331 | 7.58 | 34.29 | 0.85 | 126 | | | | | | | |
| 431 | 6.71 | 34.33 | 0.48 | 111 | | | | | | | |
| 559 | 5.77 | 34.37 | 0.25 | 96 | | | | | | | |
| **90.37** | PAOLINA-T; November 20, 1958; 1938, 2021, 2048 GCT; 33°11'N, 118°24'W; sounding, 647 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 00°, 00°, 00°. | | | | | | | | | | |
| 1 | 17.52 | 33.55 | 6.02 | 363 | 0 | (17.52) | (33.55) | (6.02) | (24.30) | (363) | (0.00) |
| 11 | 17.03 | 33.58 | 6.18 | 350 | 10 | 17.05 | 33.58 | 6.18 | 24.43 | 351 | 0.04 |
| 31 | 16.38 | 33.54 | 6.07 | 339 | 20 | 16.94 | 33.58 | 6.16 | 24.46 | 348 | 0.07 |
| 41 | 15.57 | 33.51 | 6.07 | 324 | 30 | 16.43 | 33.54 | 6.07 | 24.55 | 340 | 0.10 |
| 52 | 13.86 | 33.48 | 5.35 | 290 | 50 | 13.98 | 33.48 | 5.40 | 25.04 | 293 | 0.17 |
| 61 | 12.77 | 33.61 | 4.68 | 260 | 75 | 12.38 | 33.66 | 3.77 | 25.50 | 248 | 0.24 |
| 71 | 12.48 | 33.66 | 3.88 | 252 | 100 | 11.44 | 33.78 | 3.31 | 25.76 | 224 | 0.30 |
| 85 | 12.01 | 33.71 | 3.59 | 239 | 150 | 9.88 | 33.87 | 3.17 | 26.11 | 191 | 0.40 |
| 100 | 11.44 | 33.78 | 3.31 | 224 | 200 | 8.72 | 34.04 | 2.46 | 26.44 | 160 | 0.49 |
| | | | | | 250 | 8.19 | 34.14 | 1.92 | 26.60 | 145 | 0.57 |
| 113 | 11.03 | 33.81 | 3.22 | 215 | 300 | 7.90 | 34.21 | 1.58 | 26.69 | 136 | 0.64 |
| 138 | 10.24 | 33.85 | 3.21 | 198 | 400 | 7.06 | 34.27 | 0.96 | 26.86 | 120 | 0.77 |
| 168 | 9.31 | 33.91 | 3.00 | 179 | 500 | 6.19 | 34.31 | 0.49 | 27.01 | 106 | 0.89 |
| 204 | 8.66 | 34.05 | 2.42 | 159 | | | | | | | |
| 253 | 8.18 | 34.14 | 1.91 | 145 | | | | | | | |
| 334 | 7.64 | 34.27 | 1.32 | 128 | | | | | | | |
| 434 | 6.70 | 34.27 | 0.75 | 115 | | | | | | | |
| 565 | 5.89 | 34.35 | 0.35 | 100 | | | | | | | |

a) Alternate value, 5.08 ml/L, not used in interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; November 20, 1958; 1355, 1418 GCT; 32°49.5'N, 118°55.5'W; sounding, 950 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 00°, 03°. 90.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.51 | 33.50 | 5.37 | 344 | 0 | (16.51) | (33.50) | (5.37) | (24.50) | (344) | (0.00) |
| 13 | 16.50 | 33.49 | 5.47 | 345 | 10 | 16.50 | 33.49 | 5.46 | 24.50 | 345 | 0.03 |
| 33 | 16.52 | 33.48 | 5.42 | 346 | 20 | 16.51 | 33.48 | 5.46 | 24.50 | 345 | 0.07 |
| 43 | 15.34 | 33.42 | 5.44 | 325 | 30 | 16.52 | 33.48 | 5.43 | 24.49 | 346 | 0.10 |
| 53 | 13.87 | 33.39 | 5.38 | 298 | 50 | 14.02 | 33.39 | 5.39 | 24.96 | 300 | 0.17 |
| 63 | 13.02 | 33.37 | 5.24 | 283 | 75 | 12.47 | 33.45 | 4.88 | 25.31 | 267 | 0.24 |
| 73 | 12.47 | 33.44 | 4.89 | 268 | 100 | 10.67 | 33.50 | 4.38 | 25.69 | 231 | 0.30 |
| 87 | 11.16 | 33.48 | 4.36 | 241 | 150 | 9.22 | 33.90 | 2.89 | 26.24 | 179 | 0.40 |
| 102 | 10.60 | 33.51 | 4.38 | 230 | 200 | 8.61 | 34.05 | 2.18 | 26.46 | 158 | 0.49 |
| 117 | 9.76 | 33.69 | 3.60 | 200 | 250 | 8.15 | 34.13 | 1.87 | 26.60 | 145 | 0.57 |
| 141 | 9.35 | 33.86 | 3.00 | 183 | 300 | 7.50 | 34.17 | 1.60 | 26.72 | 134 | 0.64 |
| 170 | 8.98 | 33.98 | 2.69 | 169 | 400 | 6.70 | 34.20 | 0.84 | 26.85 | 121 | 0.77 |
| | | | | | 500 | 6.20 | 34.26 | 0.48 | 26.97 | 110 | 0.89 |
| 205 | 8.54 | 34.06 | 2.13 | 156 | | | | | | | |
| 255 | 8.05 | 34.14 | 1.84 | 144 | | | | | | | |
| 334 | 7.06 | 34.18 | 1.31 | 127 | | | | | | | |
| 434 | 6.57 | 34.21 | 0.68 | 118 | | | | | | | |
| 565 | 5.87 | 34.34 | 0.41 | 100 | | | | | | | |

PAOLINA-T; November 20, 1958; 1025 GCT; 32°43'N, 119°16'W; sounding, 60 fm; wind, 340°, force 2; weather, clear; sea, moderate; wire angle, 00°. 90.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 16.60 | 33.54 | 5.19 | 343 | 0 | (16.60) | (33.54) | (5.19) | (24.51) | (343) | (0.00) |
| 12 | 16.60 | 33.53 | 5.32 | 344 | 10 | 16.60 | 33.53 | 5.31 | 24.50 | 344 | 0.03 |
| 32 | 16.61 | 33.53 | 5.31 | 344 | 20 | 16.60 | 33.53 | 5.31 | 24.50 | 344 | 0.07 |
| 52 | 14.20 | 33.39 | 5.44 | 304 | 30 | 16.61 | 33.53 | 5.31 | 24.50 | 344 | 0.10 |
| 77 | 12.82 | 33.42 | 4.83 | 275 | 50 | 14.40 | 33.40 | 5.44 | 24.88 | 308 | 0.17 |
| 103 | 11.08 | 33.53 | 4.21 | 236 | 75 | 12.86 | 33.42 | 4.87 | 25.22 | 276 | 0.24 |
| | | | | | 100 | 11.40 | 33.51 | 4.31 | 25.56 | 243 | 0.31 |

PAOLINA-T; November 20, 1958; 0732 GCT; 32°34.5'N, 119°37'W; sounding, 500 fm; wind, 340°, force 2; weather, partly cloudy; sea, slight; wire angle, 03°. 90.55

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.62 | 33.44 | 5.28 | 330 | 0 | (15.62) | (33.44) | (5.28) | (24.65) | (330) | (0.00) |
| 11 | 15.65 | 33.45 | 5.55 | 330 | 10 | 15.65 | 33.45 | 5.54 | 24.65 | 330 | 0.03 |
| 31 | 15.56 | 33.44 | 5.32 | 328 | 20 | 15.02 | 33.45 | 5.54 | 24.65 | 330 | 0.07 |
| 57 | 15.35 | 33.43 | 5.36 | 325 | 30 | 15.56 | 33.44 | 5.33 | 24.67 | 328 | 0.10 |
| 67 | 12.98 | 33.42 | 5.01 | 278 | 50 | 15.55 | 33.44 | 5.32 | 24.67 | 328 | 0.16 |
| 76 | 11.78 | 33.43 | 4.72 | 255 | 75 | 12.20 | 33.42 | 4.85 | 25.35 | 264 | 0.24 |
| 86 | 10.72 | 33.44 | 4.36 | 236 | 100 | 10.05 | 33.51 | 4.05 | 25.81 | 220 | 0.30 |
| 101 | 10.00 | 33.52 | 4.02 | 219 | 150 | 8.84 | 33.88 | 2.55 | 26.29 | 174 | 0.40 |
| 116 | 9.70 | 33.60 | 3.73 | 208 | 200 | 8.02 | 34.06 | 1.88 | 26.56 | 149 | 0.48 |
| 135 | 9.11 | 33.77 | 2.94 | 186 | 250 | 7.82 | 34.10 | 1.57 | 26.62 | 143 | 0.56 |
| 155 | 8.78 | 33.90 | 2.47 | 172 | 300 | 7.32 | 34.18 | 1.15 | 26.75 | 130 | 0.63 |
| 179 | 8.45 | 33.96 | 2.15 | 163 | 400 | 6.74 | 34.27 | 0.59 | 26.90 | 116 | 0.76 |
| 203 | 7.98 | 34.07a) | 1.82 | 147 | 500 | 6.36 | 34.32 | 0.47 | 27.00 | 107 | 0.87 |
| 251 | 7.81 | 34.10a) | 1.55 | 143 | | | | | | | |
| 331 | 7.00 | 34.22 | 0.93 | 123 | | | | | | | |
| 432 | 6.62 | 34.28 | 0.64 | 114 | | | | | | | |
| 562 | 5.82 | 34.35 | 0.33 | 99 | | | | | | | |

a) The use of these values results in an unusual density structure, but nevertheless values were accepted in drawing the property curve.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ 10 cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ 10 cm/g | ΔD dyn. m |

90.60 PAOLINA-T; November 20, 1958; 0237, 0323 GCT; 32°25.5'N, 119°57'W; sounding, 550 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 05°, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.05 | 33.48 | 5.89 | 336 | 0 | (16.05) | (33.48) | (5.89) | (24.59) | (336) | (0.00) |
| 12 | 16.04 | 33.48 | 5.89 | 336 | 10 | 16.04 | 33.48 | 5.89 | 24.59 | 336 | 0.03 |
| 32 | 15.99 | 33.44 | 6.05 | 337 | 20 | 16.01 | 33.45 | 6.00 | 24.58 | 337 | 0.07 |
| 57 | 15.94 | 33.45 | 6.06 | 336 | 30 | 15.99 | 33.44 | 6.03 | 24.58 | 337 | 0.10 |
| 67 | 12.75 | 33.33 | 5.56 | 280 | 50 | 15.96 | 33.45 | 6.05 | 24.59 | 336 | 0.17 |
| 76 | 11.42 | 33.40 | 5.26 | 252 | 75 | 11.43 | 33.40 | 5.27 | 25.47 | 252 | 0.24 |
| 86 | 11.01 | 33.46 | 5.09 | 240 | 100 | 10.09 | 33.58 | 4.24 | 25.85 | 216 | 0.30 |
| 101 | 10.07 | 33.58 | 4.24 | 216 | 150 | 8.72 | 33.86 | 3.00 | 26.29 | 174 | 0.40 |
| 115 | 9.46 | 33.66 | 3.65 | 200 | 200 | 8.09 | 34.04 | 2.33 | 26.52 | 152 | 0.48 |
| | | | | | 250 | 7.61 | 34.15 | 1.62 | 26.68 | 137 | 0.56 |
| 134 | 9.01 | 33.80 | 3.12 | 183 | 300 | 7.19 | 34.22 | 1.24 | 26.80 | 126 | 0.62 |
| 156 | 8.62 | 33.88 | 2.95 | 171 | 400 | 6.44 | 34.28 | 0.77 | 26.95 | 111 | 0.75 |
| 180 | 8.36 | 33.96 | 2.70 | 161 | 500 | 5.98 | 34.32 | 0.50 | 27.04 | 103 | 0.86 |
| 204 | 8.04 | 34.05 | 2.28 | 150 | | | | | | | |
| 254 | 7.59 | 34.16 | 1.54 | 136 | | | | | | | |
| 332 | 6.88 | 34.25 | 1.06 | 120 | | | | | | | |
| 433 | 6.26 | 34.29 | 0.67 | 108 | | | | | | | |
| 563 | 5.76 | 34.34 | 0.40 | 98 | | | | | | | |

90.70 PAOLINA-T; November 19, 1958; 1948 GCT; 31°53.6'N, 120°29.5'W; sounding, 2125 fm; wind, 360°, force 3; weather, cloudy; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 16.73 | 33.58 | 4.98 | 343 | 0 | (16.73) | (33.58) | (4.98) | (24.51) | (343) | (0.00) |
| 13 | 16.71 | 33.58 | 5.36 | 343 | 10 | 16.72 | 33.58 | 5.30 | 24.51 | 343 | 0.03 |
| 33 | 16.66 | 33.60 | 5.34 | 340 | 20 | 16.69 | 33.58 | 5.36 | 24.52 | 342 | 0.07 |
| 62 | 15.89 | 33.48 | 5.22 | 332 | 30 | 16.67 | 33.60 | 5.35 | 24.54 | 341 | 0.10 |
| 73 | 13.82 | 33.37 | 5.44 | 298 | 50 | 16.48 | 33.58 | 5.31 | 24.56 | 339 | 0.17 |
| 83 | 12.72 | 33.43 | 5.44 | 272 | 75 | 13.60 | 33.38 | 5.44 | 25.04 | 293 | 0.25 |
| 98 | 11.33 | 33.47 | 4.80 | 244 | 100 | 11.18 | 33.48 | 4.77 | 25.58 | 242 | 0.32 |
| 112 | 10.25 | 33.55 | 4.56 | 221 | 150 | 9.22 | 33.74 | 4.11 | 26.12 | 190 | 0.43 |
| 127 | 9.60 | 33.57 | 3.98 | 209 | 200 | 8.32 | 33.97 | 2.94 | 26.44 | 160 | 0.52 |
| 148 | 9.22 | 33.73 | 4.12 | 191 | 250 | 7.54 | 34.04 | 2.29 | 26.61 | 144 | 0.59 |
| 167 | 8.96 | 33.79 | 3.57 | 183 | 300 | 7.05 | 34.08 | 1.94 | 26.71 | 134 | 0.66 |
| 196 | 8.40 | 33.95 | 3.15 | 163 | 400 | 6.20 | 34.23 | 0.89 | 26.94 | 112 | 0.79 |
| 221 | 7.98 | 34.01 | 2.42 | 152 | 500 | 5.46 | 34.28 | 0.68 | 27.08 | 99 | 0.90 |
| 275 | 7.26 | 34.05 | 2.21 | 139 | 600 | 4.94 | 34.31 | 0.57 | 27.16 | 92 | 1.00 |
| 359 | 6.58 | 34.17 | 1.11 | 121 | | | | | | | |
| 467 | 5.68 | 34.27 | 0.73 | 103 | | | | | | | |
| 604 | 4.92 | 34.31 | 0.56 | 91 | | | | | | | |

90.80 PAOLINA-T; November 19, 1958; 1330 GCT; 31°35.5'N, 121°09'W; sounding, 2300 fm; wind, 340°, force 4; weather, partly cloudy; sea, rough; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 16.62 | 33.49 | 5.32 | 347 | 0 | (16.62) | (33.49) | (5.32) | (24.47) | (347) | (0.00) |
| 12 | 16.61 | 33.49 | 5.28 | 347 | 10 | 16.61 | 33.49 | 5.29 | 24.47 | 347 | 0.03 |
| 31 | 16.62 | 33.48 | 5.21 | 348 | 20 | 16.62 | 33.49 | 5.24 | 24.46 | 348 | 0.07 |
| 60 | 16.60 | 33.47 | 5.29 | 349 | 30 | 16.62 | 33.48 | 5.22 | 24.46 | 348 | 0.10 |
| 69 | 14.23 | 33.28 | 5.32 | 313 | 50 | 16.61 | 33.47 | 5.27 | 24.45 | 349 | 0.17 |
| 78 | 13.06 | 33.42 | 4.89 | 280 | 75 | 13.25 | 33.40 | 4.95 | 25.13 | 284 | 0.25 |
| 91 | 11.80 | 33.50 | 4.54 | 251 | 100 | 11.43 | 33.51 | 4.64 | 25.56 | 244 | 0.32 |
| 107 | 11.16 | 33.51 | 4.70 | 238 | 150 | 9.12 | 33.74 | 3.46 | 26.14 | 189 | 0.43 |
| 121 | 10.01 | 33.58 | 4.44 | 215 | 200 | 8.25 | 33.96 | 2.82 | 26.44 | 160 | 0.52 |
| 140 | 9.32 | 33.68 | 3.62 | 196 | 250 | 7.42 | 34.06 | 2.20 | 26.64 | 141 | 0.59 |
| 159 | 9.00 | 33.78 | 3.38 | 185 | 300 | 6.93 | 34.13 | 1.15 | 26.76 | 129 | 0.66 |
| 187 | 8.46 | 33.92 | 2.95 | 166 | 400 | 6.15 | 34.21 | 0.95 | 26.94 | 113 | 0.79 |
| 209 | 8.10 | 33.98 | 2.70 | 156 | 500 | 5.59 | 34.27 | 0.57 | 27.06 | 101 | 0.90 |
| 258 | 7.32 | 34.07 | 2.11 | 138 | | | | | | | |
| 337 | 6.66 | 34.16 | 1.33 | 123 | | | | | | | |
| 442 | 5.81 | 34.24 | 0.73 | 107 | | | | | | | |
| 579 | 5.32 | 34.32 | 0.38 | 95 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T}^{-5}{}_{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T}^{-5}{}_{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

PAOLINA-T; November 17, 1958; 1951 GCT; 32°54.5'N, 117°21'W; sounding, 300 fm; wind, calm; weather, partly cloudy; sea, moderate; wire angle, 02°. 93.27

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.80 | 33.49 | 5.11 | 352 | 0 | (16.80) | (33.49) | (5.11) | (24.42) | (352) | (0.00) |
| 11 | 16.63 | 33.52 | 5.22 | 346 | 10 | 16.64 | 33.52 | 5.22 | 24.48 | 346 | 0.03 |
| 32 | 14.98 | 33.44 | 5.34 | 316 | 20 | 16.12 | 33.50 | 5.28 | 24.59 | 336 | 0.07 |
| 52 | 13.41 | 33.58 | 4.24 | 275 | 30 | 15.12 | 33.45 | 5.34 | 24.77 | 318 | 0.10 |
| 77 | 12.36 | 33.63 | 3.89 | 251 | 50 | 13.55 | 33.58 | 4.30 | 25.21 | 277 | 0.16 |
| 101 | 11.61 | 33.71 | 3.21 | 232 | 75 | 12.44 | 33.63 | 3.93 | 25.46 | 253 | 0.23 |
| 126 | 10.44 | 33.85 | 2.75 | 202 | 100 | 11.65 | 33.71 | 3.24 | 25.67 | 233 | 0.29 |
| 165 | 9.34 | 34.05 | 2.07 | 169 | 150 | 9.64 | 34.00 | 2.25 | 26.25 | 178 | 0.39 |
| 205 | 8.86 | 34.11 | 1.87 | 158 | 200 | 8.92 | 34.10 | 1.88 | 26.45 | 159 | 0.48 |

PAOLINA-T; November 17, 1958; 2210 GCT; 32°49'N, 117°30.5'W; sounding, 480 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 09°. 93.30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.74 | 33.55 | 5.47 | 368 | 0 | (17.74) | (33.55) | (5.47) | (24.25) | (368) | (0.00) |
| 11 | 17.48 | 33.53 | 5.32 | 364 | 10 | 17.52 | 33.53 | 5.34 | 24.28 | 364 | 0.04 |
| 31 | 13.70 | 33.53 | 4.76 | 284 | 20 | 15.00 | 33.53 | 4.94 | 24.86 | 310 | 0.07 |
| 41 | 13.19 | 33.55 | 4.32 | 272 | 30 | 13.71 | 33.53 | 4.75 | 25.14 | 284 | 0.10 |
| 51 | 12.80 | 33.60 | 3.82 | 262 | 50 | 12.82 | 33.60 | 3.83 | 25.36 | 262 | 0.15 |
| 60 | 12.81 | 33.58 | 3.97 | 264 | 75 | 12.28 | 33.63 | 3.61 | 25.49 | 250 | 0.22 |
| 70 | 12.44 | 33.62 | 3.68 | 254 | 100 | 11.69 | 33.77 | 2.93 | 25.72 | 228 | 0.28 |
| 85 | 12.00 | 33.66 | 3.41 | 243 | 150 | 10.59 | 33.90 | 2.53 | 26.02 | 200 | 0.39 |
| 99 | 11.70 | 33.77 | 2.93 | 229 | 200 | 9.64 | 34.02 | 2.39 | 26.26 | 177 | 0.48 |
| 115 | 11.14 | 33.75 | 2.96 | 220 | 250 | 8.90 | 34.16 | 1.78 | 26.50 | 154 | 0.57 |
| 139 | 10.72 | 33.84 | 2.73 | 207 | 300 | 8.26 | 34.20 | 1.46 | 26.64 | 142 | 0.64 |
| 167 | 10.42 | 33.95 | 2.37 | 194 | 400 | 7.24 | 34.30 | 0.80 | 26.86 | 120 | 0.78 |
| 201 | 9.62 | 34.02 | 2.39 | 176 | 500 | 6.54 | 34.34 | 0.43 | 27.01 | 106 | 0.90 |
| 251 | 8.88 | 34.16 | 1.77 | 154 | | | | | | | |
| 331 | 7.86 | 34.22 | 1.26 | 134 | | | | | | | |
| 430 | 6.96 | 34.33 | 0.60 | 114 | | | | | | | |
| 560 | 5.74 | 34.34 | 0.33 | 98 | | | | | | | |

PAOLINA-T; November 18, 1958; 0210 GCT; 32°39.5'N, 117°51.5'W; sounding, 390 fm; wind, 360°, force 1; weather, partly cloudy; sea, moderate; wire angle, 05°. 93.35

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.79 | 33.51 | 6.26 | 372 | 0 | 17.79 | 33.51 | 6.26 | 24.20 | 372 | 0.00 |
| 10 | 17.78 | 33.54 | 6.18a) | 370 | 10 | 17.78 | 33.54 | 6.18 | 24.23 | 370 | 0.04 |
| 30 | 17.50 | 33.53 | 6.12 | 364 | 20 | 17.65 | 33.54 | 6.13 | 24.26 | 367 | 0.07 |
| 40 | 14.45 | 33.34 | 6.40 | 312 | 30 | 17.50 | 33.53 | 6.12 | 24.29 | 364 | 0.11 |
| 50 | 13.58 | 33.41 | 5.76 | 290 | 50 | 13.58 | 33.41 | 5.76 | 25.07 | 290 | 0.18 |
| 61 | 13.01 | 33.52 | 5.33 | 272 | 75 | 12.26 | 33.55 | 4.73 | 25.43 | 255 | 0.24 |
| 71 | 12.38 | 33.53 | 4.90 | 259 | 100 | 11.20 | 33.63 | 4.28 | 25.70 | 230 | 0.31 |
| 85 | 11.98 | 33.68 | 3.97b) | 241 | 150 | 10.38 | 33.90 | 2.76 | 26.06 | 196 | 0.41 |
| 100 | 11.20 | 33.63 | 4.28 | 230 | 200 | 9.46 | 34.06 | 2.37 | 26.32 | 171 | 0.51 |
| 114 | 10.84 | 33.71 | 3.90 | 219 | 250 | 8.64 | 34.15 | 2.12 | 26.53 | 152 | 0.59 |
| 138 | 10.64 | 33.84 | 3.15 | 206 | 300 | 8.00 | 34.20 | 1.74 | 26.67 | 138 | 0.66 |
| 167 | 9.99 | 33.98 | 2.47 | 184 | 400 | 6.90 | 34.28 | 0.89 | 26.88 | 118 | 0.80 |
| 201 | 9.44 | 34.06 | 2.37 | 170 | 500 | 6.19 | 34.35 | 0.47 | 27.04 | 103 | 0.91 |
| 251 | 8.62 | 34.15 | 2.11 | 151 | | | | | | | |
| 329 | 7.66 | 34.22 | 1.52 | 132 | | | | | | | |
| 429 | 6.65 | 34.29 | 0.67 | 113 | | | | | | | |
| 559 | 5.84 | 34.41 | 0.31 | 94 | | | | | | | |

a) Alternate value, 5.36 ml/L, not used in interpolation.
b) Alternate value, 4.17 ml/L, not used in interpolation.

SIO
CCOFI
5811

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

93.40 PAOLINA-T; November 18, 1958; 0602 GCT; 32°30'N, 118°12.5'W; sounding, 900 fm; wind, 320°, force 3; weather, clear; sea, slight; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 17.52 | 33.48 | 5.31 | 368 | 0 | (17.52) | (33.48) | (5.31) | (24.25) | (368) | (0.00) |
| 12 | 17.52 | 33.51 | 5.26 | 366 | 10 | 17.52 | 33.51 | 5.27 | 24.27 | 366 | 0.04 |
| 32 | 17.52 | 33.50 | 5.41 | 367 | 20 | 17.52 | 33.50 | 5.32 | 24.27 | 366 | 0.07 |
| 42 | 16.00 | 33.37 | 5.54 | 343 | 30 | 17.52 | 33.50 | 5.40 | 24.26 | 367 | 0.11 |
| 53 | 13.95 | 33.30 | 5.52 | 306 | 50 | 14.06 | 33.30 | 5.52 | 24.88 | 308 | 0.18 |
| 63 | 13.49 | 33.34 | 5.20 | 294 | 75 | 12.75 | 33.38 | 4.94 | 25.22 | 276 | 0.25 |
| 72 | 12.87 | 33.37 | 4.97 | 280 | 100 | 11.14 | 33.45 | 4.56 | 25.57 | 242 | 0.32 |
| 87 | 11.78 | 33.40 | 4.77 | 257 | 150 | 9.53 | 33.85 | 3.04 | 26.16 | 187 | 0.42 |
| 102 | 11.00 | 33.46 | 4.50 | 240 | 200 | 8.94 | 34.03 | 2.14 | 26.39 | 164 | 0.51 |
| 116 | 10.00 | 33.57 | 3.92 | 215 | 250 | 8.08 | 34.16 | 1.69 | 26.62 | 143 | 0.59 |
| 141 | 9.64 | 33.78 | 3.20 | 194 | 300 | 7.52 | 34.20 | 1.25 | 26.74 | 131 | 0.66 |
| 171 | 9.26 | 33.96 | 2.78 | 175 | 400 | 6.90 | 34.28 | 0.73 | 26.89 | 117 | 0.79 |
| 205 | 8.88 | 34.04 | 2.08 | 163 | 500 | 6.30 | 34.34 | 0.47 | 27.01 | 105 | 0.91 |
| 253 | 8.02 | 34.16 | 1.67 | 142 | | | | | | | |
| 333 | 7.25 | 34.22 | 1.04 | 126 | | | | | | | |
| 432 | 6.76 | 34.31 | 0.61 | 113 | | | | | | | |
| 560 | 5.85 | 34.25 | 0.33 | 99 | | | | | | | |

93.50 PAOLINA-T; November 17, 1958; 1234 GCT; 32°09'N, 118°56.7'W; sounding, 840 fm; wind, 320°, force 3; weather, clear; sea, moderate; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 17.34 | 33.69 | 5.06 | 348 | 0 | (17.34) | (33.69) | (5.06) | (24.46) | (348) | (0.00) |
| 12 | 17.34 | 33.68 | 5.66 | 349 | 10 | 17.34 | 33.68 | 5.66 | 24.45 | 349 | 0.04 |
| 32 | 17.33 | 33.71 | 4.66 | 347 | 20 | 17.34 | 33.70 | 5.10 | 24.46 | 348 | 0.07 |
| 47 | 13.66 | 33.57 | 4.68 | 280 | 30 | 17.33 | 33.71 | 4.68 | 24.47 | 347 | 0.10 |
| 58 | 11.88 | 33.58 | 3.84 | 246 | 50 | 13.02 | 33.57 | 4.41 | 25.31 | 268 | 0.17 |
| 68 | 10.77 | 33.64 | 3.43 | 222 | 75 | 10.33 | 33.64 | 3.27 | 25.86 | 215 | 0.23 |
| 78 | 10.31 | 33.66 | 3.21 | 214 | 100 | 9.49 | 33.79 | 2.78 | 26.12 | 190 | 0.28 |
| 97 | 9.59 | 33.75 | 2.80 | 195 | 150 | 8.74 | 33.97 | 2.02 | 26.38 | 166 | 0.37 |
| 111 | 9.23 | 33.86 | 2.75 | 182 | 200 | 8.25 | 34.10 | 1.75 | 26.56 | 149 | 0.45 |
| 126 | 9.02 | 33.89 | 2.49 | 176 | 250 | 7.74 | 34.19 | 1.50 | 26.70 | 135 | 0.52 |
| 150 | 8.74 | 33.97 | 2.02 | 166 | 300 | 7.20 | 34.23 | 1.24 | 26.81 | 125 | 0.59 |
| 179 | 8.46 | 34.05 | 1.87 | 156 | 400 | 6.41 | 34.28 | 0.53 | 26.95 | 111 | 0.71 |
| 218 | 8.04 | 34.14 | 1.63 | 143 | 500 | 5.92 | 34.32 | 0.43 | 27.05 | 102 | 0.82 |
| 271 | 7.48 | 34.21 | 1.41 | 131 | 600 | 5.50 | 34.36 | 0.42 | 27.13 | 95 | 0.92 |
| 355 | 6.70 | 34.26 | 0.68 | 116 | | | | | | | |
| 458 | 6.09 | 34.30 | 0.45 | 106 | | | | | | | |
| 603 | 5.47 | 34.36 | 0.42 | 94 | | | | | | | |

93.60 PAOLINA-T; November 18, 1958; 1839 GCT; 31°50.5'N, 119°34'W; sounding, 1220 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.52 | 33.48 | 5.47 | 346 | 0 | 16.52 | 33.48 | 5.47 | 24.48 | 346 | 0.00 |
| 9 | 16.48 | 33.48 | 5.51 | 345 | 10 | 16.48 | 33.48 | 5.51 | 24.50 | 345 | 0.03 |
| 28 | 16.46 | 33.51 | 5.45 | 343 | 20 | 16.47 | 33.50 | 5.48 | 24.50 | 344 | 0.07 |
| 58 | 14.02 | 33.40 | 5.67 | 300 | 30 | 16.46 | 33.51 | 5.46 | 24.52 | 342 | 0.10 |
| 67 | 13.52 | 33.41 | 5.56 | 288 | 50 | 16.25 | 33.51 | 5.48 | 24.57 | 338 | 0.17 |
| 77 | 12.24 | 33.49 | 4.96 | 260 | 75 | 12.57 | 33.48 | 5.04 | 25.32 | 266 | 0.25 |
| 94 | 10.81 | 33.49 | 4.64 | 235 | 100 | 11.64 | 33.52 | 4.56 | 25.71 | 229 | 0.31 |
| 108 | 10.32 | 33.58 | 4.34 | 219 | 150 | 9.10 | 33.77 | 3.36 | 26.16 | 186 | 0.41 |
| 116 | 9.96 | 33.61 | 4.15 | 201 | 200 | 8.15 | 34.02 | 2.52 | 26.52 | 152 | 0.50 |
| 135 | 9.32 | 33.71 | 3.63 | 194 | 250 | 7.58 | 34.10 | 2.00 | 26.65 | 140 | 0.58 |
| 153 | 9.02 | 33.79 | 3.28 | 185 | 300 | 7.28 | 34.18 | 1.51 | 26.75 | 130 | 0.64 |
| 179 | 8.50 | 33.98 | 2.93 | 162 | 400 | 6.68 | 34.32 | 0.96 | 26.96 | 111 | 0.77 |
| 203 | 8.10 | 34.04 | 2.48 | 152 | 500 | 6.05 | 34.35 | 0.73 | 27.06 | 101 | 0.88 |
| 253 | 7.57 | 34.10 | 1.99 | 140 | | | | | | | |
| 333 | 7.10 | 34.23 | 1.21 | 124 | | | | | | | |
| 440 | 6.41 | 34.34 | 0.89 | 107 | | | | | | | |
| 579 | 5.56 | 34.36 | 0.48 | 95 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| PAOLINA-T; November 19, 1958; 0047 GCT; 31°30.5'N, 120°13'W; sounding, 2000 fm; wind, 360°, force 4; weather, cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | 93.70 |
| 2 | 17.05 | 33.52 | 6.13 | 355 | 0 | (17.05) | (33.52) | (6.13) | (24.39) | (355) | (0.00) |
| 12 | 17.04 | 33.51 | 6.19 | 355 | 10 | 17.04 | 33.51 | 6.19 | 24.39 | 355 | 0.04 |
| 32 | 16.97 | 33.51 | 6.10 | 354 | 20 | 17.02 | 33.51 | 6.17 | 24.39 | 355 | 0.07 |
| 63 | 16.92 | 33.51 | 6.13 | 352 | 30 | 16.98 | 33.51 | 6.11 | 24.40 | 354 | 0.11 |
| 72 | 15.54 | 33.46 | 6.34 | 326 | 50 | 16.95 | 33.51 | 6.12 | 24.41 | 353 | 0.18 |
| 83 | 14.45 | 33.46 | 6.34 | 304 | 75 | 15.25 | 33.46 | 6.35 | 24.76 | 320 | 0.26 |
| 98 | 12.81 | 33.49 | 5.87 | 270 | 100 | 12.68 | 33.48 | 5.80 | 25.31 | 268 | 0.34 |
| 112 | 11.68 | 33.46 | 5.26 | 252 | 150 | 9.98 | 33.69 | 3.88 | 25.96 | 206 | 0.46 |
| 128 | 10.68 | 33.51 | 4.89 | 231 | 200 | 9.08 | 33.98 | 2.40 | 26.33 | 170 | 0.55 |
| 148 | 10.00 | 33.67 | 3.98 | 208 | 250 | 8.24 | 34.07 | 2.34 | 26.53 | 152 | 0.63 |
| 167 | 9.69 | 33.82 | 3.16 | 192 | 300 | 7.66 | 34.12 | 1.94 | 26.65 | 140 | 0.71 |
| 197 | 9.17 | 33.97 | 2.40 | 172 | 400 | 6.68 | 34.20 | 1.00 | 26.86 | 120 | 0.85 |
| 221 | 8.62 | 34.04 | 2.40 | 159 | 500 | 5.80 | 34.24 | 0.67 | 27.00 | 107 | 0.96 |
| 274 | 7.94 | 34.09 | 2.20 | 145 | 600 | 5.37 | 34.31 | 0.46 | 27.12 | 95 | 1.07 |
| 358 | 7.06 | 34.19 | 1.25 | 126 | | | | | | | |
| 466 | 6.04 | 34.22 | 0.76 | 111 | | | | | | | |
| 605 | 5.23 | 34.32 | 0.45 | 94 | | | | | | | |
| PAOLINA-T; November 19, 1958; 0706 GCT; 31°06'N, 120°51'W; sounding, 2000 fm; wind, 020°, force 5; weather, partly cloudy; sea, rough; wire angle, 06°. | | | | | | | | | | | 93.80 |
| 2 | 17.12 | 33.46 | 5.31 | 361 | 0 | (17.12) | (33.46) | (5.31) | (24.32) | (361) | (0.00) |
| 11 | 17.13 | 33.45 | 5.44 | 361 | 10 | 17.13 | 33.45 | 5.43 | 24.32 | 361 | 0.04 |
| 30 | 17.12 | 33.46 | 5.49 | 361 | 20 | 17.12 | 33.46 | 5.46 | 24.32 | 361 | 0.07 |
| 61 | 17.12 | 33.46 | 5.37 | 361 | 30 | 17.12 | 33.46 | 5.49 | 24.32 | 361 | 0.11 |
| 70 | 15.74 | 33.44 | 5.47 | 332 | 50 | 17.12 | 33.46 | 5.40 | 24.32 | 361 | 0.18 |
| 80 | 14.74 | 33.38 | 5.76 | 315 | 75 | 15.17 | 33.40 | 5.66 | 24.74 | 322 | 0.26 |
| 94 | 13.55 | 33.48 | 5.21 | 284 | 100 | 12.98 | 33.48 | 4.96 | 25.22 | 274 | 0.34 |
| 109 | 12.04 | 33.46 | 4.66 | 258 | 150 | 9.61 | 33.59 | 4.07 | 25.94 | 208 | 0.46 |
| 132 | 10.27 | 33.53 | 4.57 | 222 | 200 | 8.60 | 33.91 | 2.77 | 26.36 | 168 | 0.56 |
| 163 | 9.20 | 33.66 | 3.67 | 196 | 250 | 7.95 | 34.01 | 2.30 | 26.53 | 151 | 0.64 |
| 191 | 8.70 | 33.86 | 2.99 | 174 | 300 | 7.26 | 34.07 | 1.94 | 26.68 | 138 | 0.71 |
| 215 | 8.40 | 33.95 | 2.58 | 162 | 400 | 6.28 | 34.18 | 0.98 | 26.89 | 117 | 0.85 |
| 270 | 7.64 | 34.04 | 2.14 | 145 | 500 | 5.66 | 34.24 | 0.54 | 27.02 | 106 | 0.96 |
| 305 | 7.20 | 34.07 | 1.90 | 137 | 600 | 5.20 | 34.31 | 0.42 | 27.13 | 94 | 1.07 |
| 353 | 6.62 | 34.14 | 1.31 | 124 | | | | | | | |
| 461 | 5.88 | 34.21 | 0.69 | 110 | | | | | | | |
| 600 | 5.20 | 34.31 | 0.42 | 94 | | | | | | | |
| PAOLINA-T; November 13, 1958; 0225 GCT;[a] 32°12'N, 117°16'W; sounding, 800 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 05°. | | | | | | | | | | | 97.32 |
| 492 | 6.31 | 34.42 | 0.31 | 99 | | | | | | | |
| 502 | 6.25 | 34.35 | 0.14 | 104 | | | | | | | |
| 513 | 6.16 | 34.40 | 0.25 | 99 | | | | | | | |
| 523 | 6.04 | 34.38 | 0.34 | 99 | | | | | | | |
| 532 | 6.02 | 34.40 | 0.23 | 98 | | | | | | | |
| 543 | 5.95 | 34.38 | 0.27 | 98 | | | | | | | |
| 553 | 5.87 | 34.38 | 0.21 | 97 | | | | | | | |
| 563 | 5.84 | 34.38 | 0.28 | 96 | | | | | | | |
| 572 | 5.78 | 34.40 | 0.28 | 94 | | | | | | | |
| 582 | 5.72 | 34.38 | 0.42 | 95 | | | | | | | |
| 592 | 5.65 | 34.38 | 0.26 | 94 | | | | | | | |
| 602 | 5.58 | 34.42 | 0.24 | 90 | | | | | | | |
| 612 | 5.52 | 34.40 | 0.23 | 91 | | | | | | | |

a) Test cast.

5811

CCOFI 5811

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{3}^{-5}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{3}^{-5}$ $10^{-5}$ cm/g | ΔD dyn. m |

97.60 PAOLINA-T; November 14, 1958; 1037 GCT; 31°17'N, 119°06'W; sounding, 1900 fm; wind, 320°, force 4; weather, clear; sea, very rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 17.75 | 33.43 | 5.52 | 377 | 0 | (17.75) | (33.43) | (5.52) | (24.15) | (377) | (0.00) |
| 12 | 17.73 | 33.46 | 5.47 | 375 | 10 | 17.74 | 33.46 | 5.48 | 24.18 | 375 | 0.04 |
| 32 | 17.76 | 33.44 | 5.74 | 376 | 20 | 17.73 | 33.45 | 5.65 | 24.17 | 376 | 0.08 |
| 46 | 16.09 | 33.41 | 6.07 | 342 | 30 | 17.75 | 33.44 | 5.74 | 24.16 | 376 | 0.11 |
| 56 | 15.36 | 33.39 | 6.12 | 327 | 50 | 15.89 | 33.40 | 6.10 | 24.59 | 336 | 0.18 |
| 66 | 14.82 | 33.40 | 5.93 | 316 | 75 | 14.50 | 33.48 | 5.87 | 24.93 | 304 | 0.26 |
| 76 | 14.49 | 33.48 | 5.86 | 303 | 100 | 11.88 | 33.54 | 5.12 | 25.50 | 249 | 0.34 |
| 96 | 12.37 | 33.54 | 5.13 | 258 | 150 | 9.72 | 33.67 | 4.11 | 25.98 | 203 | 0.45 |
| 110 | 10.92 | 33.55 | 5.03 | 232 | 200 | 8.55 | 33.97 | 2.63 | 26.41 | 163 | 0.54 |
| 125 | 10.17 | 33.59 | 4.48 | 216 | 250 | 7.91 | 34.12 | 1.69 | 26.63 | 142 | 0.62 |
| 150 | 9.72 | 33.67 | 4.11 | 203 | 300 | 7.45 | 34.20 | 1.21 | 26.74 | 131 | 0.69 |
| 178 | 8.85 | 33.86 | 3.30 | 176 | 400 | 6.82 | 34.29 | 0.65 | 26.91 | 116 | 0.82 |
| 218 | 8.30 | 34.04 | 2.22 | 154 | 500 | 6.26 | 34.36 | 0.34 | 27.03 | 104 | 0.93 |
| 271 | 7.67 | 34.16 | 1.47 | 137 | 600 | 5.85 | 34.38 | 0.28 | 27.10 | 97 | 1.04 |
| 353 | 7.08 | 34.25 | 0.87 | 122 | | | | | | | |
| 456 | 6.49 | 34.34 | 0.41 | 108 | | | | | | | |
| 602 | 5.82 | 34.38 | 0.28 | 96 | | | | | | | |

100.60 PAOLINA-T; November 14, 1958; 0420 GCT; 30°42'N, 118°43.5'W; sounding, 1500+ fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 19.46 | 33.67 | 4.78 | 400 | 0 | (19.46) | (33.67) | (4.78) | (23.92) | (400) | (0.00) |
| 12 | 19.47 | 33.68 | 4.90 | 400 | 10 | 19.47 | 33.68 | 4.88 | 23.92 | 400 | 0.04 |
| 32 | 19.48 | 33.68 | 4.86 | 400 | 20 | 19.48 | 33.68 | 4.88 | 23.92 | 400 | 0.08 |
| 46 | 18.69 | 33.58 | 4.99 | 389 | 30 | 19.48 | 33.68 | 4.87 | 23.92 | 400 | 0.12 |
| 57 | 16.00 | 33.55 | 5.32 | 330 | 50 | 16.90 | 33.56 | 5.22 | 24.46 | 348 | 0.19 |
| 67 | 15.59 | 33.53 | 5.54 | 322 | 75 | 14.56 | 33.48 | 5.25 | 24.92 | 304 | 0.28 |
| 76 | 14.47 | 33.48 | 5.23 | 303 | 100 | 12.42 | 33.58 | 4.29 | 25.42 | 256 | 0.35 |
| 95 | 12.77 | 33.55 | 4.49 | 264 | 150 | 10.72 | 33.86 | 2.70 | 25.96 | 206 | 0.46 |
| 109 | 11.89 | 33.64 | 3.95 | 242 | 200 | 9.63 | 34.01 | 2.33 | 26.27 | 176 | 0.56 |
| 123 | 11.27 | 33.71 | 3.70 | 226 | 250 | 8.89 | 34.14 | 1.88 | 26.48 | 156 | 0.65 |
| 146 | 10.80 | 33.84 | 2.78 | 208 | 300 | 8.40 | 34.20 | 1.52 | 26.61 | 144 | 0.72 |
| 175 | 10.24 | 33.95 | 2.36 | 191 | 400 | 7.36 | 34.28 | 0.92 | 26.83 | 123 | 0.86 |
| 213 | 9.30 | 34.05 | 2.31 | 168 | 500 | 6.55 | 34.33 | 0.56 | 26.98 | 109 | 0.98 |
| 265 | 8.76 | 34.17 | 1.72 | 151 | 600 | (5.82) | (34.33) | (0.35) | (27.07) | (100) | (1.10) |
| 348 | 7.86 | 34.23 | 1.21 | 134 | | | | | | | |
| 452 | 6.84 | 34.33 | 0.67 | 113 | | | | | | | |
| 597 | 5.86 | 34.33 | 0.37 | 100 | | | | | | | |

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.47-P | XI-21 | 2200 | 34°14.5' | 119°58.5' | 300 | 270° | 3 | partly cloudy | slight | 16.54 | 33.58 |
| 83.40-P | 21 | 1632 | 34°13.5' | 119°22.0' | 11 | 050° | 2 | partly cloudy | slight | 15.98 | 33.55 |
| 83.51-P | 22 | 2219 | 33°52.0' | 120°07.5' | 600 | 320° | 4 | missing | rough | 16.24 | 33.55 |
| 83.55-P | 22 | 1857 | 33°47.0' | 120°24.5' | 600 | 300° | 5 | cloudy | rough | 16.10 | 33.53 |
| 87.35-P | 21 | 1014 | 33°50.5' | 118°37.0' | 140 | 140° | 2 | partly cloudy | slight | 16.83 | 33.51 |
| 87.45-P | 23 | 1619 | 33°30.0' | 119°18.5' | 135 | - | 1 | overcast | moderate | 16.82 | 33.54 |
| 87.50-P | 23 | 1304 | 33°20.0' | 119°39.5' | 41 | 320° | 3 | fog | moderate | 15.36 | 33.47 |
| 87.55-P | 23 | 0833 | 33°12.0' | 120°02.0' | 600 | 290° | 4 | clear | very rough | 14.63 | 33.48 |
| 97.30-P | 15 | 0406 | 32°15.5' | 117°09.0' | 33 | 320° | 4 | partly cloudy | moderate | 19.24 | 33.58 |
| 97.32-P | 15 | 0241 | 32°11.5' | 117°16.5' | 700+ | 320° | 4 | overcast | moderate | 19.50 | 33.64 |
| 97.35-P | 15 | 0040 | 32°06.0' | 117°29.0' | 650 | 320° | 4 | cloudy | rough | 18.98 | 33.57 |
| 97.40-P | 14 | 2134 | 31°54.0' | 117°48.5' | 380 | 320° | 3 | partly cloudy | very rough | 18.15 | 33.41 |
| 97.50-P | 14 | 1615 | 31°40.0' | 118°25.5' | 1320 | 320° | 5 | cloudy | very rough | 17.87 | 33.43 |
| 100.29-P | 13 | 0818 | 31°42.0' | 116°43.5' | 125 | 040° | 3 | clear | moderate | 18.28 | 33.60 |
| 100.30-P | 13 | 0930 | 31°41.5' | 116°46.5' | 240 | 320° | 3 | clear | moderate | 18.46 | 33.68 |
| 100.35-P | 13 | 1240 | 31°31.5' | 117°05.5' | 600 | 320° | 4 | clear | rough | 19.64 | 33.61 |
| 100.40-P | 13 | 1643 | 31°22.0' | 117°23.5' | 1000 | 320° | 4 | partly cloudy | very rough | 19.60 | 33.69 |
| 100.50-P | 13 | 2233 | 31°01.0' | 118°06.0' | 950 | 240° | 4 | cloudy | rough | 18.50 | 33.44 |

SIO

CCOFI 5812

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **80.51** | ORCA; December 9, 1958; 1145 GCT; 34°26.5'N, 120°31.5'W; sounding, 71 fm; wind, 320°, force 3; weather, clear; sea, rough; wire angle, 05°. | | | | | | | | | | |
| 1 | 15.94 | 33.55 | 5.51 | 328 | 0 | (15.94) | (33.55) | (5.51) | (24.67) | (328) | (0.00) |
| 11 | 15.94 | 33.57 | 5.47 | 327 | 10 | 15.94 | 33.57 | 5.48 | 24.68 | 327 | 0.03 |
| 31 | 15.70 | 33.54 | 5.46 | 324 | 20 | 15.92 | 33.56 | 5.47 | 24.69 | 326 | 0.06 |
| 51 | 14.40 | 33.48 | 4.93 | 301 | 30 | 15.71 | 33.54 | 5.46 | 24.71 | 324 | 0.10 |
| | | | | | 50 | 14.43 | 33.48 | 4.97 | 24.94 | 302 | 0.16 |
| **80.55** | ORCA; December 9, 1958; 1439 GCT; 34°17'N, 120°48'W; sounding, 414 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 32°. | | | | | | | | | | |
| 2 | 15.60 | 33.53 | 5.60 | 322 | 0 | (15.60) | (33.53) | (5.60) | (24.74) | (322) | (0.00) |
| 12 | 15.60 | 33.53 | 5.53 | 322 | 10 | 15.60 | 33.53 | 5.54 | 24.74 | 322 | 0.03 |
| 33 | 14.66 | 33.52 | 5.40 | 304 | 20 | 15.53 | 33.53 | 5.51 | 24.75 | 321 | 0.06 |
| 42 | 14.08 | 33.48 | 5.06 | 295 | 30 | 15.24 | 33.53 | 5.48 | 24.81 | 315 | 0.10 |
| 55 | 12.89 | 33.51 | 4.91 | 270 | 50 | 13.45 | 33.50 | 4.96 | 25.17 | 281 | 0.16 |
| 63 | 11.98 | 33.53 | 4.54 | 251 | 75 | 11.56 | 33.59 | 4.16 | 25.59 | 240 | 0.22 |
| 71 | 11.68 | 33.58 | 4.23 | 243 | 100 | 10.80 | 33.66 | 3.72 | 25.79 | 222 | 0.28 |
| 88 | 11.10 | 33.61 | 3.97 | 230 | 150 | 9.58 | 33.87 | 2.83 | 26.16 | 186 | 0.38 |
| 103 | 10.68 | 33.68 | 3.62 | 218 | 200 | 8.94 | 33.94 | 2.37 | 26.32 | 171 | 0.47 |
| 116 | 10.32 | 33.75 | 3.30 | 207 | 250 | 8.63 | 34.03 | 2.26 | 26.44 | 160 | 0.56 |
| 133 | 10.02 | 33.78 | 3.13 | 201 | 300 | 8.18 | 34.18 | 1.82 | 26.63 | 142 | 0.64 |
| 165 | 9.28 | 33.91 | 2.64 | 179 | 400 | 7.02 | 34.25 | 0.86 | 26.84 | 122 | 0.77 |
| 196 | 8.98 | 33.94 | 2.38 | 172 | 500 | 6.18 | | | | | |
| 245 | 8.64 | 34.03 | 2.27 | 160 | | | | | | | |
| 320 | 7.99 | 34.21 | 1.61 | 137 | | | | | | | |
| 421 | 6.80 | 34.25 | 0.66 | 118 | | | | | | | |
| 557 | 5.66 | 34.05r | 1.61r | | | | | | | | |
| **80.60** | ORCA; December 9, 1958; 1847 GCT; 34°06'N, 121°08'W; sounding, 1250 fm; wind, 320°, force 5; weather, partly cloudy; sea, high; wire angle, 35°. | | | | | | | | | | |
| 2a) | 15.17 | 33.49 | | 316 | 0 | (15.17) | (33.49) | | (24.80) | (316) | (0.00) |
| 10 | 15.18 | 33.50 | | 316 | 10 | 15.18 | 33.50 | | 24.80 | 316 | 0.03 |
| 28 | 13.54 | 33.40 | | 290 | 20 | 13.88 | 33.42 | | 25.02 | 295 | 0.06 |
| 34 | 13.16 | 33.45 | | 279 | 30 | 13.42 | 33.41 | | 25.10 | 287 | 0.09 |
| 41 | 11.54 | 33.31 | | 260 | 50 | 11.44 | 33.58 | | 25.61 | 239 | 0.14 |
| 47 | 10.84 | 33.36 | | 244 | | | | | | | |
| 53 | 11.06 | 33.55 | | 234 | | | | | | | |
| 66 | 10.64 | 33.58 | | 225 | | | | | | | |
| **80.70** | ORCA; December 10, 1958; 0040, 0053 GCT; 33°47.5'N, 121°47'W; sounding, 1800 fm; wind, 320°, force 5; weather, cloudy; sea, high; wire angle, 31°, 34°. | | | | | | | | | | |
| 4 | 16.37 | 33.30 | | 356 | 0 | 16.4 | (33.30) | | (24.38) | (356) | (0.00) |
| 13 | 16.32 | 33.31 | | 354 | 10 | 16.33 | 33.31 | | 24.39 | 354 | 0.04 |
| | | | | | 20 | 16.25 | 33.31 | | 24.42 | 352 | 0.07 |
| 29b) | 15.86 | 33.30 | | 345 | 30 | 15.85 | 33.30 | | 24.50 | 345 | 0.10 |
| 38 | 15.80 | 33.30 | | 343 | 50 | 15.65 | 33.37 | | 24.60 | 336 | 0.17 |
| 51 | 15.63 | 33.37 | | 335 | 75 | 12.00 | 33.20 | | 25.21 | 277 | 0.25 |
| 60 | 15.11 | 33.31 | | 328 | 100 | 9.80 | 33.35 | | 25.72 | 228 | 0.31 |
| 69 | 13.01 | 33.13 | | 300 | 150 | 8.68 | 33.75 | | 26.21 | 181 | 0.42 |
| 80 | 11.36 | 33.24 | | 262 | 200 | 8.10 | 34.00 | | 26.49 | 155 | 0.50 |
| 96 | 10.21 | 33.31 | | 238 | 250 | 7.48 | 34.08 | | 26.65 | 140 | 0.58 |
| 106 | 9.40 | 33.42 | | 217 | 300 | 6.88 | 34.11 | | 26.76 | 130 | 0.65 |
| 122 | 9.00 | 33.57 | | 200 | 400 | 6.02 | 34.13 | | 26.89 | 117 | 0.78 |
| 148 | 8.69 | 33.73 | | 183 | 500 | (5.39) | (34.14) | | (26.97) | (109) | (0.89) |
| 174 | 8.42 | 33.92 | | 166 | | | | | | | |
| 215 | 7.89 | 34.03 | | 149 | | | | | | | |
| 276 | 7.19 | 34.10 | | 134 | | | | | | | |
| 364 | 6.24 | 34.13 | | 120 | | | | | | | |
| 485 | 5.46 | 34.14 | | 110 | | | | | | | |

a) Depths adjusted to agree with bathythermograph data.
b) Possible posttrip beginning at 29 meters.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}$ $10^3$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}$ $10^3$ cm/g | ΔD dyn. m | |

ORCA; December 10, 1958; 0715, 0730 GCT; 33°27.5'N, 112°30'W; sounding, 2000 fm; wind, 320°, force 5; weather, clear; sea, high; wire angle, 18°, 17°. 80.80

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.50 | 33.24 | | 363 | 0 | (16.50) | (33.24) | | (24.30) | (363) | (0.00) |
| 10 | 16.50 | 33.24 | | 363 | 10 | 16.50 | 33.24 | | 24.30 | 363 | 0.04 |
| | | | | | 20 | 16.50 | 33.23 | | 24.29 | 364 | 0.07 |
| 36 | 16.48 | 33.22 | | 365 | 30 | 16.49 | 33.22 | | 24.29 | 364 | 0.11 |
| 63 | 15.75 | 33.24 | | 347 | 50 | 16.27 | 33.22 | | 24.34 | 360 | 0.18 |
| 72 | 15.60 | - | | | 75 | 15.55 | 33.30 | | 24.57 | 338 | 0.27 |
| 86 | 15.30 | 33.35 | | 329 | 100 | 12.60 | 33.15 | | 25.06 | 291 | 0.35 |
| 95 | 13.48 | 33.15 | | 308 | 150 | 9.32 | 33.65 | | 26.04 | 198 | 0.47 |
| 114 | 11.24 | 33.22 | | 262 | 200 | 8.57 | 33.88 | | 26.34 | 170 | 0.56 |
| 128 | 10.25 | 33.42 | | 231 | 250 | 7.80 | 34.00 | | 26.55 | 149 | 0.65 |
| 146 | 9.40 | 33.61 | | 203 | 300 | 7.19 | 34.08 | | 26.69 | 136 | 0.72 |
| 170 | 9.08 | 33.74 | | 189 | 400 | 6.34 | 34.17 | | 26.88 | 118 | 0.85 |
| 197 | 8.60 | 33.86 | | 172 | 500 | 5.73 | 34.26 | | 27.03 | 104 | 0.97 |
| 225 | 8.16 | 33.96 | | 158 | 600 | 5.20 | 34.33 | | 27.14 | 93 | 1.08 |
| 280 | 7.38 | 34.05 | | 141 | | | | | | | |
| 364 | 6.60 | 34.14 | | 124 | | | | | | | |
| 472 | 5.88 | 34.23 | | 108 | | | | | | | |
| 617 | 5.08 | 34.34 | | 91 | | | | | | | |

ORCA; December 8, 1958; 1511 GCT; 33°33.5'N, 120°46'W; sounding, 700 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 30°. 83.60

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 15.37 | 33.49 | 5.75 | 321 | 0 | (15.37) | (33.49) | (5.75) | (24.75) | (321) | (0.00) |
| 10 | 15.37 | 33.50 | 5.75 | 320 | 10 | 15.37 | 33.50 | 5.75 | 24.76 | 320 | 0.03 |
| 26a) | 15.32 | 33.53 | 6.09 | 316 | 20 | 15.35 | 33.52 | 5.98 | 24.78 | 318 | 0.06 |
| 39 | 14.10 | 33.40 | 5.88 | 301 | 30 | 14.58 | 33.45 | 5.99 | 24.89 | 307 | 0.10 |
| 47 | 14.00 | 33.48 | 5.44 | 293 | 50 | 13.78 | 33.49 | 5.34 | 25.08 | 288 | 0.15 |
| 54 | 13.42 | 33.49 | 5.24 | 281 | 75 | 11.10 | 33.57 | 4.41 | 25.67 | 233 | 0.22 |
| 62 | 12.33 | 33.52 | 4.79 | 259 | 100 | 9.99 | 33.69 | 3.72 | 25.96 | 206 | 0.28 |
| 79 | 10.86 | 33.58 | 4.33 | 228 | 150 | 8.75 | 33.93 | 2.76 | 26.34 | 169 | 0.37 |
| 91 | 10.18 | 33.60 | 4.08 | 216 | 200 | 8.18 | 34.04 | 2.26 | 26.52 | 153 | 0.45 |
| 103 | 9.92 | 33.73 | 3.59 | 202 | 250 | 7.79 | 34.11 | 1.86 | 26.64 | 141 | 0.53 |
| 121 | 9.20 | 33.79 | 3.41 | 186 | 300 | 7.28 | 34.13 | 1.57 | 26.72 | 133 | 0.60 |
| 139 | 8.92 | 33.89 | 2.91 | 175 | 400 | 6.64 | 34.18 | 0.98 | 26.85 | 121 | 0.73 |
| 164 | 8.58 | 33.96 | 2.62 | 164 | 500 | (6.10) | (34.28) | | (27.00) | (107) | (0.85) |
| 201 | 8.17 | 34.04 | 2.25 | 152 | | | | | | | |
| 260 | 7.67 | 34.12 | 1.82 | 140 | | | | | | | |
| 343 | 6.93 | 34.14 | 1.27 | 128 | | | | | | | |
| 466 | 6.27 | 34.25 | 0.67 | 112 | | | | | | | |

ORCA; December 7, 1958; 2143 GCT; 33°39'N, 118°57'W; sounding, 260 fm; wind, 290°, force 3; weather, fog; sea, moderate; wire angle, 10°. 87.40

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.12 | 33.53 | 5.25b) | 356 | 0 | (17.12) | (33.53) | | (24.38) | (356) | (0.00) |
| 11 | 17.04 | 33.53 | 6.00 | 354 | 10 | 17.05 | 33.53 | | 24.39 | 354 | 0.04 |
| 25 | 16.98 | 33.52 | 4.82 | 354 | 20 | 17.00 | 33.52 | | 24.40 | 354 | 0.07 |
| 35 | 16.09 | 33.46 | 4.45 | 338 | 30 | 16.97 | 33.52 | | 24.41 | 353 | 0.11 |
| 40 | 15.76 | 33.43 | 4.06 | 333 | 50 | 13.84 | 33.41 | | 25.01 | 296 | 0.17 |
| 45 | 14.86 | 33.41 | 5.10 | 316 | 75 | 12.29 | 33.56 | | 25.44 | 255 | 0.24 |
| 50 | 13.84 | 33.41 | 5.76 | 296 | 100 | 10.61 | 33.58 | | 25.76 | 224 | 0.30 |
| 55 | 13.04 | 33.40 | 4.87 | 281 | 150 | 9.64 | 33.88 | | 26.16 | 187 | 0.40 |
| 60 | 12.64 | 33.42 | 3.82 | 272 | 200 | 8.97 | 34.03 | | 26.39 | 165 | 0.49 |
| 65 | 12.56 | 33.52 | 2.94 | 263 | | | | | | | |
| 70 | 12.47 | 33.55 | 3.33 | 259 | | | | | | | |
| 75 | 12.29 | 33.56 | 3.16 | 255 | | | | | | | |
| 85 | 11.78 | 33.66 | 3.20 | 238 | | | | | | | |
| 101 | 10.58 | 33.58 | 3.63 | 223 | | | | | | | |
| 125 | 10.22 | 33.81 | 2.47 | 201 | | | | | | | |
| 150 | 9.64 | 33.88 | 2.85 | 187 | | | | | | | |
| 205 | 8.92 | 34.05 | 2.20 | 163 | | | | | | | |

a) Possible posttrip beginning at 26 meters.
b) Oxygen values appear to be erratic; therefore no interpolated values are given.

SIO

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5812

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta_{T_3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_{T_3}$ $10^{-5}$ cm/g | ΔD dyn. m |

87.60 ORCA; December 8, 1958; 0856 GCT; 33°00'N, 120°21.5'W; sounding, 400 fm; wind, 310°, force 5; weather, clear; sea, very rough; wire angle, 18°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 16.52 | 33.52 | 4.54 | 343 | 0 | (16.52) | (33.52) | (4.54) | (24.51) | (343) | (0.00) |
| 13 | 16.55 | 33.49 | 4.89 | 346 | 10 | 16.55 | 33.49 | 4.80 | 24.49 | 346 | 0.03 |
| 36 | 15.92 | 33.48 | 4.83 | 333 | 20 | 16.42 | 33.49 | 4.89 | 24.51 | 343 | 0.07 |
| 65 | 12.42 | 33.42 | 4.85 | 268 | 30 | 16.13 | 33.48 | 4.86 | 24.58 | 337 | 0.10 |
| 75 | 11.58 | 33.48 | 4.53 | 248 | 50 | 13.60 | 33.44 | 4.85 | 25.09 | 288 | 0.16 |
| 89 | 10.78 | 33.49 | 4.34 | 233 | 75 | 11.58 | 33.48 | 4.53 | 25.51 | 248 | 0.23 |
| 99 | 10.46 | 33.53 | 3.93 | 226 | 100 | 10.45 | 33.53 | 3.92 | 25.75 | 225 | 0.29 |
| 118 | 9.54 | 33.69 | 3.39 | 199 | 150 | 9.03 | 33.84 | 3.06 | 26.22 | 181 | 0.39 |
| 132 | 9.20 | 33.78 | 3.04 | 187 | 200 | 8.27 | 34.06 | 2.05 | 26.52 | 152 | 0.48 |
| 151 | 9.03 | 33.84 | 3.06 | 181 | 250 | 7.94 | 34.16 | 1.58 | 26.65 | 140 | 0.55 |
| 175 | 8.69 | 33.96 | 2.52 | 166 | 300 | 7.58 | 34.20 | 1.46 | 26.73 | 132 | 0.62 |
| 203 | 8.21 | 34.07 | 2.00 | 151 | 400 | 6.70 | 34.26 | 0.79 | 26.90 | 117 | 0.75 |
| 232 | 8.02 | 34.12 | 1.65 | 145 | 500 | 6.20 | 34.33 | 0.55 | 27.02 | 105 | 0.87 |
| 289 | 7.66 | 34.19 | 1.52 | 135 | 600 | 5.81 | 34.36 | 0.44 | 27.09 | 98 | 0.98 |
| 375 | 6.85 | 34.23 | 0.92 | 121 | | | | | | | |
| 488 | 6.24 | 34.32 | 0.58 | 106 | | | | | | | |
| 635 | 5.64 | 34.36 | 0.41 | 96 | | | | | | | |

90.28 ORCA; December 11, 1958; 1222 GCT; 33°28.5'N, 117°46.5'W; sounding, 240 fm; wind, calm; weather, clear; sea, smooth; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.92 | 33.55 | 5.58 | 350 | 0 | 16.92 | 33.55 | 5.58 | 24.44 | 350 | 0.00 |
| 10 | 16.94 | 33.55 | 5.46 | 350 | 10 | 16.94 | 33.55 | 5.46 | 24.44 | 350 | 0.04 |
| 30 | 15.34 | 33.43 | 5.23 | 324 | 20 | 16.47 | 33.51 | 5.37 | 24.53 | 342 | 0.07 |
| 50 | 14.10 | 33.46 | 4.87 | 297 | 30 | 15.34 | 33.43 | 5.23 | 24.71 | 324 | 0.10 |
| 75 | 12.86 | 33.61 | 3.71 | 262 | 50 | 14.10 | 33.46 | 4.87 | 25.00 | 297 | 0.16 |
| 100 | 12.35 | 33.80 | 3.60 | 238 | 75 | 12.86 | 33.61 | 3.71 | 25.36 | 262 | 0.23 |
| 125 | 11.43 | 33.75 | 3.27 | 226 | 100 | 12.35 | 33.80 | 3.60 | 25.61 | 238 | 0.30 |
| 155 | 10.34 | 33.87 | 2.76 | 198 | 150 | 10.52 | 33.85 | 2.80 | 25.99 | 203 | 0.41 |

90.30 ORCA; December 11, 1958; 1045 GCT; 33°25'N, 117°53.5'W; sounding, 340 fm; wind, 070°, force 2; weather, fog; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.92 | 33.56 | 5.68 | 349 | 0 | (16.92) | (33.56) | (5.68) | (24.45) | (349) | (0.00) |
| 11 | 16.92 | 33.54 | 5.25 | 350 | 10 | 16.92 | 33.54 | 5.26 | 24.44 | 350 | 0.04 |
| 32 | 16.80 | 33.57 | 5.39 | 345 | 20 | 16.87 | 33.54 | 5.26 | 24.44 | 350 | 0.07 |
| 42 | 15.66 | 33.49 | 4.77 | 327 | 30 | 16.81 | 33.57 | 5.37 | 24.48 | 346 | 0.10 |
| 52 | 14.76 | 33.45 | 5.54 | 310 | 50 | 14.92 | 33.45 | 5.44 | 24.82 | 314 | 0.17 |
| 62 | 13.92 | 33.49 | 4.80 | 291 | 75 | 13.17 | 33.58 | 4.74 | 25.27 | 271 | 0.24 |
| 72 | 13.41 | 33.58 | 4.75 | 275 | 100 | 11.70 | 33.80 | 3.22 | 25.72 | 228 | 0.31 |
| 87 | 12.27 | 33.55 | 4.62 | 256 | 150 | 9.80 | 33.79 | 3.32 | 26.06 | 196 | 0.42 |
| 101 | 11.75 | 33.80 | 3.21 | 228 | 200 | 9.42 | 34.08 | 1.98 | 26.34 | 169 | 0.51 |
| 116 | 11.22 | 33.80 | 2.91 | 218 | 250 | 8.78 | 34.14 | 1.85 | 26.50 | 154 | 0.59 |
| 141 | 9.82 | 33.71 | 3.56 | 202 | 300 | 8.18 | 34.19 | 1.56 | 26.64 | 141 | 0.67 |
| 170 | 9.78 | 33.98 | 2.48 | 182 | 400 | 7.33 | 34.31 | 0.90 | 26.86 | 120 | 0.80 |
| 205 | 9.37 | 34.09 | 1.96 | 167 | 500 | 6.46 | | | | | |
| 254 | 8.72 | 34.14 | 1.85 | 153 | | | | | | | |
| 332 | 7.87 | 34.23 | 1.35 | 134 | | | | | | | |
| 432 | 7.08 | 34.34 | 0.71 | 116 | | | | | | | |
| 559 | 5.86 | - | - | | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta T_3$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta T_3$ | ΔD |
| m | °C | ‰ | ml/L | $10^{-5}$ cm/g | m | °C | ‰ | ml/L | g/L | $10^{-5}$ cm/g | dyn. m |

ORCA; December 7, 1958; 1246, 1330 GCT; 33°09'N, 118°25'W; sounding, 600 fm; wind, 270°, force 2; weather, overcast; sea, slight; wire angle, 03°, 03°. 90.37

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.00 | 33.57 | 5.32 | 350 | 0 | (17.00) | (33.57) | (5.32) | (24.44) | (350) | (0.00) |
| 11 | 16.99 | 33.55 | 5.65 | 351 | 10 | 16.98 | 33.55 | 5.60 | 24.43 | 351 | 0.04 |
| 31 | 16.37 | 33.54 | 5.46 | 339 | 20 | 16.97 | 33.55 | 5.67 | 24.43 | 350 | 0.07 |
| 41 | 15.57 | 33.49 | 5.00 | 325 | 30 | 16.81 | 33.55 | 5.64 | 24.47 | 348 | 0.10 |
| 51 | 14.60 | 33.48 | 5.26 | 305 | 50 | 14.75 | 33.48 | 5.23 | 24.86 | 308 | 0.17 |
| 60 | 13.96 | 33.49 | 4.37u | 292 | 75 | 12.39 | 33.54 | 4.75 | 25.41 | 258 | 0.24 |
| 71 | 12.86 | 33.54 | 4.75 | 267 | 100 | 11.48 | 33.65 | 3.77 | 25.65 | 234 | 0.30 |
| 86 | 12.04 | 33.58 | 4.04 | 249 | 150 | 10.30 | 33.87 | 2.83 | 26.04 | 198 | 0.41 |
| 102 | 11.39 | 33.65 | 3.76 | 233 | 200 | 9.59 | 34.04 | 2.37 | 26.29 | 174 | 0.51 |
| 117 | 11.10 | 33.75 | 3.37 | 220 | 250 | 8.56 | 34.13 | 1.93 | 26.54 | 151 | 0.59 |
| | | | | | 300 | 8.09 | 34.17 | 1.69 | 26.64 | 142 | 0.67 |
| 137 | 10.60 | 33.84 | 2.98 | 205 | 400 | 7.47 | 34.25 | 1.04 | 26.78 | 127 | 0.81 |
| 167 | 9.94 | 33.89 | 2.67 | 190 | 500 | 6.67 | 34.35 | 0.63 | 26.98 | 109 | 0.93 |
| 202 | 9.57 | 34.04 | 2.23 | 173 | | | | | | | |
| 250 | 8.56 | 34.13 | 1.93 | 151 | | | | | | | |
| 329 | 7.90 | 34.18 | 1.54 | 138 | | | | | | | |
| 429 | 7.28 | 34.29 | 0.82 | 122 | | | | | | | |
| 557 | 5.96 | 34.40 | 0.51 | 97 | | | | | | | |

ORCA; December 7, 1958; 0757 GCT; 32°51.5'N, 118°53.5'W; sounding, 350 fm; wind, 300°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°. 90.45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.83 | 33.47 | 5.45 | 353 | 0 | (16.83) | (33.47) | (5.45) | (24.40) | (353) | (0.00) |
| 11 | 16.83 | 33.48 | 5.60 | 353 | 10 | 16.83 | 33.48 | 5.57 | 24.40 | 353 | 0.04 |
| 31 | 16.83 | 33.46 | 5.43 | 354 | 20 | 16.83 | 33.47 | 5.52 | 24.40 | 354 | 0.07 |
| 41 | 16.82 | 33.49 | 5.41 | 352 | 30 | 16.83 | 33.46 | 5.46 | 24.39 | 354 | 0.11 |
| 51 | 15.95 | 33.46 | 5.63 | 335 | 50 | 16.10 | 33.46 | 5.60 | 24.57 | 338 | 0.18 |
| 61 | 15.14 | 33.46 | 5.61 | 318 | 75 | 13.40 | 33.47 | 5.28 | 25.15 | 282 | 0.25 |
| 71 | 13.85 | 33.46 | 5.32 | 292 | 100 | 11.53 | 33.49 | 4.80 | 25.52 | 248 | 0.32 |
| 86 | 12.62 | 33.49 | 5.16 | 266 | 150 | 9.21 | 33.74 | 3.60 | 26.12 | 190 | 0.43 |
| 101 | 11.45 | 33.49 | 4.78 | 245 | 200 | 8.59 | 34.01 | 2.23 | 26.43 | 160 | 0.52 |
| 116 | 10.32 | 33.53 | 4.54 | 223 | 250 | 8.20 | 34.13 | 1.92 | 26.59 | 146 | 0.60 |
| 141 | 9.38 | 33.70 | 3.75 | 195 | 300 | 7.65 | 34.19 | 1.50 | 26.71 | 134 | 0.67 |
| 171 | 9.00 | 33.83 | 3.25 | 181 | 400 | 6.93 | 34.26 | 0.80 | 26.87 | 119 | 0.80 |
| 205 | 8.53 | 34.02 | 2.19 | 159 | 500 | 6.30 | 34.32 | 0.49 | 27.02 | 106 | 0.92 |
| 254 | 8.19 | 34.14 | 1.90 | 145 | | | | | | | |
| 335 | 7.29 | 34.22 | 1.20 | 127 | | | | | | | |
| 433 | 6.74 | 34.28 | 0.69 | 115 | | | | | | | |
| 563 | 5.86 | 34.36 | 0.37 | 99 | | | | | | | |

ORCA; December 7, 1958; 0450 GCT; 32°40.5'N, 119°13.5'W; sounding, 108 fm; wind, 320°, force 4; weather, overcast; sea, slight; wire angle, 08°. 90.50

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.68 | 33.49 | 5.51 | 349 | 0 | (16.68) | (33.49) | (5.51) | (24.45) | (349) | (0.00) |
| 11 | 16.65 | 33.49 | 5.35 | 347 | 10 | 16.66 | 33.49 | 5.40 | 24.46 | 348 | 0.03 |
| 31 | 16.41 | 33.48 | 5.34 | 344 | 20 | 16.60 | 33.49 | 5.36 | 24.47 | 347 | 0.07 |
| 50 | 14.10 | 33.40 | 5.14 | 301 | 30 | 16.44 | 33.48 | 5.36 | 24.50 | 344 | 0.10 |
| 75 | 12.08 | 33.44 | 4.73 | 260 | 50 | 14.10 | 33.40 | 5.14 | 24.96 | 301 | 0.17 |
| 100 | 10.02 | 33.61 | 3.57 | 213 | 75 | 12.08 | 33.44 | 4.73 | 25.38 | 260 | 0.24 |
| 125 | 9.63 | 33.69 | 3.54 | 201 | 100 | 10.02 | 33.61 | 3.57 | 25.88 | 213 | 0.30 |
| 155 | 9.26 | 33.72 | 3.51 | 193 | 150 | 9.35 | 33.71 | 3.53 | 26.08 | 194 | 0.40 |

SIO

CCOFI 5812

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **90.55** | ORCA; December 7, 1958; 0215 GCT; 32°32.5'N, 119°31'W; sounding, 300 fm; wind, 300°, force 2; weather, overcast; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 3 | 16.71 | 33.51 | 5.43 | 348 | 0 | (16.71) | (33.51) | (5.43) | (24.46) | (348) | (0.00) |
| 13 | 16.70 | 33.54 | 5.46 | 345 | 10 | 16.71 | 33.54 | 5.46 | 24.48 | 346 | 0.03 |
| 33 | 16.58 | 33.57 | 5.40 | 341 | 20 | 16.71 | 33.54 | 5.44 | 24.49 | 346 | 0.07 |
| 53 | 13.41 | 33.42 | 5.16 | 286 | 30 | 16.70 | 33.55 | 5.43 | 24.49 | 345 | 0.10 |
| 77 | 11.00 | 33.50 | 4.36 | 237 | 50 | 14.10 | 33.45 | 5.33 | 24.99 | 298 | 0.17 |
| 103 | 10.26 | 33.56 | 3.89 | 220 | 75 | 11.06 | 33.50 | 4.40 | 25.63 | 238 | 0.23 |
| 128 | 9.52 | 33.70 | 3.48 | 198 | 100 | 10.37 | 33.55 | 3.94 | 25.79 | 222 | 0.29 |
| 166 | 8.60 | 34.02 | 2.30 | 161 | 150 | 8.93 | 33.90 | 2.77 | 26.29 | 174 | 0.40 |
| 206 | 8.08 | 34.10 | 1.84 | 147 | 200 | 8.18 | 34.09 | 1.89 | 26.57 | 148 | 0.48 |
| 256 | 7.59 | 34.14 | 1.39 | 137 | 250 | 7.63 | 34.15 | 1.42 | 26.67 | 138 | 0.55 |
| 306 | 7.38 | 34.22 | 1.12 | 128 | 300 | 7.40 | 34.22 | 1.16 | 26.77 | 129 | 0.62 |
| 410 | 6.46 | 34.27 | 0.58 | 113 | 400 | 6.59 | 34.26 | 0.66 | 26.92 | 115 | 0.74 |
| **90.60** | ORCA; December 6, 1958; 2246 GCT; 32°23.5'N, 119°55'W; sounding, 450 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 2 | 16.28 | 33.50 | 5.42 | 340 | 0 | (16.28) | (33.50) | (5.42) | (24.55) | (340) | (0.00) |
| 12 | 16.24 | 33.53 | 5.49 | 337 | 10 | 16.26 | 33.52 | 5.47 | 24.58 | 338 | 0.03 |
| 31 | 15.62 | 33.48 | 5.51 | 327 | 20 | 16.10 | 33.52 | 5.52 | 24.61 | 334 | 0.07 |
| 41 | 15.11 | 33.47 | 5.35 | 316 | 30 | 15.67 | 33.49 | 5.53 | 24.68 | 327 | 0.10 |
| 51 | 14.10 | 33.40 | 5.53 | 301 | 50 | 14.22 | 33.41 | 5.51 | 24.94 | 303 | 0.16 |
| 61 | 13.25 | 33.42 | 5.40 | 283 | 75 | 12.61 | 33.42 | 5.40 | 25.27 | 271 | 0.24 |
| 70 | 12.85 | 33.42 | 5.39 | 276 | 100 | 10.50 | 33.51 | 4.91 | 25.72 | 228 | 0.30 |
| 85 | 11.98 | 33.44 | 5.48 | 258 | 150 | 9.07 | 33.81 | 4.02 | 26.20 | 183 | 0.40 |
| 100 | 10.50 | 33.51 | 4.91 | 228 | 200 | 8.35 | 34.02 | 2.56 | 26.47 | 157 | 0.49 |
| 114 | 9.83 | 33.60 | 4.80 | 210 | 250 | 7.79 | 34.11 | 2.01 | 26.64 | 142 | 0.56 |
| 138 | 9.34 | 33.73 | 4.54 | 193 | 300 | 7.30 | 34.17 | 1.53 | 26.75 | 130 | 0.64 |
| 167 | 8.71 | 33.92 | 3.28 | 169 | 400 | 6.72 | 34.27 | 0.90 | 26.91 | 116 | 0.76 |
| 202 | 8.34 | 34.02 | 2.55 | 157 | 500 | 6.19 | 34.35 | 0.58 | 27.05 | 103 | 0.88 |
| 249 | 7.80 | 34.11 | 2.02 | 142 | | | | | | | |
| 325 | 7.10 | 34.20 | 1.35 | 126 | | | | | | | |
| 422 | 6.62 | 34.29 | 0.85 | 113 | | | | | | | |
| 549 | 5.88 | 34.38 | 0.46 | 97 | | | | | | | |
| **90.70** | ORCA; December 6, 1958; 1747 GCT; 32°04'N, 120°33.5'W; sounding, 2000 fm; wind, 300°, force 4; weather, overcast; sea, moderate; wire angle, 04°. | | | | | | | | | | |
| 1 | 16.99 | 33.50 | 5.19 | 355 | 0 | (16.99) | (33.50) | (5.19) | (24.38) | (355) | (0.00) |
| 11 | 16.96 | 33.51 | 5.21 | 354 | 10 | 16.97 | 33.51 | 5.21 | 24.40 | 354 | 0.04 |
| 31 | 16.94 | 33.49 | 5.33 | 354 | 20 | 16.96 | 33.50 | 5.26 | 24.40 | 354 | 0.07 |
| 41 | 16.86 | 33.48 | 5.51 | 354 | 30 | 16.95 | 33.49 | 5.32 | 24.40 | 354 | 0.11 |
| 51 | 16.50 | 33.48 | 5.24 | 346 | 50 | 16.56 | 33.48 | 5.28 | 24.47 | 347 | 0.18 |
| 61 | 16.18 | 33.51 | 5.21 | 336 | 75 | 14.80 | 33.45 | 4.88 | 24.85 | 311 | 0.26 |
| 71 | 15.32 | 33.43 | 4.86 | 324 | 100 | 12.50 | 33.49 | 4.36 | 25.35 | 264 | 0.33 |
| 86 | 14.24 | 33.48 | 4.93 | 298 | 150 | 9.55 | 33.60 | 3.17 | 25.96 | 206 | 0.45 |
| 102 | 12.22 | 33.49 | 4.27 | 259 | 200 | 8.50 | 33.92 | 2.16 | 26.37 | 166 | 0.54 |
| 116 | 11.22 | 33.48 | 3.77 | 242 | 250 | 7.90 | 34.03 | 1.69 | 26.56 | 149 | 0.63 |
| 141 | 9.90 | 33.55 | 3.35 | 215 | 300 | 7.40 | 34.09 | 1.30 | 26.67 | 138 | 0.70 |
| 171 | 8.92 | 33.78 | 2.57 | 183 | 400 | 6.48 | 34.18 | 0.77 | 26.86 | 120 | 0.84 |
| 206 | 8.40 | 33.95 | 2.09 | 163 | 500 | 5.83 | 34.25 | 0.53 | 27.01 | 106 | 0.95 |
| 256 | 7.82 | 34.04 | 1.63 | 148 | | | | | | | |
| 335 | 7.08 | 34.13 | 1.03 | 131 | | | | | | | |
| 434 | 6.20 | 34.20 | 0.67 | 114 | | | | | | | |
| 563 | 5.61 | 34.30 | 0.42 | 100 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |
| ORCA; December 6, 1958; 1212 GCT; 31°45'N, 121°14'W; sounding, 2000 fm; wind, 320°, force 3; weather, overcast; sea, moderate; wire angle, 02°. | | | | | | | | | | | 90.80 |
| 1 | 16.54 | 33.41 | 5.03 | 351 | 0 | (16.54) | (33.41) | (5.03) | (24.43) | (351) | (0.00) |
| 11 | 16.52 | 33.39 | 4.40 | 352 | 10 | 16.50 | 33.39 | 4.45 | 24.42 | 352 | 0.04 |
| 31 | 16.48 | 33.42 | 4.36 | 350 | 20 | 16.50 | 33.41 | 4.36 | 24.43 | 351 | 0.07 |
| 56 | 15.80 | 33.40 | 4.93 | 336 | 30 | 16.48 | 33.42 | 4.36 | 24.44 | 350 | 0.10 |
| 66 | 15.42 | 33.43 | 4.54 | 326 | 50 | 16.06 | 33.41 | 4.78 | 24.54 | 341 | 0.17 |
| 76 | 13.74 | 33.40 | 4.53 | 294 | 75 | 13.80 | 33.40 | 4.53 | 25.02 | 295 | 0.25 |
| 86 | 13.12 | 33.42 | 4.22 | 281 | 100 | 12.06 | 33.44 | 4.16 | 25.38 | 260 | 0.33 |
| 101 | 12.00 | 33.44 | 4.16 | 259 | 150 | 9.10 | 33.76 | 2.57 | 26.16 | 187 | 0.44 |
| 116 | 10.46 | 33.54 | 3.51 | 225 | 200 | 8.28 | 34.02 | 2.02 | 26.49 | 155 | 0.52 |
| 135 | 9.74 | 33.69 | 2.81 | 202 | 250 | 7.48 | 34.05 | 1.90 | 26.63 | 142 | 0.60 |
| 155 | 8.98 | 33.78 | 2.57 | 184 | 300 | 6.80 | 34.09 | 1.28 | 26.76 | 130 | 0.67 |
| 181 | 8.62 | 33.89 | 2.56 | 170 | 400 | 6.22 | 34.20 | 0.67 | 26.91 | 115 | 0.80 |
| 205 | 8.18 | 34.03 | 1.95 | 153 | 500 | 5.74 | 34.30 | 0.32 | 27.06 | 101 | 0.91 |
| 255 | 7.40 | 34.05 | 1.89 | 141 | | | | | | | |
| 334 | 6.52 | 34.13 | 0.88 | 123 | | | | | | | |
| 433 | 6.06 | 34.24 | 0.55 | 110 | | | | | | | |
| 562 | 5.40 | 34.34 | 0.12 | 94 | | | | | | | |
| ORCA; December 4, 1958; 2059 GCT; 32°54.5'N, 117°22'W; sounding, 300 fm; wind, 200°, force 4; weather, cloudy; sea, smooth; wire angle, 13°. | | | | | | | | | | | 93.27 |
| 2 | 17.44 | 33.55 | 5.57 | 362 | 0 | (17.44) | (33.55) | (5.57) | (24.31) | (362) | (0.00) |
| 11 | 17.39 | 33.57 | 5.44 | 359 | 10 | 17.39 | 33.57 | 5.45 | 24.34 | 360 | 0.04 |
| 31 | 17.36 | 33.53 | 5.54 | 361 | 20 | 17.37 | 33.55 | 5.52 | 24.33 | 360 | 0.07 |
| | | | | | 30 | 17.36 | 33.53 | 5.54 | 24.32 | 361 | 0.11 |
| ORCA; December 4, 1958; 2307 GCT; 32°50'N, 117°31'W; sounding, 450 fm; wind, 200°, force 2; weather, overcast; sea, rough; wire angle, 07°. | | | | | | | | | | | 93.30 |
| 2 | 17.24 | 33.51 | 5.48 | 360 | 0 | (17.24) | (33.51) | (5.48) | (24.33) | (360) | (0.00) |
| 12 | 17.22 | 33.53 | 5.42 | 358 | 10 | 17.23 | 33.53 | 5.44 | 24.34 | 359 | 0.04 |
| 32 | 15.44 | 33.39 | 5.80 | 330 | 20 | 16.90 | 33.51 | 5.47 | 24.41 | 353 | 0.07 |
| 47 | 14.25 | 33.50 | 4.91 | 297 | 30 | 15.55 | 33.39 | 5.78 | 24.63 | 332 | 0.10 |
| 57 | 13.98 | 33.57 | 4.46 | 286 | 50 | 14.17 | 33.53 | 5.64 | 25.04 | 293 | 0.17 |
| 66 | 13.78 | 33.58 | 4.46 | 282 | 75 | 13.70 | 33.61 | 4.16 | 25.20 | 278 | 0.24 |
| 76 | 13.68 | 33.62 | 4.09 | 277 | 100 | 12.78 | 33.68 | 3.70 | 25.44 | 255 | 0.31 |
| 96 | 13.00 | 33.66 | 3.80 | 261 | 150 | 10.75 | 33.90 | 2.67 | 25.99 | 203 | 0.42 |
| 110 | 12.20 | 33.73 | 3.38 | 241 | 200 | 9.44 | 33.96 | 2.53 | 26.25 | 178 | 0.52 |
| 125 | 11.81 | 33.77 | 3.14 | 231 | 250 | 8.78 | 34.12 | 1.90 | 26.49 | 155 | 0.60 |
| 150 | 10.75 | 33.90 | 2.67 | 203 | 300 | 8.17 | 34.16 | 1.59 | 26.62 | 143 | 0.68 |
| 178 | 9.66 | 33.85 | 2.84 | 189 | 400 | 7.37 | 34.25 | 1.00 | 26.80 | 126 | 0.82 |
| 217 | 9.32 | 34.07 | 2.18 | 167 | 500 | 6.60 | 34.33 | 0.58 | 26.97 | 110 | 0.95 |
| 272 | 8.43 | 34.14 | 1.76 | 149 | 600 | 5.90 | 34.36 | 0.40 | 27.08 | 99 | 1.06 |
| 356 | 7.72 | 34.20 | 1.29 | 134 | | | | | | | |
| 461 | 6.86 | 34.31 | 0.66 | 115 | | | | | | | |
| 606 | 5.85 | 34.36 | 0.38 | 98 | | | | | | | |
| ORCA; December 5, 1958; 0228 GCT; 32°39.5'N, 117°51.5'W; sounding, 300 fm; wind, 220°, force 2; weather, overcast; sea, rough; wire angle, 06°. | | | | | | | | | | | 93.35 |
| 2 | 17.44 | 33.56 | 5.56 | 361 | 0 | (17.44) | (33.56) | (5.56) | (24.32) | (361) | (0.00) |
| 11 | 17.42 | 33.58 | 5.56 | 359 | 10 | 17.43 | 33.58 | 5.56 | 24.34 | 360 | 0.04 |
| 32 | 17.40 | 33.53 | 5.53 | 362 | 20 | 17.42 | 33.57 | 5.55 | 24.34 | 359 | 0.07 |
| 52 | 14.56 | 33.42 | 5.74 | 309 | 30 | 17.40 | 33.53 | 5.53 | 24.32 | 362 | 0.11 |
| 76 | 12.60 | 33.51 | 4.40 | 264 | 50 | 14.70 | 33.42 | 5.75 | 24.85 | 311 | 0.18 |
| 102 | 11.67 | 33.63 | 3.84 | 239 | 75 | 12.68 | 33.51 | 4.45 | 25.32 | 266 | 0.25 |
| 126 | 10.83 | 33.77 | 3.02 | 215 | 100 | 11.78 | 33.63 | 3.90 | 25.59 | 241 | 0.31 |
| 165 | 10.02 | 33.89 | 2.67 | 192 | 150 | 10.38 | 33.85 | 2.76 | 26.02 | 200 | 0.42 |
| 204 | 9.13 | 34.04 | 2.24 | 167 | 200 | 9.20 | 34.03 | 2.29 | 26.34 | 169 | 0.52 |
| 253 | 8.32 | 34.14 | 1.83 | 147 | 250 | 8.39 | 34.13 | 1.86 | 26.56 | 148 | 0.60 |
| 302 | 7.80 | 34.19 | 1.37 | 136 | 300 | 7.82 | 34.19 | 1.38 | 26.69 | 136 | 0.67 |
| 406 | 6.88 | 34.26 | 0.74 | 119 | 400 | 6.95 | 34.26 | 0.76 | 26.87 | 120 | 0.80 |

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_3$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_3$ $10^{-5}$ cm/g | ΔD dyn. m |
| **93.40** | ORCA; December 5, 1958; 0555 GCT; 32°29'N, 118°11.5'W; sounding, 800 fm; wind, 270°, force 2; weather, overcast; sea, slight; wire angle, 06°. | | | | | | | | | | |
| 1 | 16.96 | 33.50 | 4.94 | 355 | 0 | (16.96) | (33.50) | (4.94) | (24.39) | (355) | (0.00) |
| 11 | 16.94 | 33.49 | 3.79 | 355 | 10 | 16.95 | 33.49 | 3.87 | 24.39 | 355 | 0.04 |
| 30 | 16.81 | 33.49 | 3.90 | 352 | 20 | 16.85 | 33.49 | 3.85 | 24.41 | 353 | 0.07 |
| 40 | 16.82 | 33.49 | 4.08 | 352 | 30 | 16.81 | 33.49 | 3.90 | 24.42 | 352 | 0.10 |
| 50 | 15.92 | 33.48 | 3.51 | 333 | 50 | 15.92 | 33.48 | 3.51 | 24.62 | 333 | 0.17 |
| 60 | 14.50 | 33.42 | 3.56 | 308 | 75 | 13.42 | 33.44 | 3.75 | 25.12 | 285 | 0.25 |
| 70 | 13.76 | 33.44 | 3.67 | 291 | | | | | | | |
| 85 | 12.83 | 33.44 | 3.90 | 274 | | | | | | | |
| **93.50** | ORCA; December 5, 1958; 1200 GCT; 32°08'N, 118°51.5'W; sounding, 700 fm; wind, 270°, force 2; weather, overcast; sea, slight; wire angle, 03°. | | | | | | | | | | |
| 2 | 16.83 | 33.56 | 5.29 | 347 | 0 | (16.83) | (33.56) | (5.29) | (24.47) | (347) | (0.00) |
| 12 | 16.83 | 33.57 | 5.26 | 346 | 10 | 16.83 | 33.57 | 5.25 | 24.47 | 347 | 0.03 |
| 32 | 16.84 | 33.56 | 5.23 | 347 | 20 | 16.83 | 33.56 | 5.25 | 24.47 | 347 | 0.07 |
| 42 | 16.46 | 33.53 | 5.35 | 341 | 30 | 16.83 | 33.56 | 5.24 | 24.47 | 347 | 0.10 |
| 53 | 14.47 | 33.45 | 5.31 | 305 | 50 | 14.70 | 33.46 | 5.32 | 24.87 | 309 | 0.17 |
| 62 | 12.51 | 33.49 | 4.68 | 264 | 75 | 11.27 | 33.50 | 4.33 | 25.58 | 242 | 0.24 |
| 72 | 11.46 | 33.49 | 4.38 | 246 | 100 | 9.76 | 33.67 | 3.53 | 25.98 | 204 | 0.30 |
| 87 | 10.34 | 33.57 | 4.08 | 220 | 150 | 8.99 | 33.89 | 2.57 | 26.28 | 176 | 0.39 |
| 102 | 9.70 | 33.69 | 3.47 | 202 | | | | | | | |
| 117 | 9.36 | 33.75 | 3.19 | 191 | | | | | | | |
| 142 | 9.08 | 33.86 | 2.69 | 180 | | | | | | | |
| 172 | 8.72 | 33.95 | 2.34 | 167 | | | | | | | |
| **93.60** | ORCA; December 5, 1958; 1848, 1907 GCT; 31°46'N, 119°31.5'W; sounding, 1000 fm; wind, 280°, force 6; weather, overcast; sea, rough; wire angle, 07°, 15°. | | | | | | | | | | |
| 1 | 16.74 | 33.55 | 5.40 | 346 | 0 | (16.74) | (33.55) | (5.40) | (24.48) | (346) | (0.00) |
| 11 | 16.74 | 33.57 | 5.56 | 345 | 10 | 16.74 | 33.56 | 5.53 | 24.49 | 345 | 0.03 |
| 30 | 16.38 | 33.55 | 5.66 | 338 | 20 | 16.74 | 33.57 | 5.56 | 24.50 | 344 | 0.07 |
| 40 | 15.82 | 33.49 | 5.71 | 330 | 30 | 16.38 | 33.55 | 5.66 | 24.57 | 338 | 0.10 |
| 50 | 14.75 | 33.48 | 5.47 | 308 | 50 | 14.75 | 33.48 | 5.47 | 24.88 | 308 | 0.17 |
| 60 | 13.28 | 33.46 | 5.12 | 281 | 75 | 11.63 | 33.50 | 4.66 | 25.52 | 248 | 0.24 |
| 70 | 12.00 | 33.50 | 4.73 | 254 | 100 | 10.50 | 33.59 | 3.97 | 25.79 | 222 | 0.30 |
| 84 | 11.17 | 33.51 | 4.53 | 239 | 150 | 9.01 | 33.85 | 2.89 | 26.24 | 179 | 0.40 |
| 99 | 10.56 | 33.58 | 4.00 | 223 | 200 | 8.64 | 34.01 | 2.24 | 26.42 | 162 | 0.48 |
| 115 | 9.84 | 33.68 | 3.63 | 205 | 250 | 8.04 | 34.14 | 1.72 | 26.62 | 143 | 0.56 |
| 140 | 9.22 | 33.79 | 3.16 | 187 | 300 | 7.54 | 34.19 | 1.48 | 26.72 | 133 | 0.63 |
| | | | | | 400 | 6.58 | 34.27 | 0.81 | 26.93 | 114 | 0.76 |
| 167 | 8.84 | 33.92 | 2.60 | 172 | 500 | 5.78 | 34.35 | 0.44 | 27.09 | 98 | 0.87 |
| 200 | 8.64 | 34.01 | 2.24 | 162 | | | | | | | |
| 247 | 8.08 | 34.14 | 1.73 | 144 | | | | | | | |
| 322 | 7.36 | 34.20 | 1.41 | 129 | | | | | | | |
| 418 | 6.39 | 34.29 | 0.74 | 111 | | | | | | | |
| 546 | 5.45 | 34.38 | 0.37 | 92 | | | | | | | |

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta T_{-5}^{3}$ $10^{-5}$ cm/g | ΔD dyn. m |

93.70

ORCA; December 6, 1958; 0022, 0058 GCT; 31°30'N, 120°15'W; sounding, 2000 fm; wind, 270°, force 2; weather, cloudy; sea, moderate; wire angle, 04°, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 17.04 | 33.51 | 5.42 | 356 | 0 | (17.04) | (33.51) | (5.42) | (24.38) | (356) | (0.00) |
| 12 | 17.04 | 33.51 | 5.54 | 356 | 10 | 17.04 | 33.51 | 5.53 | 24.38 | 356 | 0.04 |
| 31 | 17.01 | 33.49 | 5.51 | 356 | 20 | 17.03 | 33.50 | 5.52 | 24.38 | 356 | 0.07 |
| 57 | 17.05 | 33.55 | 5.48 | 353 | 30 | 17.01 | 33.49 | 5.51 | 24.37 | 356 | 0.11 |
| 67 | 16.85 | 33.55 | 5.46 | 348 | 50 | 17.04 | 33.54 | 5.49 | 24.40 | 353 | 0.18 |
| 77 | 15.04 | 33.48 | 5.71 | 315 | 75 | 15.30 | 33.48 | 5.69 | 24.76 | 320 | 0.26 |
| 87 | 14.72 | 33.50 | 5.65 | 306 | 100 | 14.34 | 33.51 | 5.52 | 24.99 | 298 | 0.34 |
| 102 | 14.24 | 33.51 | 5.50 | 296 | 150 | 10.42 | 33.72 | 3.34 | 25.90 | 211 | 0.46 |
| 116 | 12.06 | 33.49 | 4.89 | 256 | 200 | 9.46 | 33.90 | 2.36 | 26.21 | 182 | 0.56 |
| 136 | 10.74 | 33.60 | 4.00 | 225 | 250 | 8.75 | 34.04 | 1.57 | 26.43 | 161 | 0.65 |
| 156 | 10.30 | 33.76 | 3.11 | 206 | 300 | 7.93 | 34.12 | 1.40 | 26.62 | 143 | 0.73 |
| 180 | 9.79 | 33.86 | 2.58 | 190 | 400 | 6.60 | 34.19 | 1.02 | 26.86 | 120 | 0.87 |
| 204 | 9.40 | 33.91 | 2.31 | 181 | 500 | 5.87 | 34.25 | 0.64 | 27.00 | 107 | 0.99 |
| 254 | 8.68 | 34.05 | 1.50 | 159 | | | | | | | |
| 333 | 7.39 | 34.16 | 1.36 | 133 | | | | | | | |
| 423 | 6.40 | 34.20 | 0.89 | 117 | | | | | | | |
| 552 | 5.52 | 34.31 | 0.45 | 98 | | | | | | | |

93.80

ORCA; December 6, 1958; 0625 GCT; 31°10.5'N, 120°53'W; sounding, 1800 fm; wind, 310°, force 2; weather, overcast; sea, moderate; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.71 | 33.66 | 4.88 | 360 | 0 | 17.71 | 33.66 | 4.88 | 24.34 | 360 | 0.00 |
| 11 | 17.68 | 33.66 | 5.50 | 359 | 10 | 17.68 | 33.66 | 5.45 | 24.34 | 359 | 0.04 |
| 30 | 17.68 | 33.65 | 4.55 | 360 | 20 | 17.68 | 33.65 | 5.05 | 24.34 | 359 | 0.07 |
| 55 | 18.08 | 33.84 | 5.48 | 356 | 30 | 17.68 | 33.65 | 4.55 | 24.34 | 360 | 0.11 |
| 65 | 16.57 | 33.57 | 3.49 | 340 | 50 | 17.80 | 33.70 | 5.28 | 24.35 | 358 | 0.18 |
| 75 | 15.11 | 33.44 | 3.47 | 319 | 75 | 15.11 | 33.44 | 3.47 | 24.77 | 319 | 0.26 |
| 85 | 14.93 | 33.52 | 4.08 | 309 | 100 | 13.78 | 33.57 | 3.47 | 25.15 | 282 | 0.34 |
| 100 | 13.78 | 33.57 | 3.47 | 282 | 150 | 9.90 | 33.55 | 3.34 | 25.86 | 215 | 0.46 |
| 114 | 12.24 | 33.51 | 3.46 | 258 | 200 | 8.70 | 33.85 | 2.28 | 26.29 | 174 | 0.56 |
| 134 | 10.54 | 33.49 | 3.33 | 230 | 250 | 7.80 | 34.00 | 2.15 | 26.54 | 150 | 0.65 |
| 154 | 9.78 | 33.57 | 3.34 | 212 | 300 | 7.30 | 34.08 | 1.61 | 26.67 | 138 | 0.72 |
| 179 | 9.08 | 33.75 | 2.67 | 188 | 400 | 6.37 | 34.16 | 0.83 | 26.87 | 119 | 0.86 |
| 203 | 8.63 | 33.86 | 2.22 | 173 | 500 | 5.79 | 34.24 | 0.50 | 27.00 | 106 | 0.97 |
| 252 | 7.77 | 34.00 | 2.13 | 150 | | | | | | | |
| 330 | 7.02 | 34.12 | 1.23 | 131 | | | | | | | |
| 429 | 6.08 | 34.17 | 0.71 | 116 | | | | | | | |
| 557 | 5.62 | 34.31 | 0.35 | 100 | | | | | | | |

97.32

ORCA; December 2, 1958; 0025 GCT;[a] 32°11'N, 117°16'W; sounding, 700 fm; wind, 330°, force 4; weather, clear; sea, slight; wire angle, 17°.

| | | | | |
|---|---|---|---|---|
| 429 | 6.98 | 34.24 | 0.84[b] | 121 |
| 439 | 6.94 | 34.25 | 0.51 | 120 |
| 449 | 6.87 | 34.27 | 0.50 | 118 |
| 459 | 6.73 | 34.26 | 0.65 | 117 |
| 469 | 6.69 | 34.27 | 0.53 | 115 |
| 479 | 6.65 | 34.29 | 0.47 | 114 |
| 489 | 6.49 | 34.29 | 0.42 | 112 |
| 498 | 6.52 | 34.29 | 0.64 | 112 |
| 508 | 6.40 | 34.29 | 0.57 | 110 |
| 518 | 6.38 | 34.30 | 0.51 | 108 |
| 528 | 6.20 | 34.29 | 0.49 | 107 |
| 537 | 6.18 | 34.31 | 0.53 | 105 |
| 547 | 6.08 | 34.31 | 0.48 | 105 |
| 557 | 6.00 | 34.34 | 0.40 | 102 |
| 567 | 5.98 | 34.37 | 0.38 | 99 |
| 577 | 5.92 | 34.36 | 0.43 | 99 |
| 587 | 5.82 | 34.34 | 0.39 | 100 |

a) Test cast.
b) Alternate value, 1.09 ml/L, not used in interpolation.

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| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\delta T_3$<br>$10^{-5}$ cm/g | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta T_3$<br>$10^{-5}$ cm/g | ΔD<br>dyn. m |

97.60 ORCA; December 3, 1958; 0507 GCT; 31°16.5'N, 119°08.5'W; sounding, 1000 fm; wind, 300°, force 2; weather, clear; sea, smooth; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.78 | 33.49 | 5.49 | 351 | 0 | (16.78) | (33.49) | (5.49) | (24.43) | (351) | (0.00) |
| 11 | 16.78 | 33.50 | 5.51 | 350 | 10 | 16.78 | 33.50 | 5.50 | 24.44 | 350 | 0.04 |
| 30 | 16.74 | 33.51 | 5.40 | 349 | 20 | 16.76 | 33.51 | 5.45 | 24.45 | 349 | 0.07 |
| 59 | 15.88 | 33.50 | 5.42 | 331 | 30 | 16.74 | 33.51 | 5.40 | 24.45 | 349 | 0.10 |
| 69 | 15.40 | 33.53 | 5.53 | 318 | 50 | 16.60 | 33.51 | 5.40 | 24.48 | 346 | 0.17 |
| 79 | 14.01 | 33.45 | 5.51 | 296 | 75 | 14.69 | 33.49 | 5.53 | 24.89 | 307 | 0.26 |
| 94 | 12.81 | 33.56 | 5.00 | 266 | 100 | 12.49 | 33.58 | 4.96 | 25.42 | 257 | 0.33 |
| 108 | 12.00 | 33.59 | 4.94 | 248 | 150 | 9.50 | 33.63 | 3.96 | 25.98 | 203 | 0.44 |
| 120 | 10.88 | 33.57 | 4.78 | 230 | 200 | 8.62 | 33.92 | 3.01 | 26.36 | 168 | 0.54 |
| 140 | 9.83 | 33.57 | 4.34 | 213 | 250 | 8.12 | 34.04 | 2.30 | 26.52 | 152 | 0.62 |
| 160 | 9.26 | 33.70 | 3.60 | 194 | 300 | 7.57 | 34.10 | 1.66 | 26.66 | 140 | 0.70 |
| 187 | 8.82 | 33.87 | 3.15 | 175 | 400 | 6.68 | 34.20 | 0.98 | 26.85 | 121 | 0.83 |
| 210 | 8.44 | 33.95 | 3.90 | 164 | 500 | 6.13 | 34.28 | 0.63 | 26.99 | 108 | 0.95 |
| 261 | 8.01 | 34.05 | 2.16 | 150 | 600 | (5.55) | (34.36) | | (27.13) | (95) | (1.06) |
| 340 | 7.01 | 34.14 | 1.31 | 131 | | | | | | | |
| 445 | 6.42 | 34.23 | 0.83 | 115 | | | | | | | |
| 580 | 5.65 | 34.34 | 0.37 | 98 | | | | | | | |

100.50 ORCA; December 2, 1958; 1805 GCT; 30°54'N, 118°11'W; sounding, 950 fm; wind, 320°, force 2; weather, clear; sea, moderate; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.50 | 33.51 | 5.70 | 366 | 0 | 17.50 | 33.51 | 5.70 | 24.27 | 366 | 0.00 |
| 5 | 17.46 | 33.53 | 4.89 | 364 | 10 | 17.42 | 33.52 | 5.22 | 24.29 | 364 | 0.04 |
| 10 | 17.42 | 33.52 | 5.22 | 364 | 20 | 17.42 | 33.53 | 4.93 | 24.31 | 363 | 0.07 |
| 15 | 17.44 | 33.54 | 4.77 | 364 | 30 | 17.42 | 33.53 | 5.30 | 24.31 | 363 | 0.11 |
| 20 | 17.42 | 33.53 | 4.93 | 363 | 50 | 14.78 | 33.66 | 3.76 | 25.01 | 296 | 0.17 |
| 25 | 17.43 | 33.53 | 4.43 | 362 | 75 | 14.22 | 33.75 | 3.34 | 25.21 | 277 | 0.25 |
| 30 | 17.42 | 33.53 | 5.30 | 363 | 100 | 13.68 | 33.83 | 2.88 | 25.37 | 262 | 0.32 |
| 35 | 17.40 | 33.54 | 4.86 | 362 | 150 | 11.20 | 33.86 | 2.59 | 25.87 | 214 | 0.44 |
| 40 | 15.94 | 33.46 | 4.96 | 335 | | | | | | | |
| 50 | 14.78 | 33.66 | 3.76 | 296 | | | | | | | |
| 60 | 14.54 | 33.70 | 3.38 | 288 | | | | | | | |
| 71 | 14.34 | 33.75 | 3.44 | 280 | | | | | | | |
| 80 | 14.04 | 33.79 | 3.05 | 272 | | | | | | | |
| 90 | 13.90 | 33.81 | 3.05 | 267 | | | | | | | |
| 120 | 13.10 | 33.87 | 2.29 | 247 | | | | | | | |
| 150 | 11.20 | 33.86 | 2.59 | 214 | | | | | | | |
| 180 | 10.17 | 33.96 | 2.36 | 189 | | | | | | | |

100.60 ORCA; December 2, 1958; 2248 GCT; 30°41.5'N, 118°45'W; sounding, 1500 fm; wind, 330°, force 5; weather, clear; sea, rough; wire angle, 14°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 17.89 | 33.66 | 5.44 | 364 | 0 | (17.89) | (33.66) | (5.44) | (24.29) | (364) | (0.00) |
| 11 | 17.84 | 33.60 | 5.42 | 367 | 10 | 17.86 | 33.61 | 5.44 | 24.26 | 367 | 0.04 |
| 31 | 17.26 | 33.49 | 5.13 | 362 | 20 | 17.77 | 33.58 | 5.38 | 24.26 | 367 | 0.07 |
| 61 | 15.34 | 33.44 | 5.53 | 323 | 30 | 17.27 | 33.49 | 5.13 | 24.31 | 362 | 0.11 |
| 70 | 14.66 | 33.46 | 5.61 | 309 | 50 | 17.20 | 33.48 | 5.16 | 24.32 | 361 | 0.18 |
| 79 | 13.80 | 33.46 | 5.40 | 291 | 75 | 14.28 | 33.46 | 5.53 | 24.98 | 299 | 0.26 |
| 93 | 12.44 | 33.46 | 5.00 | 266 | 100 | 12.08 | 33.47 | 4.94 | 25.40 | 258 | 0.34 |
| 108 | 11.60 | 33.48 | 4.87 | 249 | 150 | 9.80 | 33.56 | 4.13 | 25.88 | 213 | 0.45 |
| 122 | 10.82 | 33.50 | 4.47 | 234 | 200 | 8.75 | 33.94 | 2.89 | 26.36 | 168 | 0.55 |
| 141 | 10.10 | 33.50 | 4.28 | 222 | 250 | 8.24 | 34.08 | 2.13 | 26.53 | 151 | 0.63 |
| 159 | 9.48 | 33.69 | 3.82 | 198 | | | | | | | |
| 188 | 8.88 | 33.89 | 3.07 | 174 | | | | | | | |
| 211 | 8.62 | 33.97 | 2.79 | 165 | | | | | | | |
| 263 | 8.15 | 34.11 | 2.02 | 147 | | | | | | | |

## TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

| Station | Date | Time GCT | Latitude North | Longitude West | Sounding (fm) | Wind Dir | Wind Force | Weather | Sea | 10 Meters T | 10 Meters S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 82.47-O | XII-9 | 0735 | 34°14.5' | 119°58.0' | 315 | 320° | 2 | partly cloudy | slight | 15.88 | 33.50 |
| 83.40-O | 9 | 0350 | 34°12.0' | 119°21.5' | 14 | 320° | 3 | overcast | smooth | 16.68 | 33.53 |
| 83.43-O | 9 | 0150 | 34°07.0' | 119°35.0' | 140 | 320° | 3 | cloudy | smooth | 16.27 | 33.53 |
| 83.51-O | 8 | 2102 | 33°52.0' | 120°07.5' | 84 | 330° | 3 | cloudy | moderate | 16.10 | 33.51 |
| 83.55-O | 8 | 1828 | 33°44.0' | 120°24.5' | 552 | 320° | 4 | cloudy | rough | 16.40 | 33.57 |
| 87.35-O | 7 | 1845 | 33°50.0' | 118°37.0' | 160 | 280° | 3 | fog | smooth | 16.88 | 33.53 |
| 87.45-O | 8 | 0025 | 33°28.5' | 119°20.0' | 900 | 280° | 2 | clear | rough | 16.71 | 33.55 |
| 87.50-O | 8 | 0315 | 33°20.5' | 119°40.0' | 40 | 310° | 1 | clear | smooth | 16.68 | 33.55 |
| 87.55-O | 8 | 0545 | 33°09.0' | 120°00.0' | 600 | 270° | 2 | clear | very rough | 16.46 | 33.53 |
| 97.30-O | 3 | 2130 | 32°14.0' | 117°08.0' | 48 | 330° | 1 | fog | slight | 16.54 | - |
| 97.32-O | 3 | 2025 | 32°11.0' | 117°16.0' | 700 | 140° | 1 | clear | very rough | 17.07 | 33.50 |
| 97.35-O | 3 | 1810 | 32°05.0' | 117°27.5' | 600 | 290° | 2 | clear | very rough | 17.27 | 33.55 |
| 97.40-O | 3 | 1532 | 32°00.0' | 117°51.0' | 400 | 320° | 2 | clear | very rough | 17.18 | 33.57 |
| 97.50-O | 3 | 1015 | 31°37.0' | 118°32.0' | 1300 | 300° | 2 | clear | smooth | 16.58 | 33.54 |
| 100.29-O | 2 | 0553 | 31°42.0' | 116°44.0' | 100 | 160° | 1 | clear | smooth | 17.76 | 33.68 |
| 100.30-O | 2 | 0647 | 31°41.0' | 116°46.5' | 300 | 160° | 2 | clear | smooth | 17.76 | 33.65 |
| 100.35-O | 2 | 0935 | 31°29.0' | 117°07.5' | 650 | 270° | 2 | clear | smooth | 18.43 | 33.74 |
| 100.40-O | 2 | 1230 | 31°18.0' | 117°28.5' | 1100 | 270° | 2 | clear | smooth | 18.28 | 33.72 |

SIO

DOLPHIN

I

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| HORIZON; April 7, 1958; 0946 GCT; 0°03'N, 140°01'W; sounding, 2310 fm; wind, 130°, force 4; weather, partly cloudy; sea, slight; wire angle, 20°. | | | | | | | | | | | | | |
| 0 | 27.14 | 35.14 | 4.66 | | 507 | 0 | 27.14 | 35.14 | | 22.80 | 507 | 507 | 0.00 |
| 217 | 12.54 | 34.90 | 2.15 | | 161 | 10 | 27.12 | 35.14 | | 22.81 | 506 | 506 | 0.05 |
| 406 | 9.86 | 34.77 | - | | 124 | 20 | 26.90 | 35.15 | | 22.89 | 498 | 499 | 0.10 |
| 622 | 7.10r | 34.65 | 0.34 | | | 30 | 26.33 | 35.22 | | 23.12 | 476 | 477 | 0.15 |
| 737 | 6.12 | 34.58 | 0.41 | | 85 | 50 | 25.30 | 35.26 | | 23.47 | 443 | 445 | 0.24 |
| 851 | 5.36 | 34.57 | 0.43 | | 77 | 75 | 23.10 | 35.27 | | 24.14 | 379 | 382 | 0.35 |
| 967 | 4.63 | 34.59 | 0.41 | | 68 | 100 | 19.80 | 35.16 | | 24.97 | 300 | 304 | 0.43 |
| 1004 | 4.40 | 34.58 | 0.62 | | 66 | 125 | 17.69 | 34.96 | | 25.34 | 264 | 268 | 0.50 |
| 1063 | 4.24 | 34.58 | 0.36 | | 64 | 150 | 14.55 | 34.96 | | 26.06 | 196 | 200 | 0.56 |
| 1110 | 4.09 | 34.77r | 0.88 | | | 175 | 13.81 | 34.94 | | 26.20 | 183 | 188 | 0.61 |
| 1147 | 3.97 | 34.63r | 1.09 | | | 200 | 12.80 | 34.91 | | 26.39 | 165 | 170 | 0.65 |
| 1174 | 3.89 | 34.56 | 1.20 | | 62 | 225 | 12.40 | 34.90 | | 26.45 | 159 | 165 | 0.70 |
| 1206 | 3.64 | 34.57 | 1.98 | | 59 | 250 | 12.05 | 34.88 | | 26.50 | 154 | 160 | 0.74 |
| 1229 | 3.58 | 34.60r | 1.79 | | | 275 | 11.68 | 34.87 | | 26.56 | 148 | 155 | 0.78 |
| 1252 | 3.55 | 34.57 | 1.99 | | 58 | 300 | 11.32 | 34.84 | | 26.61 | 144 | 151 | 0.81 |
| 1274 | 3.50 | 34.58 | 2.04 | | 57 | 400 | 9.90 | 34.77 | | 26.82 | 124 | 132 | 0.96 |
| 1284 | 3.46 | 34.60 | 2.08 | | 55 | 500 | 7.84 | 34.69 | | 27.07 | 100 | 109 | 1.08 |
| | | | | | | 600 | 7.02 | 34.65 | | 27.16 | 92 | 101 | 1.18 |
| | | | | | | 700 | 6.36 | 34.59 | | 27.21 | 87 | 97 | 1.28 |
| | | | | | | 800 | 5.69 | 34.57 | | 27.28 | 80 | 90 | 1.37 |
| | | | | | | 1000 | 4.39 | 34.58 | | 27.44 | 65 | 75 | 1.54 |
| | | | | | | 1200 | 3.71 | 34.57 | | 27.49 | 60 | 70 | 1.68 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

HORIZON; April 8, 1958; 1040 GCT; 0°01.5'S, 140°04.5'W; sounding, 2302 fm; wind, 120°, force 3; weather, partly cloudy; sea, missing; wire angle, 25°. 2

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.99 | 35.14 | | 501 | 0 | 26.99 | 35.14 | | 22.86 | 501 | 501 | 0.00 |
| 210 | 12.49 | 34.90 | | 160 | 10 | 26.83 | 35.17 | | 22.93 | 494 | 494 | 0.05 |
| 392 | 10.02 | 34.74 | | 129 | 20 | 26.60 | 35.20 | | 23.03 | 485 | 486 | 0.10 |
| 602 | 7.14 | 34.60 | | 97 | 30 | 26.18 | 35.25 | | 23.19 | 469 | 470 | 0.15 |
| 716 | 6.52a) | 34.60 | | 89 | 50 | 25.12 | 35.28 | | 23.54 | 436 | 438 | 0.24 |
| 831 | 5.80r | 34.56 | | 81 | 75 | 22.27 | 35.32 | | 24.40 | 354 | 357 | 0.34 |
| 947 | 4.60b) | 34.55 | | 70 | 100 | 20.15 | 35.22 | | 24.91 | 305 | 308 | 0.42 |
| 984 | 4.40c) | 34.56 | | 68 | 125 | 18.23 | 35.00 | | 25.24 | 274 | 278 | 0.49 |
| 1043 | 4.27d) | 34.61r | | - | 150 | 15.65 | 34.98 | | 25.83 | 218 | 222 | 0.56 |
| 1089 | 4.28 | 34.54 | | 67 | 175 | 13.70 | 34.98 | | 26.25 | 178 | 183 | 0.61 |
| 1127 | 4.13 | 34.56 | | 65 | 200 | 12.70 | 34.92 | | 26.41 | 163 | 168 | 0.65 |
| 1154 | 4.00 | 34.56 | | 64 | 225 | 12.30 | 34.89 | | 26.47 | 157 | 163 | 0.69 |
| 1188 | 3.94 | 34.57 | | 61 | 250 | 12.02 | 34.87 | | 26.50 | 154 | 160 | 0.73 |
| 1211 | 3.87e) | 34.58 | | 60 | 275 | 11.68 | 34.84 | | 26.55 | 149 | 156 | 0.77 |
| 1234 | 3.65 | 34.60 | | 57 | 300 | 11.37 | 34.83 | | 26.59 | 146 | 153 | 0.81 |
| 1257 | 3.56 | 34.61 | | 55 | 400 | 9.79 | 34.74 | | 26.80 | 126 | 134 | 0.95 |
| 1266 | 3.56 | 34.60 | | 56 | 500 | 7.84 | 34.62 | | 27.02 | 105 | 114 | 1.08 |
| | | | | | 600 | 7.15 | 34.60 | | 27.10 | 97 | 107 | 1.19 |
| | | | | | 700 | 6.61 | 34.60 | | 27.18 | 90 | 100 | 1.29 |
| | | | | | 800 | 5.92 | 34.56 | | 27.24 | 84 | 95 | 1.39 |
| | | | | | 1000 | 4.34 | 34.56 | | 27.42 | 67 | 77 | 1.56 |
| | | | | | 1200 | 3.88 | 34.58 | | 27.47 | 62 | 73 | 1.71 |

HORIZON; April 9, 1958; 1105 GCT; 0°01.5'S, 140°03'W; sounding, 2310 fm; wind, 110°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. 3

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.00f) | 35.16 | 4.51 | 501 | 0 | 27.00 | 35.16 | 4.51 | 22.86 | 501 | 501 | 0.00 |
| 9 | 26.80 | 35.16 | 4.56 | 494 | 10 | 26.76 | 35.16 | 4.56 | 22.94 | 493 | 493 | 0.05 |
| 33 | 26.26 | 35.23 | 4.30 | 473 | 20 | 26.59 | 35.19 | 4.45 | 23.02 | 486 | 487 | 0.10 |
| 58 | 25.00 | 35.26 | 3.92 | 434 | 30 | 26.34 | 35.22 | 4.33 | 23.11 | 477 | 478 | 0.15 |
| 82 | 22.21 | 35.32 | 3.20 | 352 | 50 | 25.58 | 35.26 | 4.15 | 23.38 | 451 | 453 | 0.24 |
| 117 | 19.54 | 35.14 | 3.07 | 296 | 75 | 22.99 | 35.28 | 3.28 | 24.17 | 376 | 379 | 0.34 |
| 146 | 16.48 | 34.95 | 3.09 | 239 | 100 | 21.40 | 35.31 | 3.15 | 24.64 | 331 | 335 | 0.43 |
| 184 | 13.66 | 34.97 | 3.07 | 178 | 125 | 18.89 | 35.03 | 3.08 | 25.10 | 287 | 291 | 0.51 |
| 228 | 12.32 | 34.92 | 2.48 | 156 | 150 | 16.26 | 34.96 | 3.10 | 25.68 | 232 | 237 | 0.58 |
| 282 | 11.49 | 34.84 | 0.82 | 147 | 175 | 14.40 | 34.97 | 3.10 | 26.10 | 192 | 197 | 0.63 |
| 318 | 10.83 | 34.80 | 0.63 | 138 | 200 | 12.92 | 34.94 | 2.89 | 26.38 | 165 | 170 | 0.68 |
| 424 | 8.95 | 34.69 | 0.56 | 116 | 225 | 12.35 | 34.92 | 2.49 | 26.48 | 156 | 162 | 0.72 |
| 532 | 7.30 | 34.58 | 1.19 | 100 | 250 | 11.98 | 34.88 | 1.61 | 26.52 | 152 | 158 | 0.76 |
| 642 | 6.80 | 34.54 | 1.45 | 97 | 275 | 11.59 | 34.84 | 0.90 | 26.58 | 147 | 154 | 0.80 |
| 855 | 5.20 | 34.54 | 1.98 | 77 | 300 | 11.17 | 34.82 | 0.70 | 26.62 | 143 | 150 | 0.84 |
| 1050 | 4.28 | 34.60 | 2.10 | 63 | 400 | 9.42 | 34.72 | 0.50 | 26.84 | 122 | 130 | 0.98 |
| 1268 | 3.50 | 34.58 | 2.17 | 57 | 500 | 7.63 | 34.61 | 1.04 | 27.04 | 103 | 111 | 1.10 |
| | | | | | 600 | 7.01 | 34.56 | 1.34 | 27.09 | 98 | 107 | 1.21 |
| | | | | | 700 | 6.37 | 34.53 | 1.68 | 27.16 | 92 | 102 | 1.31 |
| | | | | | 800 | 5.64 | 34.52 | 1.89 | 27.24 | 84 | 94 | 1.41 |
| | | | | | 1000 | 4.41 | 34.58 | 2.07 | 27.43 | 66 | 76 | 1.58 |
| | | | | | 1200 | 3.86 | 34.59 | 2.14 | 27.49 | 60 | 70 | 1.72 |

a) Mean value of 6.48 and 6.56°C.
b) Alternate value, 4.47°C.
c) Alternate value, 4.70°C.
d) Alternate value, 4.42°C.
e) Alternate value, 3.59°C.
f) Alternate value, 25.98°C.

| | OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\delta$ cl/ton | $\Delta D$ dyn m |
| 4 | HORIZON; April 10, 1958; 1045 GCT; 0°01.5'S, 140°03'W; sounding, 2300 fm; wind, 110°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | | | |
| | 0 | 26.94 | 35.14 | 4.63 | | 500 | 0 | 26.94 | 35.14 | 4.63 | 22.87 | 500 | 500 | 0.00 |
| | 9 | 26.74 | 35.15 | 4.62 | | 493 | 10 | 26.72 | 35.15 | 4.62 | 22.94 | 493 | 493 | 0.05 |
| | 33 | 26.38 | 35.16 | 4.47 | | 482 | 20 | 26.65 | 35.15 | 4.60 | 22.97 | 490 | 491 | 0.10 |
| | 57 | 25.50 | 35.25 | 4.24 | | 450 | 30 | 26.46 | 35.16 | 4.49 | 23.04 | 484 | 485 | 0.15 |
| | 82 | 23.22 | 35.25 | 3.31 | | 384 | 50 | 25.88 | 35.23 | 4.35 | 23.27 | 462 | 464 | 0.24 |
| | 116 | 19.24 | 35.07 | 3.06 | | 293 | 75 | 24.15 | 35.26 | 3.56 | 23.81 | 410 | 413 | 0.35 |
| | 145 | 16.28 | 34.96 | 3.11 | | 232 | 100 | 21.80 | 35.31 | 3.12 | 24.53 | 341 | 345 | 0.45 |
| | 182 | 13.27 | 34.94 | 3.06 | | 171 | 125 | 18.61 | 35.03 | 3.07 | 25.15 | 282 | 286 | 0.53 |
| | 228 | 12.34 | 34.88 | 2.45 | | 159 | 150 | 14.99 | 34.96 | 3.10 | 25.98 | 204 | 208 | 0.59 |
| | 286 | 11.52 | 34.84 | 0.91 | | 148 | 175 | 13.59 | 34.95 | 3.07 | 26.25 | 178 | 183 | 0.64 |
| | 321 | 10.96 | 34.81 | 0.67 | | 139 | 200 | 12.60 | 34.89 | 2.67 | 26.41 | 163 | 168 | 0.68 |
| | 429 | 9.06 | 34.67 | 0.61 | | 119 | 225 | 12.38 | 34.88 | 2.47 | 26.44 | 160 | 166 | 0.72 |
| | 535 | 7.73 | 34.61 | 1.10 | | 104 | 250 | 12.11 | 34.88 | 2.08 | 26.49 | 155 | 161 | 0.76 |
| | 654 | 6.91 | 34.60 | 1.50 | | 83 | 275 | 11.73 | 34.86 | 1.12 | 26.55 | 149 | 156 | 0.80 |
| | 872 | 5.07 | 34.58 | 2.09 | | 73 | 300 | 11.34 | 34.83 | 0.81 | 26.60 | 145 | 152 | 0.84 |
| | 1062 | 4.26 | 34.57 | 2.09 | | 65 | 400 | 9.58 | 34.72 | 0.60 | 26.83 | 123 | 131 | 0.98 |
| | 1280 | 3.50 | 34.60 | 2.27 | | 55 | 500 | 8.09 | 34.63 | 0.87 | 26.99 | 108 | 117 | 1.11 |
| | | | | | | | 600 | 7.24 | 34.60 | 1.33 | 27.09 | 98 | 108 | 1.22 |
| | | | | | | | 700 | 6.50 | 34.56 | 1.66 | 27.16 | 91 | 101 | 1.32 |
| | | | | | | | 800 | 5.67 | 34.56 | 1.96 | 27.26 | 82 | 92 | 1.42 |
| | | | | | | | 1000 | 4.41 | 34.58 | 2.09 | 27.43 | 66 | 76 | 1.59 |
| | | | | | | | 1200 | 3.73 | 34.60 | 2.21 | 27.51 | 58 | 68 | 1.73 |
| 5 | HORIZON; April 11, 1958; 0920 GCT; 0°01'S, 139°59.5'W; sounding, 2300 fm; wind, 100°, force 2; weather, partly cloudy; sea, missing; wire angle, 18°. | | | | | | | | | | | | | |
| | 0 | 26.92 | 35.19 | 4.56 | | 496 | 0 | 26.92 | 35.19 | 4.56 | 22.91 | 496 | 496 | 0.00 |
| | 9 | 26.84 | 35.16 | 4.71 | | 496 | 10 | 26.83 | 35.16 | 4.71 | 22.91 | 496 | 496 | 0.05 |
| | 33 | 26.45 | 35.16 | 4.54 | | 484 | 20 | 26.69 | 35.16 | 4.66 | 22.95 | 492 | 493 | 0.10 |
| | 58 | 25.71 | 35.23 | 4.17 | | 458 | 30 | 26.50 | 35.16 | 4.56 | 23.02 | 486 | 487 | 0.15 |
| | 82 | 23.32 | 35.26 | 3.50 | | 386 | 50 | 25.99 | 35.20 | 4.30 | 23.21 | 467 | 469 | 0.24 |
| | 115 | 19.98 | 35.12 | 3.34 | | 309 | 75 | 24.35 | 35.26 | 3.68 | 23.75 | 416 | 419 | 0.35 |
| | 143 | 17.29 | 35.05 | 3.25 | | 249 | 100 | 22.63 | 35.30 | 3.44 | 24.29 | 364 | 368 | 0.45 |
| | 178 | 13.26a) | 34.94 | 3.25 | | 171 | 125 | 18.89 | 35.06 | 3.29 | 25.11 | 286 | 290 | 0.54 |
| | 217 | 12.92 | 34.91 | 2.96 | | 168 | 150 | 16.20 | 35.03 | 3.25 | 25.74 | 226 | 231 | 0.60 |
| | 267 | 12.14 | 34.89 | 2.15 | | 154 | 175 | 13.41 | 34.95 | 3.26 | 26.29 | 174 | 179 | 0.65 |
| | 298 | 11.77 | 34.88 | 1.50 | | 149 | 200 | 13.05 | 34.92 | 3.05 | 26.34 | 169 | 174 | 0.70 |
| | 396 | 9.40 | 34.71 | 0.64 | | 121 | 225 | 12.83 | 34.90 | 2.87 | 26.38 | 166 | 172 | 0.74 |
| | 493 | 8.20 | 34.69 | 0.57 | | 105 | 250 | 12.40 | 34.89 | 2.49 | 26.44 | 160 | 166 | 0.78 |
| | 590 | 7.06 | 34.62 | 1.38 | | 94 | 275 | 12.03 | 34.88 | 1.95 | 26.51 | 153 | 160 | 0.82 |
| | 781 | 5.57 | 34.60 | 1.91 | | 77 | 300 | 11.65 | 34.86 | 1.30 | 26.58 | 147 | 154 | 0.86 |
| | 964 | 4.34 | 34.58 | 2.08 | | 65 | 400 | 9.33 | 34.71 | 0.62 | 26.86 | 120 | 128 | 1.00 |
| | 1179 | 3.58 | 34.60 | 2.35 | | 56 | 500 | 8.07 | 34.66 | 0.62 | 27.02 | 105 | 114 | 1.12 |
| | | | | | | | 600 | 6.98 | 34.61 | 1.43 | 27.13 | 94 | 103 | 1.23 |
| | | | | | | | 700 | 6.33 | 34.60 | 1.69 | 27.22 | 86 | 96 | 1.33 |
| | | | | | | | 800 | 5.40 | 34.58 | 2.00 | 27.32 | 76 | 86 | 1.42 |
| | | | | | | | 1000 | 4.22 | 34.58 | 2.10 | 27.45 | 64 | 74 | 1.58 |

a) Alternate value, 14.68°C.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

HORIZON; April 12, 1958; 1625 GCT; 0°53'N, 140°01'W; sounding, 2360 fm; wind, 140°, force 2; weather, partly cloudy; sea, moderate; wire angle, 15°. 6

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.70 | 35.02 | 4.27 | | 532 | 0 | 27.70 | 35.02 | 4.27 | 22.53 | 532 | 532 | 0.00 |
| 9 | 27.52a) | 35.03 | 4.85 | | 526 | 10 | 27.50 | 35.03 | 4.85 | 22.60 | 526 | 526 | 0.05 |
| 33 | 27.01 | 35.03 | 4.69 | | 510 | 20 | 27.33 | 35.03 | 4.80 | 22.66 | 520 | 521 | 0.11 |
| 58 | 24.30 | 34.99 | 3.65 | | 432 | 30 | 27.13 | 35.03 | 4.74 | 22.72 | 514 | 515 | 0.16 |
| 82 | 21.32 | 34.96 | 3.06 | | 354 | 50 | 26.10 | 35.02 | 4.40 | 23.04 | 484 | 486 | 0.26 |
| 117 | 18.18 | 34.96 | 3.09 | | 276 | 75 | 22.10 | 34.98 | 3.10 | 24.20 | 373 | 376 | 0.36 |
| 145 | 14.84 | 34.79 | 2.38 | | 215 | 100 | 20.20 | 34.96 | 3.07 | 25.70 | 325 | 328 | 0.45 |
| 185 | 12.53b) | 34.81 | 2.19 | | 168 | 125 | 17.02 | 34.92 | 3.01 | 25.47 | 252 | 256 | 0.53 |
| 232 | 12.16 | 34.88 | 2.08 | | 156 | 150 | 14.13 | 34.79 | 2.36 | 26.02 | 200 | 204 | 0.58 |
| 292 | 11.62 | 34.83 | 3.05r | | 150 | 175 | 12.75 | 34.80 | 2.25 | 26.30 | 173 | 177 | 0.63 |
| 331 | 11.06 | 34.65r | 0.49 | | | 200 | 12.44 | 34.83 | 2.19 | 26.38 | 165 | 170 | 0.67 |
| 447 | 9.22 | 34.69 | 0.75 | | 120 | 225 | 12.26 | 34.87 | 2.14 | 26.46 | 158 | 164 | 0.72 |
| 565 | 7.47 | 34.61 | 1.16 | | 100 | 250 | 11.98 | 34.87 | 1.85 | 26.50 | 154 | 160 | 0.76 |
| 683 | 6.72 | 34.56 | 1.58 | | 94 | 275 | 11.79 | 34.85 | 1.55 | 26.53 | 151 | 158 | 0.80 |
| 905 | 5.10 | 34.57 | 2.00 | | 74 | 300 | 11.52 | 34.82 | 1.11 | 26.56 | 148 | 155 | 0.84 |
| 1098 | 4.20 | 34.56 | 2.20 | | 65 | 400 | 10.00 | 34.73 | 0.61 | 26.76 | 129 | 137 | 0.98 |
| 1320 | 3.45 | 34.60 | 2.22 | | 55 | 500 | 8.23 | 34.65 | 0.83 | 26.99 | 108 | 117 | 1.11 |
| | | | | | | 600 | 7.16 | 34.58 | 1.37 | 27.09 | 98 | 108 | 1.22 |
| | | | | | | 700 | 6.59 | 34.56 | 1.64 | 27.16 | 92 | 102 | 1.33 |
| | | | | | | 800 | 5.88 | 34.57 | 1.84 | 27.25 | 83 | 94 | 1.42 |
| | | | | | | 1000 | 4.57 | 34.56 | 2.12 | 27.40 | 69 | 79 | 1.60 |
| | | | | | | 1200 | 3.70 | 34.59 | 2.21 | 27.51 | 58 | 68 | 1.74 |

HORIZON; April 13, 1958; 1510 GCT; 1°59'N, 140°06'W; sounding, 2350 fm; wind, 150°, force 2; weather, partly cloudy; sea, missing; wire angle, 20°. 7

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.66 | 34.74 | 4.74 | 0.39 | 582 | 0 | 28.66 | 34.74 | 4.74 | 22.00 | 583 | 583 | 0.00 |
| 9 | 28.53c) | 34.74 | 4.41 | 0.53 | 579 | 10 | 28.52 | 34.74 | 4.41 | 22.05 | 578 | 578 | 0.06 |
| 33 | 28.15 | 34.72 | 4.54 | 0.48 | 568 | 20 | 28.43 | 34.73 | 4.46 | 22.07 | 576 | 577 | 0.12 |
| 56 | 27.10 | 34.95 | 4.28 | 0.81 | 519 | 30 | 28.31 | 34.72 | 4.51 | 22.12 | 572 | 573 | 0.17 |
| 80 | 23.39 | 34.90 | 3.22 | 1.00 | 414 | 50 | 27.66 | 34.84 | 4.44 | 22.41 | 544 | 546 | 0.29 |
| 113 | 15.50 | 34.89 | 1.53 | 1.87 | 221 | 75 | 24.30 | 34.91 | 3.50 | 23.51 | 439 | 442 | 0.41 |
| 140 | 13.92 | 34.93 | 1.08 | 2.25 | 186 | 100 | 17.97 | 34.91 | 2.13 | 25.23 | 275 | 278 | 0.50 |
| 175 | 13.10 | 34.92 | 1.19 | 2.21 | 170 | 125 | 14.78 | 34.92 | 1.27 | 25.98 | 203 | 207 | 0.56 |
| 218 | 12.60 | 34.88 | 1.09 | 2.25 | 163 | 150 | 13.52 | 34.93 | 1.13 | 26.26 | 177 | 181 | 0.61 |
| 276 | 11.50 | 34.81 | 1.01 | 2.51 | 149 | 175 | 13.10 | 34.92 | 1.19 | 26.32 | 171 | 176 | 0.65 |
| 310 | 11.06 | 34.79 | 0.96 | 2.46 | 142 | 200 | 12.82 | 34.90 | 1.18 | 26.36 | 167 | 172 | 0.70 |
| 423 | 8.80 | 34.67 | 0.62 | 2.76 | 115 | 225 | 12.48 | 34.88 | 1.08 | 26.42 | 162 | 168 | 0.74 |
| 534 | 7.92 | 34.63 | 0.81 | 2.83 | 105 | 250 | 12.02 | 34.84 | 1.04 | 26.48 | 156 | 162 | 0.78 |
| 642 | 6.74 | 34.58 | 1.11 | 2.95 | 93 | 275 | 11.51 | 34.81 | 1.01 | 26.55 | 149 | 156 | 0.82 |
| 854 | 5.28 | 34.56 | 1.76 | 2.85 | 77 | 300 | 11.20 | 34.80 | 0.99 | 26.61 | 144 | 151 | 0.86 |
| 1049 | 4.20 | 34.57 | 1.81 | 2.89 | 64 | 400 | 9.21 | 34.70 | 0.59 | 26.87 | 119 | 127 | 1.00 |
| 1269 | 3.43 | 34.62 | 1.82 | 2.87 | 53 | 500 | 8.12 | 34.64 | 0.76 | 27.00 | 107 | 116 | 1.12 |
| | | | | | | 600 | 7.21 | 34.60 | 0.99 | 27.09 | 98 | 108 | 1.23 |
| | | | | | | 700 | 6.37 | 34.58 | 1.33 | 27.19 | 89 | 99 | 1.33 |
| | | | | | | 800 | 5.77 | 34.56 | 1.64 | 27.26 | 82 | 92 | 1.43 |
| | | | | | | 1000 | 4.48 | 34.57 | 1.81 | 27.42 | 67 | 77 | 1.60 |
| | | | | | | 1200 | 3.68 | 34.60 | 1.82 | 27.52 | 57 | 67 | 1.74 |

a) Alternate value, 27.43°C.
b) Alternate value, 14.67°C.
c) Alternate value, 28.25°C.

SIO

DOLPHIN

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| **8** | HORIZON; April 15, 1958; 1940 GCT; 1°00'S, 140°06'W; sounding, 2265 fm; wind, 120°, force missing; weather, partly cloudy; sea, missing; wire angle, 25°. | | | | | | | | | | | | |
| 0 | 27.42 | 35.23 | 4.49 | 0.55 | 509 | 0 | 27.42 | 35.23 | 4.49 | 22.77 | 509 | 509 | 0.00 |
| 9 | 27.40 | 35.22 | 4.58 | 0.66 | 509 | 10 | 27.39 | 35.22 | 4.58 | 22.77 | 509 | 509 | 0.05 |
| 31 | 27.24 | 35.22 | 4.42 | 0.65 | 504 | 20 | 27.33 | 35.22 | 4.55 | 22.80 | 507 | 508 | 0.10 |
| 54 | 26.78 | 35.26 | 4.28 | 0.71 | 487 | 30 | 27.26 | 35.22 | 4.43 | 22.82 | 505 | 506 | 0.15 |
| 78 | 24.81 | 35.45 | 3.84 | 0.85 | 415 | 50 | 26.91 | 35.25 | 4.32 | 22.95 | 492 | 494 | 0.25 |
| 110 | 19.52 | 35.48 | 2.75 | 1.40 | 271 | 75 | 25.30 | 35.40 | 3.96 | 23.57 | 433 | 436 | 0.37 |
| 137 | 15.88 | 35.21 | 1.58 | 1.68 | 206 | 100 | 20.75 | 35.52 | 2.96 | 24.98 | 299 | 303 | 0.46 |
| 173 | 13.64 | 35.02 | 1.33 | 2.03 | 173 | 125 | 16.70 | 35.28 | 1.87 | 25.82 | 219 | 223 | 0.53 |
| 214 | 12.28 | 34.90 | 1.44 | 1.77 | 156 | 150 | 14.81 | 35.12 | 1.38 | 26.13 | 189 | 193 | 0.58 |
| 268 | 11.70 | 34.83 | 0.80 | - | 151 | 175 | 13.51 | 35.00 | 1.36 | 26.31 | 172 | 177 | 0.62 |
| 300 | 11.28 | 34.83 | 0.78 | 1.74 | 143 | 200 | 12.50 | 34.92 | 1.44 | 26.45 | 159 | 164 | 0.67 |
| 402 | 9.14 | 34.68 | 0.61 | 2.69 | 120 | 225 | 12.20 | 34.89 | 1.38 | 26.48 | 156 | 162 | 0.71 |
| 514 | 8.26 | 34.63 | 0.80 | 2.55 | 110 | 250 | 11.97 | 34.86 | 1.02 | 26.50 | 154 | 160 | 0.75 |
| 632 | 6.75 | 34.61 | 1.40 | 1.57 | 91 | 275 | 11.63 | 34.83 | 0.80 | 26.55 | 149 | 156 | 0.79 |
| 856 | 5.36 | 34.55 | 1.83 | 2.64 | 79 | 300 | 11.28 | 34.83 | 0.78 | 26.62 | 143 | 150 | 0.83 |
| 1052 | 4.33a) | 34.60 | 2.16 | 2.72 | 64 | 400 | 9.21 | 34.68 | 0.62 | 26.84 | 122 | 130 | 0.97 |
| 1277 | 3.60 | 34.60 | 2.17 | 3.23 | 56 | 500 | 8.31 | 34.63 | 0.78 | 26.95 | 111 | 120 | 1.09 |
| | | | | | | 600 | 7.30 | 34.61 | 1.17 | 27.08 | 99 | 109 | 1.21 |
| | | | | | | 700 | 6.14 | 34.58 | 1.58 | 27.23 | 85 | 94 | 1.31 |
| | | | | | | 800 | 5.58 | 34.56 | 1.76 | 27.28 | 80 | 90 | 1.40 |
| | | | | | | 1000 | 4.55 | 34.59 | 2.10 | 27.43 | 66 | 76 | 1.57 |
| | | | | | | 1200 | 3.82 | 34.60 | 2.17 | 27.50 | 59 | 70 | 1.71 |
| **9** | HORIZON; April 16, 1958; 2025, 2115 GCT; 2°04.5'S, 140°16'W; sounding, 2325 fm; wind, 110°, force 3; weather, partly cloudy; sea, moderate; wire angle, 12°, 03°. | | | | | | | | | | | | |
| 0 | 27.93 | 35.12 | 4.01 | 0.60 | 532 | 0 | 27.93 | 35.12 | 4.01 | 22.52 | 533 | 533 | 0.00 |
| 10 | 27.93 | 35.11 | 4.68 | 0.59 | 532 | 10 | 27.93 | 35.11 | 4.68 | 22.52 | 533 | 533 | 0.05 |
| 34 | 27.88 | 35.11 | 4.53 | 0.58 | 531 | 20 | 27.92 | 35.11 | 4.65 | 22.53 | 532 | 533 | 0.11 |
| 60 | 27.48 | 35.26 | 4.60 | 0.59 | 508 | 30 | 27.90 | 35.11 | 4.63 | 22.53 | 532 | 533 | 0.16 |
| 84 | 23.72 | 35.34 | 4.00 | 0.75 | 392 | 50 | 27.66 | 35.19 | 4.57 | 22.67 | 519 | 521 | 0.27 |
| 119 | 15.64 | 35.10 | 1.50 | 1.78 | 209 | 75 | 25.22 | 35.36 | 4.10 | 23.56 | 434 | 437 | 0.39 |
| 148 | 13.14 | 34.96 | 0.64 | 1.55 | 169 | 100 | 20.09 | 35.30 | 3.14 | 24.99 | 298 | 302 | 0.48 |
| 189 | 12.65 | 34.94 | 0.78 | 2.31 | 160 | 125 | 14.70 | 35.05 | 1.08 | 26.10 | 192 | 196 | 0.54 |
| 238 | 12.22 | 34.88 | 0.44 | 2.21 | 157 | 150 | 13.12 | 34.96 | 0.65 | 26.35 | 168 | 172 | 0.59 |
| 303 | 11.36 | 34.83 | 0.81 | 2.02 | 144 | 175 | 12.79 | 34.95 | 0.75 | 26.41 | 163 | 168 | 0.63 |
| 342 | 10.40 | 34.78 | 0.78 | 2.50 | 132 | 200 | 12.58 | 34.93 | 0.77 | 26.44 | 160 | 165 | 0.67 |
| | | | | | | 225 | 12.34 | 34.90 | 0.50 | 26.46 | 158 | 164 | 0.71 |
| 468 | 8.39 | 34.64 | 0.99 | 2.76 | 111 | 250 | 12.10 | 34.87 | 0.45 | 26.49 | 155 | 161 | 0.75 |
| 590 | 7.46 | 34.61 | 1.52 | 2.85 | 100 | 275 | 11.78 | 34.84 | 0.65 | 26.52 | 152 | 159 | 0.79 |
| 714 | 5.90 | 34.56 | 1.91 | 1.96 | 84 | 300 | 11.42 | 34.83 | 0.79 | 26.58 | 146 | 153 | 0.83 |
| 942 | 4.90 | 34.55 | 2.32 | 2.56 | 73 | 400 | 9.32 | 34.68 | 0.83 | 26.83 | 123 | 131 | 0.97 |
| 1140 | 3.92 | 34.56 | 2.46 | 1.91 | 62 | 500 | 8.09 | 34.63 | 1.15 | 26.99 | 108 | 117 | 1.10 |
| 1369 | 3.25 | 34.60 | 2.39 | 2.84 | 53 | 600 | 7.28 | 34.61 | 1.57 | 27.09 | 98 | 108 | 1.21 |
| | | | | | | 700 | 6.00 | 34.57 | 1.90 | 27.24 | 84 | 93 | 1.31 |
| | | | | | | 800 | 5.39 | 34.55 | 2.16 | 27.30 | 78 | 88 | 1.40 |
| | | | | | | 1000 | 4.48 | 34.56 | 2.42 | 27.41 | 68 | 78 | 1.57 |
| | | | | | | 1200 | 3.78 | 34.58 | 2.46 | 27.49 | 60 | 70 | 1.71 |

a) Alternate value, 4.42°C.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

10

HORIZON; April 18, 1958; 1215, 1320 GCT; 0°00', 139°59'W; sounding, 2310 fm; wind, 120°, force 3; weather, partly cloudy; sea, moderate; wire angle, 24°, 24°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.05 | 35.23 | 4.37 | 0.78 | 497 | 0 | 27.05 | 35.23 | 4.37 | 22.90 | 497 | 497 | 0.00 |
| 9 | 26.84 | 35.21 | 4.50 | 0.73 | 492 | 10 | 26.80 | 35.21 | 4.50 | 22.97 | 490 | 490 | 0.05 |
| 32 | 26.30 | 35.23 | 4.30 | 0.84 | 474 | 20 | 26.70 | 35.21 | 4.48 | 22.99 | 488 | 489 | 0.10 |
| 54 | 24.82 | 35.41 | 3.78 | 0.89 | 418 | 30 | 26.50 | 35.22 | 4.40 | 23.06 | 482 | 483 | 0.15 |
| 77 | 22.40 | 35.35 | 3.13 | 0.94 | 354 | 50 | 25.20 | 35.41 | 3.91 | 23.61 | 429 | 431 | 0.24 |
| 109 | 18.80 | 35.28 | 3.24 | 1.28 | 268 | 75 | 23.10 | 35.36 | 3.26 | 24.16 | 377 | 380 | 0.34 |
| 134 | 17.09 | 35.16 | 3.29 | 1.32 | 236 | 100 | 20.20 | 35.35 | 3.21 | 25.01 | 296 | 300 | 0.42 |
| 166 | 14.34 | 34.98 | 3.11 | 1.29 | 190 | 125 | 17.85 | 35.22 | 3.25 | 25.49 | 250 | 254 | 0.49 |
| 205 | 12.74 | 34.94 | 2.86 | 1.60 | 162 | 150 | 15.16 | 35.01 | 3.19 | 25.96 | 205 | 209 | 0.55 |
| 258 | 11.85 | 34.85 | 1.64 | 2.15 | 152 | 175 | 13.73 | 34.98 | 3.11 | 26.25 | 178 | 183 | 0.60 |
| 289 | 11.10 | 34.83 | 0.60 | 2.06 | 140 | 200 | 12.80 | 34.94 | 2.88 | 26.41 | 163 | 168 | 0.64 |
| | | | | | | 225 | 12.40 | 34.90 | 2.56 | 26.46 | 158 | 164 | 0.69 |
| 394 | 9.34 | 34.70 | 0.60 | 2.51 | 121 | 250 | 12.00 | 34.86 | 1.96 | 26.50 | 154 | 160 | 0.73 |
| 497 | 7.84 | 34.61 | 0.88 | 2.97 | 106 | 275 | 11.47 | 34.84 | 0.80 | 26.58 | 146 | 150 | 0.77 |
| 600 | 7.09 | 34.59 | 1.26 | 2.67 | 97 | 300 | 10.94 | 34.82 | 0.60 | 26.67 | 138 | 145 | 0.80 |
| 797 | 5.36 | 34.55 | 1.90 | 2.13 | 78 | 400 | 9.30 | 34.69 | 0.60 | 26.84 | 122 | 130 | 0.94 |
| 983 | 4.48 | 34.57 | 2.12 | 1.15 | 66 | 500 | 7.82 | 34.61 | 0.91 | 27.02 | 105 | 114 | 1.06 |
| 1201 | 3.66 | 34.57 | 1.97 | 3.24 | 59 | 600 | 7.09 | 34.59 | 1.26 | 27.10 | 97 | 106 | 1.17 |
| | | | | | | 700 | 6.13 | 34.57 | 1.64 | 27.21 | 87 | 96 | 1.27 |
| | | | | | | 800 | 5.34 | 34.55 | 1.91 | 27.30 | 78 | 88 | 1.37 |
| | | | | | | 1000 | 4.40 | 34.57 | 2.12 | 27.43 | 66 | 76 | 1.53 |
| | | | | | | 1200 | 3.67 | 34.57 | 1.97 | 27.50 | 59 | 69 | 1.67 |

11

HORIZON; April 19-20, 1958; 2253, 2316, 0008 GCT; 0°01'S, 139°59'W; sounding, 2350 fm; wind, 140°, force 4; weather, partly cloudy; sea, missing; wire angle, 20°, 20-25°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.01 | 35.22 | 4.62 | 0.70 | 497 | 0 | 27.01 | 35.22 | 4.62 | 22.90 | 497 | 497 | 0.00 |
| 9 | 26.95 | 35.21 | 4.14 | 0.92 | 495 | 10 | 26.94 | 35.21 | 4.14 | 22.92 | 495 | 495 | 0.05 |
| 33 | 25.92a) | 35.22 | 4.12 | 0.95 | 464 | 20 | 26.65 | 35.20 | 4.13 | 22.99 | 488 | 489 | 0.10 |
| 56 | 24.22 | 35.34 | 3.53 | 1.20 | 406 | 30 | 26.10 | 35.21 | 4.13 | 23.18 | 470 | 471 | 0.15 |
| 80 | 22.62 | 35.32 | 3.27 | 1.15 | 363 | 50 | 24.60 | 35.34 | 3.68 | 23.74 | 417 | 419 | 0.24 |
| | | | | | | 75 | 23.30 | 35.34 | 3.27 | 24.12 | 380 | 383 | 0.34 |
| 107 | 20.36 | 35.36 | 3.22 | 1.08 | 300 | 100 | 21.30 | 35.33 | 3.21 | 24.68 | 327 | 331 | 0.43 |
| 136 | 18.13 | 35.21 | 3.20 | 1.05 | 257 | 125 | 18.69 | 35.24 | 3.20 | 25.30 | 268 | 272 | 0.50 |
| 167 | 14.33b) | 35.13 | 3.27 | 1.28 | 179 | 150 | 15.68 | 35.17 | 3.26 | 25.98 | 204 | 209 | 0.56 |
| 201 | 12.96 | 34.91 | 3.07 | 1.75 | 169 | 175 | 13.87 | 35.05 | 3.25 | 26.27 | 176 | 181 | 0.61 |
| | | | | | | 200 | 13.00 | 34.92 | 3.11 | 26.35 | 168 | 173 | 0.65 |
| 375 | 9.75c) | 34.78 | 0.90r | 2.55 | 122 | 225 | 12.46 | 34.89 | 2.57 | 26.43 | 161 | 167 | 0.70 |
| 472 | 8.46 | 34.67 | 0.70 | 3.08 | 110 | 250 | 11.96 | 34.88 | 1.69 | 26.52 | 152 | 158 | 0.74 |
| 570 | 7.09 | 34.61 | 1.26 | 3.10 | 95 | 275 | 11.57 | 34.87 | 1.00 | 26.60 | 145 | 152 | 0.78 |
| 751 | 5.72 | 34.56 | 1.80 | 2.93 | 81 | 300 | 11.15 | 34.86 | 0.71 | 26.66 | 139 | 146 | 0.81 |
| 907 | 4.75 | 34.55 | 2.11 | - | 72 | 400 | 9.39 | 34.75 | 0.60 | 26.88 | 118 | 126 | 0.95 |
| 1088 | 4.19 | 34.58 | 2.13 | 3.06 | 63 | 500 | 8.05 | 34.65 | 0.81 | 27.01 | 106 | 115 | 1.07 |
| | | | | | | 600 | 6.83 | 34.60 | 1.39 | 27.14 | 93 | 102 | 1.18 |
| | | | | | | 700 | 6.07 | 34.56 | 1.68 | 27.22 | 86 | 95 | 1.28 |
| | | | | | | 800 | 5.40 | 34.56 | 1.93 | 27.30 | 78 | 88 | 1.37 |
| | | | | | | 1000 | 4.40 | 34.57 | 2.12 | 27.43 | 66 | 76 | 1.53 |

a) Alternate value, 25.79°C.
b) Alternate value, 15.44°C.
c) Alternate value, 9.36°C.

SIO

DOLPHIN

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| 12 | HORIZON; April 21, 1958; 1548 GCT; 0°01'N, 139°59'W; sounding, 2350 fm; wind, 120°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | | |
| 0 | 27.28 | 35.32 | 4.77 | 0.68 | 498 | 0 | 27.28 | 35.32 | 4.77 | 22.89 | 498 | 498 | 0.00 |
| 9 | 26.82 | 35.28 | 4.49 | 0.73 | 487 | 10 | 26.81 | 35.28 | 4.48 | 23.02 | 486 | 486 | 0.05 |
| 33 | 26.38 | 35.26 | 4.31 | 0.73 | 474 | 20 | 26.65 | 35.27 | 4.41 | 23.05 | 483 | 484 | 0.10 |
| 57 | 25.32 | 35.35 | 3.92 | 0.89 | 437 | 30 | 26.47 | 35.26 | 4.34 | 23.11 | 477 | 478 | 0.15 |
| 81 | 23.86 | 35.41 | 3.23 | 0.96 | 391 | 50 | 25.80 | 35.32 | 4.11 | 23.35 | 454 | 456 | 0.24 |
| 115 | 20.44 | 35.25 | 3.12 | 0.94 | 310 | 75 | 24.00 | 35.42 | 3.25 | 23.98 | 394 | 397 | 0.35 |
| 141 | 17.15 | 35.09 | 3.10 | 1.04 | 243 | 100 | 20.77 | 35.27 | 3.12 | 24.79 | 317 | 321 | 0.44 |
| 174 | 14.92 | 35.09 | 3.16 | 1.36 | 194 | 125 | 18.00 | 35.14 | 3.10 | 25.40 | 259 | 263 | 0.51 |
| 216 | 12.90 | 34.99 | 2.84 | 1.65 | 162 | 150 | 16.55 | 35.09 | 3.13 | 25.71 | 229 | 234 | 0.57 |
| 271 | 11.97 | 34.94 | 1.92 | 2.13 | 148 | 175 | 14.50 | 35.08 | 3.12 | 26.16 | 186 | 191 | 0.62 |
| 304 | 11.46 | 34.85 | 0.80 | 1.85 | 145 | 200 | 13.40 | 35.02 | 2.96 | 26.34 | 169 | 174 | 0.67 |
| 404 | 9.45 | 34.74 | 0.59 | 2.86 | 120 | 225 | 12.77 | 34.99 | 2.76 | 26.45 | 159 | 165 | 0.71 |
| 503 | 8.22 | 34.67 | 0.72 | 2.89 | 107 | 250 | 12.38 | 34.98 | 2.43 | 26.51 | 153 | 159 | 0.75 |
| 601 | 7.12 | 34.61 | 1.28 | 2.85 | 96 | 275 | 11.87 | 34.93 | 1.60 | 26.58 | 147 | 154 | 0.79 |
| 788 | 5.52 | 34.60 | 1.80 | 3.29 | 77 | 300 | 11.52 | 34.86 | 0.85 | 26.60 | 145 | 152 | 0.83 |
| 964 | 4.57 | 34.56 | 1.98 | 3.29 | 69 | 400 | 9.54 | 34.75 | 0.59 | 26.85 | 121 | 129 | 0.97 |
| 1170 | 3.88 | 34.60 | 2.12 | 2.99 | 59 | 500 | 8.25 | 34.67 | 0.72 | 27.00 | 107 | 116 | 1.09 |
| | | | | | | 600 | 7.13 | 34.61 | 1.27 | 27.11 | 96 | 106 | 1.20 |
| | | | | | | 700 | 6.24 | 34.60 | 1.60 | 27.23 | 85 | 95 | 1.30 |
| | | | | | | 800 | 5.40 | 34.59 | 1.86 | 27.32 | 76 | 86 | 1.39 |
| | | | | | | 1000 | 4.40 | 34.57 | 2.04 | 27.42 | 67 | 77 | 1.56 |
| 13 | HORIZON; April 22, 1958; 0110, 0232 GCT; 0°01'N, 140°00'W; sounding, 2350 fm; wind, 120°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°, 25°. | | | | | | | | | | | | |
| 0 | 27.04 | 35.28 | 4.71 | | 493 | 0 | 27.04 | 35.28 | 4.71 | 22.94 | 493 | 493 | 0.00 |
| 10 | 27.04 | 35.27 | 4.63 | | 494 | 10 | 27.04 | 35.27 | 4.63 | 22.93 | 494 | 494 | 0.05 |
| 33 | 26.75 | 35.26 | 4.49 | | 486 | 20 | 26.92 | 35.27 | 4.54 | 22.96 | 491 | 492 | 0.10 |
| 56 | 25.96 | 35.32 | 4.07 | | 459 | 30 | 26.80 | 35.26 | 4.50 | 23.00 | 487 | 488 | 0.15 |
| 77 | 24.48 | 35.37 | 3.43 | | 411 | 50 | 26.30 | 35.29 | 4.22 | 23.18 | 470 | 472 | 0.24 |
| 104 | 20.48 | 35.28 | 3.07 | | 309 | 75 | 24.70 | 35.37 | 3.52 | 23.74 | 417 | 420 | 0.36 |
| 129 | 17.34 | 35.15 | 3.36 | | 243 | 100 | 20.70 | 35.30 | 3.07 | 24.83 | 313 | 317 | 0.45 |
| 161 | 14.97a) | 35.13 | 3.25 | | | 125 | 18.10 | 35.19 | 3.32 | 25.41 | 258 | 262 | 0.52 |
| 201 | 13.31 | 34.99 | 2.83 | | 169 | 150 | 16.05 | 35.14 | 3.32 | 25.87 | 214 | 219 | 0.58 |
| 253 | 12.26 | 34.90 | 2.22 | | 156 | 175 | 13.83 | 35.03 | 3.00 | 26.27 | 176 | 181 | 0.63 |
| 286 | 11.82 | 34.87 | 1.55 | | 150 | 200 | 13.32 | 34.99 | 2.84 | 26.34 | 169 | 174 | 0.67 |
| | | | | | | 225 | 12.80 | 34.95 | 2.65 | 26.42 | 162 | 168 | 0.72 |
| 353 | 10.68 | 34.79 | 0.72 | | 136 | 250 | 12.32 | 34.91 | 2.29 | 26.47 | 157 | 163 | 0.76 |
| 450 | 8.90 | 34.65 | 0.59 | | 118 | 275 | 11.95 | 34.88 | 1.85 | 26.52 | 152 | 159 | 0.80 |
| 547 | 7.29 | 34.60 | 1.23 | | 98 | 300 | 11.60 | 34.85 | 0.99 | 26.58 | 147 | 154 | 0.84 |
| 728 | 6.06 | 34.57 | 1.57 | | 85 | 400 | 9.75 | 34.72 | 0.60 | 26.80 | 126 | 134 | 0.98 |
| 897 | 4.86 | 34.58 | 2.02 | | 71 | 500 | 8.00 | 34.61 | 0.84 | 26.99 | 108 | 117 | 1.11 |
| 1099 | 4.06 | 34.60 | 1.98 | | 61 | 600 | 6.90 | 34.58 | 1.36 | 27.13 | 94 | 103 | 1.22 |
| | | | | | | 700 | 6.25 | 34.57 | 1.53 | 27.21 | 87 | 97 | 1.32 |
| | | | | | | 800 | 5.44 | 34.57 | 1.88 | 27.30 | 78 | 88 | 1.41 |
| | | | | | | 1000 | 4.39 | 34.59 | 2.01 | 27.44 | 65 | 75 | 1.57 |

a) Alternate value, 15.25°C.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

HORIZON; April 23, 1958; 0001 GCT; 0°01'N, 140°00'W; sounding, 2350 fm; wind, 080°, force 2; weather, partly cloudy; sea, moderate; wire angle, 20°. 14

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.32 | 35.26 | 4.67 | 0.75 | 503 | 0 | 27.32 | 35.26 | 4.67 | 22.83 | 504 | 504 | 0.00 |
| 9 | 27.10 | 35.26 | 4.50 | 0.63 | 496 | 10 | 27.08 | 35.26 | 4.48 | 22.92 | 495 | 495 | 0.05 |
| 32 | 26.56 | 35.30 | 4.22 | - | 478 | 20 | 26.90 | 35.27 | 4.40 | 22.97 | 490 | 491 | 0.10 |
| 56 | 24.99 | 35.44 | 3.63 | 0.92 | 420 | 30 | 26.58 | 35.30 | 4.24 | 23.10 | 478 | 479 | 0.15 |
| 79 | 23.90 | 35.43 | 3.13 | - | 390 | 50 | 25.14 | 35.44 | 3.68 | 23.65 | 425 | 427 | 0.24 |
| 111 | 19.34 | 35.26 | 2.77 | 0.98 | 282 | 75 | 24.20 | 35.44 | 3.24 | 23.94 | 398 | 401 | 0.34 |
| 137 | 16.87 | 35.24 | 2.89 | 1.32 | 226 | 100 | 20.70 | 35.33 | 2.81 | 24.85 | 311 | 315 | 0.43 |
| 171 | 13.37 | 34.96 | 2.99 | 1.36 | 172 | 125 | 17.70 | 35.26 | 2.85 | 25.56 | 243 | 247 | 0.50 |
| 212 | 12.66 | 34.89 | 2.72 | 1.42 | 164 | 150 | 15.95 | 35.19 | 2.92 | 25.92 | 209 | 214 | 0.56 |
| 266 | 11.96 | 34.87 | 1.66 | 1.99 | 153 | 175 | 13.30 | 34.95 | 2.98 | 26.31 | 172 | 177 | 0.61 |
| 297 | 11.27 | 34.86 | 0.64 | 1.94 | 141 | 200 | 12.90 | 34.91 | 2.85 | 26.36 | 167 | 172 | 0.65 |
| 398 | 9.33 | 34.70 | 0.54 | 2.81 | 121 | 225 | 12.50 | 34.89 | 2.60 | 26.43 | 161 | 167 | 0.69 |
| 496 | 7.78 | 34.62 | 0.88 | 3.23 | 104 | 250 | 12.18 | 34.88 | 2.14 | 26.48 | 156 | 162 | 0.74 |
| 595 | 7.08 | 34.60 | 1.23 | 3.27 | 96 | 275 | 11.70 | 34.87 | 1.08 | 26.56 | 148 | 155 | 0.77 |
| 791 | 5.51 | 34.54 | 1.82 | 2.84 | 81 | 300 | 11.24 | 34.86 | 0.63 | 26.64 | 141 | 148 | 0.81 |
| 973 | 4.62 | 34.56 | 1.89 | 2.79 | 70 | 400 | 9.30 | 34.69 | 0.55 | 26.85 | 121 | 129 | 0.95 |
| 1187 | 3.84 | 34.56 | 2.10 | 3.17 | 61 | 500 | 7.70 | 34.61 | 0.92 | 27.04 | 103 | 111 | 1.07 |
| | | | | | | 600 | 7.00 | 34.59 | 1.27 | 27.11 | 96 | 105 | 1.18 |
| | | | | | | 700 | 6.23 | 34.56 | 1.61 | 27.20 | 88 | 98 | 1.28 |
| | | | | | | 800 | 5.44 | 34.54 | 1.82 | 27.28 | 80 | 90 | 1.37 |
| | | | | | | 1000 | 4.46 | 34.56 | 1.94 | 27.42 | 67 | 77 | 1.54 |

HORIZON; April 23, 1958; 1935, 2000 GCT; 0°01'N, 140°00'W; sounding, 2350 fm; wind, 100°, force 2; weather, partly cloudy; sea, moderate; wire angle, 22°, 26°. 15

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.60 | 35.26 | 4.77 | 0.72 | 512 | 0 | 27.60 | 35.26 | 4.77 | 22.73 | 513 | 513 | 0.00 |
| 8 | 27.18 | 35.30 | 4.45 | 0.69 | 496 | 10 | 27.13 | 35.30 | 4.42 | 22.92 | 495 | 495 | 0.05 |
| 32 | 26.66 | 35.30 | 4.37 | 0.66 | 480 | 20 | 26.96 | 35.30 | 4.41 | 22.97 | 490 | 491 | 0.10 |
| 55 | 24.98 | 35.40 | 3.50 | 0.72 | 423 | 30 | 26.74 | 35.30 | 4.38 | 23.04 | 484 | 485 | 0.15 |
| 78 | 23.42 | 35.35 | 3.00 | 1.39 | 382 | 50 | 25.10 | 35.40 | 3.56 | 23.63 | 427 | 429 | 0.24 |
| 111 | 19.50 | 35.24 | 2.91 | 0.90 | 288 | 75 | 23.90 | 35.37 | 3.12 | 23.97 | 395 | 398 | 0.34 |
| 139 | 16.88 | 35.17 | 2.99 | 1.10 | 230 | 100 | 21.00 | 35.29 | 2.92 | 24.73 | 322 | 326 | 0.43 |
| 175 | 13.37a) | 35.07 | 2.91 | 1.18 | 188 | 125 | 17.31 | 35.18 | 2.98 | 25.60 | 240 | 244 | 0.50 |
| 213 | 12.86 | 34.96 | 2.65 | 1.27 | 162 | 150 | 16.46 | 35.16 | 2.97 | 25.78 | 222 | 227 | 0.56 |
| 261 | 12.18 | 34.88 | 2.07 | 1.68 | 157 | 175 | 13.37 | 35.07 | 2.91 | 26.40 | 164 | 169 | 0.61 |
| 292 | 11.62 | 34.84 | 0.96 | 1.93 | 149 | 200 | 13.03 | 35.00 | 2.79 | 26.41 | 163 | 168 | 0.66 |
| | | | | | | 225 | 12.70 | 34.93 | 2.55 | 26.42 | 162 | 168 | 0.70 |
| 388 | 9.82 | 34.72 | 0.70 | 2.35 | 127 | 250 | 12.35 | 34.90 | 2.26 | 26.46 | 158 | 164 | 0.74 |
| 484 | 8.12 | 34.67 | 0.83 | 2.34 | 105 | 275 | 11.93 | 34.86 | 1.65 | 26.51 | 153 | 160 | 0.78 |
| 588 | 7.21 | 34.60 | 1.22 | 2.78 | 98 | 300 | 11.48 | 34.83 | 0.86 | 26.58 | 147 | 154 | 0.82 |
| 775 | 5.66 | 34.54 | 1.88 | 1.55 | 82 | 400 | 9.61 | 34.71 | 0.70 | 26.82 | 124 | 132 | 0.96 |
| 938 | 4.65 | 34.52 | 2.00 | 2.49 | 73 | 500 | 7.94 | 34.65 | 0.86 | 27.03 | 104 | 113 | 1.08 |
| 1126 | 3.94 | 34.56 | 2.07 | 2.84 | 63 | 600 | 7.12 | 34.60 | 1.26 | 27.10 | 97 | 106 | 1.19 |
| | | | | | | 700 | 6.24 | 34.56 | 1.69 | 27.20 | 88 | 98 | 1.30 |
| | | | | | | 800 | 5.47 | 34.54 | 1.91 | 27.28 | 80 | 90 | 1.39 |
| | | | | | | 1000 | 4.46 | 34.53 | 2.02 | 27.39 | 70 | 80 | 1.56 |

a) Alternate value, 14.62°C.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| **16** | HORIZON; April 24, 1958; 0945, 1012 GCT; 0°56'N, 139°59'W; sounding, 2390 fm; wind, 140°, force 3; weather, partly cloudy; sea, moderate; wire angle, 22°, 26°. | | | | | | | | | | | | |
| 0 | 27.46 | 35.16 | 4.76 | 0.74 | 515 | 0 | 27.46 | 35.16 | 4.76 | 22.71 | 515 | 515 | 0.00 |
| 9 | 27.42 | 35.17 | 4.66 | 0.68 | 512 | 10 | 27.41 | 35.17 | 4.65 | 22.74 | 512 | 512 | 0.05 |
| 32 | 27.00 | 35.12 | 4.50 | 0.68 | 504 | 20 | 27.30 | 35.17 | 4.61 | 22.77 | 509 | 510 | 0.10 |
| 55 | 26.35 | 34.99 | 4.12 | 0.68 | 493 | 30 | 27.07 | 35.13 | 4.54 | 22.82 | 505 | 506 | 0.15 |
| 78 | 22.58 | 34.97 | 3.16 | 1.02 | 387 | 50 | 26.60 | 35.03 | 4.27 | 22.89 | 498 | 500 | 0.25 |
| 104 | 17.87 | 34.76 | 2.97 | 1.06 | 283 | 75 | 22.74 | 34.98 | 3.19 | 22.96 | 491 | 494 | 0.38 |
| 125 | 15.76 | 34.86 | 3.04 | 1.20 | 229 | 100 | 18.52 | 34.81 | 2.98 | 25.02 | 295 | 298 | 0.48 |
| 151 | 14.62 | 34.76 | 3.08 | 1.46 | 212 | 125 | 15.76 | 34.86 | 3.04 | 25.71 | 229 | 233 | 0.54 |
| 184 | 13.28 | 34.81 | 2.67 | 1.44 | 181 | 150 | 14.63 | 34.76 | 3.08 | 25.88 | 213 | 217 | 0.60 |
| 227 | 12.14 | 34.92r | 2.00 | 1.73 | | 175 | 13.55 | 34.79 | 2.80 | 26.14 | 188 | 193 | 0.65 |
| 254 | 11.82 | 34.84 | 0.84 | 1.23 | 153 | 200 | 12.70 | 34.84 | 2.42 | 26.34 | 169 | 174 | 0.70 |
| | | | | | | 225 | 12.19 | 34.84 | 2.11 | 26.45 | 159 | 164 | 0.74 |
| 416 | 9.13 | 34.70 | 0.52 | 2.65 | 119 | 250 | 11.90 | 34.84 | 0.98 | 26.50 | 154 | 160 | 0.78 |
| 531 | 7.98 | 34.65 | 0.90 | 2.79 | 104 | 275 | 11.54 | 34.83 | 0.79 | 26.56 | 148 | 154 | 0.82 |
| 646 | 6.76 | 34.58 | 1.37 | 2.79 | 93 | 300 | 11.18 | 34.80 | 0.77 | 26.62 | 143 | 150 | 0.86 |
| 861 | 4.98 | 34.57 | 1.96 | 2.90 | 73 | 400 | 9.50 | 34.71 | 0.56 | 26.83 | 123 | 131 | 1.00 |
| | | | | | | 500 | 8.30 | 34.66 | 0.77 | 26.99 | 108 | 117 | 1.12 |
| | | | | | | 600 | 7.16 | 34.59 | 1.22 | 27.10 | 97 | 107 | 1.23 |
| | | | | | | 700 | 6.26 | 34.57 | 1.56 | 27.21 | 87 | 97 | 1.33 |
| | | | | | | 800 | 5.42 | 34.57 | 1.83 | 27.30 | 78 | 88 | 1.43 |
| **17** | HORIZON; April 24, 1958; 2245 GCT; 2°00'N, 140°06'W; sounding, 2330 fm; wind, 140°, force 4; weather, partly cloudy; sea, moderate; wire angle, 15°. | | | | | | | | | | | | |
| 0 | 28.47 | 34.79 | 4.56 | 0.64 | 573 | 0 | 28.47 | 34.79 | 4.56 | 22.10 | 573 | 573 | 0.00 |
| 9 | 28.44 | 34.78 | 4.66 | 0.52 | 573 | 10 | 28.44 | 34.78 | 4.66 | 22.10 | 573 | 573 | 0.06 |
| 33 | 28.44 | 34.78 | 4.62 | 0.29 | 573 | 20 | 28.44 | 34.78 | 4.64 | 22.10 | 573 | 574 | 0.11 |
| 57 | 27.56 | 34.94 | 4.42 | 0.55 | 533 | 30 | 28.44 | 34.78 | 4.62 | 22.10 | 573 | 574 | 0.17 |
| 80 | 25.54 | 34.88 | 3.94 | 0.64 | 478 | 50 | 28.00 | 34.92 | 4.53 | 22.34 | 550 | 552 | 0.28 |
| 111 | 18.24 | 34.87 | 2.20 | 0.65 | 284 | 75 | 25.85 | 34.89 | 4.03 | 23.02 | 486 | 489 | 0.41 |
| 137 | 14.48 | 34.94 | 1.27 | 1.62 | 196 | 100 | 19.60 | 34.88 | 2.49 | 24.80 | 316 | 320 | 0.52 |
| 173 | 13.23 | 34.96 | 1.35 | 1.76 | 170 | 125 | 15.90 | 34.90 | 1.53 | 25.71 | 229 | 233 | 0.58 |
| 221 | 12.54a) | 34.89 | 1.07 | 1.62 | 161 | 150 | 13.65 | 34.96 | 1.34 | 26.25 | 178 | 182 | 0.64 |
| 281 | 11.72 | 34.85 | 0.87 | 1.97 | 150 | 175 | 13.17 | 34.96 | 1.34 | 26.34 | 169 | 174 | 0.68 |
| 320 | 10.96 | 34.78 | 1.06 | 1.97 | 141 | 200 | 12.84 | 34.91 | 1.20 | 26.38 | 166 | 171 | 0.72 |
| 443 | 8.69 | 34.67 | 0.60 | 2.49 | 113 | 225 | 12.47 | 34.88 | 1.04 | 26.42 | 162 | 168 | 0.77 |
| 567 | 7.15 | 34.59 | 1.32 | 2.43 | 98 | 250 | 12.13 | 34.86 | 0.93 | 26.47 | 157 | 163 | 0.81 |
| 692 | 6.09 | 34.55 | 1.56 | 2.31 | 87 | 275 | 11.80 | 34.85 | 0.87 | 26.52 | 152 | 159 | 0.85 |
| 919 | 4.83 | 34.55 | 1.79 | 2.79 | 72 | 300 | 11.39 | 34.82 | 0.99 | 26.58 | 146 | 153 | 0.89 |
| 1116 | 4.10 | 34.57 | 1.88 | 2.76 | 63 | 400 | 9.52 | 34.70 | 0.51 | 26.82 | 124 | 132 | 1.03 |
| 1344 | 3.44 | 34.60 | 2.02 | 2.79 | 55 | 500 | 7.89 | 34.62 | 1.02 | 27.01 | 106 | 115 | 1.15 |
| | | | | | | 600 | 6.90 | 34.58 | 1.37 | 27.12 | 95 | 104 | 1.26 |
| | | | | | | 700 | 6.03 | 34.55 | 1.58 | 27.22 | 86 | 95 | 1.36 |
| | | | | | | 800 | 5.30 | 34.55 | 1.75 | 27.30 | 78 | 88 | 1.45 |
| | | | | | | 1000 | 4.43 | 34.56 | 1.85 | 27.42 | 67 | 77 | 1.62 |
| | | | | | | 1200 | 3.85 | 34.58 | 1.95 | 27.49 | 60 | 70 | 1.77 |

a) Alternate value, 12.45°C.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| HORIZON; April 25, 1958; 1305 GCT; 0°55.5'N, 139°56.5'W; sounding, 2310 fm; wind, 120°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | | | 18 |
| 0 | 27.60 | 35.18 | 4.60 | 0.63 | 518 | 0 | 27.60 | 35.18 | 4.60 | 22.68 | 518 | 518 | 0.00 |
| 9 | 27.45 | 35.18 | 4.52 | 0.65 | 513 | 10 | 27.44 | 35.18 | 4.51 | 22.73 | 513 | 513 | 0.05 |
| 33 | 27.16 | 35.12 | 4.41 | 0.64 | 509 | 20 | 27.29 | 35.16 | 4.46 | 22.77 | 509 | 510 | 0.10 |
| 57 | 25.10 | 35.04 | 3.51 | 0.90 | 453 | 30 | 27.18 | 35.13 | 4.41 | 22.77 | 509 | 510 | 0.15 |
| 81 | 20.98 | 34.97 | 2.89 | 0.60 | 344 | 50 | 26.50 | 35.08 | 4.08 | 22.96 | 491 | 493 | 0.25 |
| 115 | 16.53 | 34.84 | 2.92 | 1.08 | 247 | 75 | 21.32 | 34.97 | 2.92 | 24.40 | 354 | 357 | 0.36 |
| 145 | 14.48 | 34.81 | 2.87 | 1.10 | 206 | 100 | 18.00 | 34.89 | 2.91 | 25.21 | 277 | 280 | 0.44 |
| 184 | 12.44 | 34.88 | 2.01 | 1.63 | 161 | 125 | 15.56 | 34.82 | 2.91 | 25.73 | 227 | 231 | 0.50 |
| 233 | 12.05 | 34.88 | 2.14 | 1.62 | 153 | 150 | 13.95 | 34.82 | 2.73 | 26.08 | 194 | 198 | 0.56 |
| 296 | 11.28 | 34.82 | 0.76 | 1.97 | 144 | 175 | 12.62 | 34.87 | 2.05 | 26.38 | 165 | 169 | 0.60 |
| 331 | 10.66 | 34.78 | 0.78 | 1.07 | 137 | 200 | 12.20 | 34.88 | 2.11 | 26.48 | 156 | 161 | 0.64 |
| 393 | 9.24 | 34.72 | 0.55 | 2.21 | 119 | 225 | 12.06 | 34.88 | 2.13 | 26.50 | 154 | 160 | 0.68 |
| 491 | 8.36 | 34.67 | 0.68 | - | 109 | 250 | 11.86 | 34.87 | 1.08 | 26.53 | 151 | 157 | 0.72 |
| 586 | 7.02 | 34.61 | 1.31 | 2.98 | 94 | 275 | 11.58 | 34.85 | 0.82 | 26.58 | 147 | 154 | 0.76 |
| 766 | 5.46 | 34.55 | 1.75 | 1.85 | 79 | 300 | 11.22 | 34.82 | 0.76 | 26.62 | 143 | 150 | 0.80 |
| 921 | 4.66 | 34.59 | 2.05 | 2.93 | 68 | 400 | 9.11 | 34.71 | 0.56 | 26.89 | 117 | 125 | 0.94 |
| 1100 | 4.06 | 34.60 | 2.10 | 3.18 | 61 | 500 | 8.21 | 34.67 | 0.74 | 27.01 | 106 | 115 | 1.06 |
| | | | | | | 600 | 6.95 | 34.61 | 1.32 | 27.13 | 94 | 103 | 1.17 |
| | | | | | | 700 | 6.02 | 34.56 | 1.58 | 27.23 | 85 | 94 | 1.27 |
| | | | | | | 800 | 5.21 | 34.56 | 1.86 | 27.32 | 76 | 86 | 1.36 |
| | | | | | | 1000 | 4.34 | 34.60 | 2.08 | 27.45 | 64 | 74 | 1.52 |
| HORIZON; April 26, 1958; 1830 GCT; 1°00'S, 140°03.5'W; sounding, missing; wind, 110°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°. | | | | | | | | | | | | | 19 |
| 0 | 27.76 | 35.14 | 4.46 | 0.68 | 526 | 0 | 27.76 | 35.14 | 4.46 | 22.60 | 526 | 526 | 0.00 |
| 10 | 27.65 | 35.15 | 4.60 | 0.88 | 521 | 10 | 27.65 | 35.15 | 4.60 | 22.64 | 522 | 522 | 0.05 |
| 35 | 27.32 | 35.20 | 4.17 | 0.60 | 509 | 20 | 27.56 | 35.16 | 4.56 | 22.68 | 518 | 519 | 0.10 |
| 60 | 25.80 | 35.41 | 4.22 | 0.75 | 447 | 30 | 27.42 | 35.18 | 4.28 | 22.74 | 512 | 513 | 0.16 |
| 86 | 23.00 | 35.53 | 3.26 | 0.94 | 359 | 50 | 26.50 | 35.33 | 4.22 | 23.14 | 474 | 476 | 0.26 |
| 121 | 19.22 | 35.48 | 2.78 | 1.10 | 263 | 75 | 23.30 | 35.53 | 3.32 | 24.27 | 366 | 369 | 0.36 |
| 151 | 15.90 | 35.25 | 2.33 | 1.63 | 203 | 100 | 21.27 | 35.55 | 3.05 | 24.86 | 310 | 314 | 0.45 |
| 190 | 13.28 | 34.96 | 2.38 | 1.50 | 170 | 125 | 18.30 | 35.44 | 2.47 | 25.55 | 244 | 248 | 0.52 |
| 240 | 12.16 | 34.88 | 1.96 | 0.80 | 155 | 150 | 15.97 | 35.26 | 2.33 | 25.98 | 204 | 209 | 0.57 |
| 305 | 11.62 | 34.84 | 0.88 | 0.76 | 149 | 175 | 13.75 | 35.01 | 2.39 | 26.27 | 176 | 181 | 0.62 |
| 344 | 10.66 | 34.69 | 0.77 | 1.76 | 143 | 200 | 13.20 | 34.96 | 2.37 | 26.34 | 169 | 174 | 0.67 |
| 470 | 8.52 | 34.58 | 0.63 | 1.13 | 118 | 225 | 12.34 | 34.90 | 2.08 | 26.47 | 157 | 163 | 0.71 |
| 594 | 7.04 | 34.59 | 1.44 | 1.04 | 97 | 250 | 12.09 | 34.88 | 1.65 | 26.50 | 154 | 160 | 0.75 |
| 716 | 6.06 | 34.55 | 1.61 | 1.60 | 87 | 275 | 11.90 | 34.86 | 1.19 | 26.52 | 152 | 159 | 0.79 |
| 943 | 4.66 | 34.56 | 2.27 | 2.64 | 70 | 300 | 11.70 | 34.84 | 0.95 | 26.54 | 150 | 157 | 0.83 |
| 1138 | 3.90 | 34.59 | 2.08 | 2.85 | 60 | 400 | 9.21 | 34.60 | 0.57 | 26.79 | 127 | 135 | 0.97 |
| 1366 | 3.21 | 34.60 | 2.27 | 2.76 | 53 | 500 | 8.20 | 34.58 | 0.84 | 26.93 | 113 | 122 | 1.10 |
| | | | | | | 600 | 7.00 | 34.59 | 1.45 | 27.11 | 96 | 105 | 1.22 |
| | | | | | | 700 | 6.20 | 34.56 | 1.57 | 27.20 | 88 | 98 | 1.32 |
| | | | | | | 800 | 5.36 | 34.56 | 2.00 | 27.30 | 78 | 88 | 1.41 |
| | | | | | | 1000 | 4.40 | 34.57 | 2.20 | 27.42 | 67 | 77 | 1.58 |
| | | | | | | 1200 | 3.67 | 34.60 | 2.14 | 27.52 | 57 | 67 | 1.72 |

SIO

DOLPHIN

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\delta$ cl/ton | $\Delta D$ dyn m |
| 20 | HORIZON; April 27, 1958; 1413 GCT; 2°04'S, 140°17'W; sounding, 2330 fm; wind, 110°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | | |
| 0 | 28.22 | 34.70 | 4.17 | 0.52 | 572 | 0 | 28.22 | 34.70 | 4.17 | 22.12 | 572 | 572 | 0.00 |
| 10 | 28.12 | 34.70 | 4.70 | 0.58 | 569 | 10 | 28.12 | 34.70 | 4.70 | 22.16 | 568 | 568 | 0.06 |
| 35 | 27.80 | 34.91 | 4.76 | 0.58 | 543 | 20 | 27.99 | 34.74 | 4.74 | 22.23 | 561 | 562 | 0.11 |
| 60 | 27.30 | 35.30 | 4.62 | 0.67 | 500 | 30 | 27.86 | 34.82 | 4.74 | 22.34 | 551 | 552 | 0.17 |
| 85 | 25.12 | 35.36 | 4.05 | 1.04 | 430 | 50 | 27.55 | 35.13 | 4.69 | 22.67 | 519 | 521 | 0.28 |
| 120 | 16.67 | 35.16 | 1.71 | - | 227 | 75 | 25.62 | 35.37 | 4.16 | 23.45 | 444 | 447 | 0.40 |
| 151 | 13.49 | 34.96 | 1.03 | 1.78 | 174 | 100 | 21.00 | 35.32 | 3.50 | 24.76 | 320 | 324 | 0.49 |
| 191 | 12.64 | 34.91 | 0.83 | 1.87 | 163 | 125 | 15.85 | 35.12 | 1.43 | 25.89 | 212 | 216 | 0.56 |
| 241 | 12.21 | 34.90 | 0.47 | 2.57 | 156 | 150 | 13.50 | 34.96 | 1.04 | 26.28 | 175 | 179 | 0.61 |
| 307 | 11.70 | 34.85 | 0.46 | 2.57 | 149 | 175 | 12.80 | 34.92 | 0.88 | 26.38 | 165 | 170 | 0.65 |
| 347 | 11.28 | 34.85 | 0.78 | 2.19 | 142 | 200 | 12.52 | 34.90 | 0.70 | 26.43 | 161 | 166 | 0.70 |
| 469 | 8.60 | 34.67 | 1.06 | 2.23 | 112 | 225 | 12.32 | 34.90 | 0.54 | 26.47 | 157 | 163 | 0.74 |
| 592 | 7.00 | 34.59 | 1.61 | 1.32 | 96 | 250 | 12.14 | 34.89 | 0.46 | 26.50 | 154 | 160 | 0.78 |
| 714 | 5.91 | 34.56 | 1.71 | 0.90 | 84 | 275 | 11.97 | 34.87 | 0.46 | 26.51 | 153 | 160 | 0.82 |
| 943 | 4.77 | 34.54 | 2.01 | 2.19 | 73 | 300 | 11.77 | 34.85 | 0.46 | 26.53 | 151 | 158 | 0.86 |
| 1141 | 3.87 | 34.56 | 2.28 | 2.22 | 62 | 400 | 9.62 | 34.71 | 0.82 | 26.81 | 125 | 133 | 1.00 |
| 1368 | 3.19 | 34.61 | 2.43 | 1.99 | 52 | 500 | 8.18 | 34.64 | 1.21 | 26.99 | 108 | 117 | 1.13 |
| | | | | | | 600 | 6.90 | 34.58 | 1.61 | 27.12 | 95 | 104 | 1.24 |
| | | | | | | 700 | 5.99 | 34.56 | 1.69 | 27.24 | 84 | 93 | 1.34 |
| | | | | | | 800 | 5.36 | 34.55 | 1.87 | 27.30 | 78 | 88 | 1.43 |
| | | | | | | 1000 | 4.45 | 34.54 | 2.16 | 27.40 | 69 | 79 | 1.60 |
| | | | | | | 1200 | 3.63 | 34.58 | 2.34 | 27.51 | 58 | 68 | 1.74 |
| 21 | HORIZON; May 14, 1958; 0227, 0257 GCT; 0°00', 137°00'W; sounding, 2310 fm; wind, 100°, force 4; weather, partly cloudy; sea, moderate; wire angle, 24°, 24°. | | | | | | | | | | | | |
| 0 | 26.22 | 35.26 | 3.38r | | 470 | 0 | 26.22 | 35.26 | | 23.18 | 470 | 470 | 0.00 |
| 8 | 26.22 | 35.28 | 2.62r | | 469 | 10 | 26.20 | 35.28 | | 23.19 | 469 | 469 | 0.05 |
| 31 | 26.02 | 35.28 | 2.28r | | 462 | 20 | 26.14 | 35.28 | | 23.22 | 466 | 467 | 0.09 |
| 54 | 24.17 | 35.25 | 1.97r | | 411 | 30 | 26.03 | 35.28 | | 23.26 | 463 | 464 | 0.14 |
| 77 | 19.98 | 35.25 | 1.52r | | 299 | 50 | 24.45 | 35.26 | | 23.73 | 418 | 420 | 0.23 |
| 108 | 18.64 | 35.16 | 1.71r | | 272 | 75 | 20.35 | 35.25 | | 24.88 | 308 | 311 | 0.32 |
| | | | | | | 100 | 19.10 | 35.20 | | 25.17 | 281 | 284 | 0.39 |
| 135 | 15.94 | 35.08 | 1.67r | | 217 | 125 | 16.50 | 35.10 | | 25.73 | 227 | 231 | 0.46 |
| 169 | 14.58 | 35.05 | 1.79r | | 190 | 150 | 15.22 | 35.07 | | 26.00 | 202 | 206 | 0.51 |
| 211 | 12.50 | 34.92 | 2.49 | | 159 | 175 | 13.55 | 34.99 | | 26.29 | 174 | 179 | 0.56 |
| 265 | 12.09 | 34.87 | 1.96 | | 155 | 200 | 12.63 | 34.93 | | 26.43 | 161 | 166 | 0.60 |
| 300 | 11.56 | 34.85 | 0.87 | | 147 | 225 | 12.40 | 34.91 | 2.43 | 26.46 | 158 | 164 | 0.65 |
| 406 | 10.17 | 34.76 | 0.48 | | 130 | 250 | 12.23 | 34.89 | 2.24 | 26.48 | 156 | 162 | 0.69 |
| 511 | 8.44 | 34.66 | 0.74 | | 111 | 275 | 11.99 | 34.87 | 1.71 | 26.51 | 153 | 160 | 0.73 |
| 616 | 7.02 | 34.60 | 1.33 | | 95 | 300 | 11.56 | 34.85 | 0.87 | 26.59 | 146 | 153 | 0.77 |
| 819 | 5.47 | 34.56 | 1.75 | | 79 | 400 | 10.26 | 34.76 | 0.50 | 26.74 | 131 | 140 | 0.91 |
| 1008 | 4.44 | 34.56 | 2.01 | | 68 | 500 | 8.60 | 34.66 | 0.70 | 26.93 | 113 | 122 | 1.04 |
| 1228 | 3.59 | 34.60 | 2.06 | | 57 | 600 | 7.21 | 34.60 | 1.23 | 27.09 | 98 | 108 | 1.16 |
| | | | | | | 700 | 6.20 | 34.56 | 1.57 | 27.21 | 87 | 97 | 1.26 |
| | | | | | | 800 | 5.55 | 34.56 | 1.73 | 27.28 | 80 | 90 | 1.35 |
| | | | | | | 1000 | 4.47 | 34.56 | 2.01 | 27.41 | 68 | 78 | 1.52 |
| | | | | | | 1200 | 3.69 | 34.60 | 2.05 | 27.52 | 57 | 67 | 1.67 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

HORIZON; May 15, 1958; 0308 GCT; 0°00', 134°00'W; sounding, 2360 fm; wind, 100°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°. 22

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.92 | 35.19 | 4.30 | 466 | 0 | 25.92 | 35.19 | 4.30 | 23.22 | 466 | 466 | 0.00 |
| 9 | 25.93 | 35.21 | 4.29 | 465 | 10 | 25.93 | 35.21 | 4.29 | 23.25 | 464 | 464 | 0.05 |
| 33 | 25.50 | 35.21 | 4.03 | 452 | 20 | 25.92 | 35.21 | 4.27 | 23.25 | 464 | 465 | 0.09 |
| 58 | 23.60 | 35.20 | 3.50 | 399 | 30 | 25.81 | 35.21 | 4.22 | 23.28 | 461 | 462 | 0.14 |
| 82 | 20.30a) | 35.34 | 3.12 | 300 | 50 | 24.01 | 35.20 | 3.60 | 23.81 | 410 | 412 | 0.23 |
| 117 | 16.42 | 35.10 | 3.23 | 225 | 75 | 20.91 | 35.32 | 3.13 | 24.80 | 316 | 319 | 0.32 |
| 147 | 15.08 | 35.05 | 3.12 | 200 | 100 | 18.16 | 35.21 | 3.22 | 25.42 | 257 | 260 | 0.39 |
| 184 | 13.06 | 34.92 | 2.89 | 170 | 125 | 15.89 | 35.08 | 3.17 | 25.86 | 215 | 219 | 0.45 |
| 231 | 12.58 | 34.92 | 2.64 | 160 | 150 | 14.92 | 35.04 | 3.12 | 26.05 | 197 | 201 | 0.50 |
| 292 | 11.88 | 34.87 | 1.37 | 151 | 175 | 13.20 | 34.92 | 2.95 | 26.31 | 172 | 177 | 0.55 |
| 329 | 10.89 | 34.77 | 0.69r | 141 | 200 | 12.91 | 34.92 | 2.82 | 26.38 | 166 | 171 | 0.59 |
| 447 | 8.98 | 34.69 | 0.84 | 116 | 225 | 12.67 | 34.92 | 2.71 | 26.42 | 162 | 168 | 0.64 |
| 564 | 7.42 | 34.60 | 1.18 | 101 | 250 | 12.40 | 34.91 | 2.45 | 26.46 | 158 | 164 | 0.68 |
| 683 | 6.36 | 34.58 | 1.52 | 88 | 275 | 12.10 | 34.89 | 1.92 | 26.50 | 154 | 161 | 0.72 |
| 905 | 4.73 | 34.56 | 1.94 | 71 | 300 | 11.72 | 34.85 | 1.20 | 26.55 | 149 | 156 | 0.76 |
| 1097 | 4.06 | 34.56 | 2.00 | 64 | 400 | 9.71 | 34.72 | 0.70 | 26.81 | 125 | 133 | 0.90 |
| 1318 | 3.46 | 34.60 | 2.17 | 55 | 500 | 8.26 | 34.64 | 0.97 | 26.98 | 109 | 118 | 1.03 |
| | | | | | 600 | 7.10 | 34.59 | 1.29 | 27.10 | 97 | 106 | 1.14 |
| | | | | | 700 | 6.20 | 34.58 | 1.60 | 27.22 | 86 | 96 | 1.24 |
| | | | | | 800 | 5.50 | 34.57 | 1.83 | 27.30 | 78 | 88 | 1.33 |
| | | | | | 1000 | 4.42 | 34.56 | 1.97 | 27.41 | 68 | 78 | 1.50 |
| | | | | | 1200 | 3.67 | 34.57 | 2.10 | 27.50 | 59 | 69 | 1.65 |

HORIZON; May 16, 1958; 0330 GCT; 0°00', 131°00'W; sounding, 2400 fm; wind, 110°, force 5; weather, clear; sea, moderate; wire angle, 15°. 23

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.53 | 34.62 | 4.47 | 526 | 0 | 26.53 | 34.62 | 4.47 | 22.60 | 526 | 526 | 0.00 |
| 9 | 26.52 | 34.63 | 4.61 | 524 | 10 | 26.52 | 34.63 | 4.60 | 22.63 | 523 | 523 | 0.05 |
| 33 | 25.94 | 34.70 | 4.21 | 501 | 20 | 26.42 | 34.65 | 4.57 | 22.66 | 520 | 521 | 0.10 |
| 58 | 23.69 | 34.99 | 3.73 | 416 | 30 | 26.18 | 34.68 | 4.40 | 22.75 | 511 | 512 | 0.16 |
| 82 | 20.36 | 35.26 | 3.10 | 308 | 50 | 24.30 | 34.92 | 3.85 | 23.51 | 439 | 441 | 0.25 |
| 116 | 17.70 | 35.18 | 2.81r | 249 | 75 | 21.05 | 35.24 | 3.14 | 24.68 | 327 | 330 | 0.35 |
| 145 | 15.52 | 35.07 | 3.17 | 209 | 100 | 18.76 | 35.22 | 3.20 | 25.27 | 271 | 274 | 0.42 |
| 183 | 13.52 | 34.97 | 3.03 | 174 | 125 | 16.84 | 35.13 | 3.22 | 25.67 | 233 | 237 | 0.49 |
| 229 | 12.38 | 34.92 | 2.44 | 157 | 150 | 14.79 | 35.03 | 3.13 | 26.06 | 196 | 200 | 0.54 |
| 288 | 11.71 | 34.88 | 0.97 | 147 | 175 | 13.78 | 34.98 | 3.06 | 26.24 | 179 | 184 | 0.59 |
| 325 | 10.76 | 34.79 | 0.40 | 137 | 200 | 12.76 | 34.93 | 2.77 | 26.41 | 163 | 168 | 0.63 |
| 439 | 8.50 | 34.70 | 0.70 | 109 | 225 | 12.40 | 34.92 | 2.46 | 26.47 | 157 | 163 | 0.68 |
| 554 | 7.08 | 34.61 | 1.26 | 95 | 250 | 12.17 | 34.90 | 2.00 | 26.50 | 154 | 160 | 0.72 |
| 669 | 6.30 | 34.58 | 1.56 | 87 | 275 | 11.88 | 34.88 | 1.42 | 26.54 | 150 | 157 | 0.76 |
| 880 | 4.78 | 34.57 | 1.92 | 70 | 300 | 11.47 | 34.85 | 0.72 | 26.60 | 145 | 152 | 0.79 |
| 1064 | 4.20 | 34.58 | 2.04 | 64 | 400 | 9.34 | 34.72 | 0.54 | 26.86 | 120 | 128 | 0.93 |
| 1276 | 3.38 | 34.60 | 2.08 | 54 | 500 | 7.66 | 34.63 | 1.00 | 27.05 | 102 | 110 | 1.05 |
| | | | | | 600 | 6.70 | 34.60 | 1.38 | 27.17 | 91 | 100 | 1.16 |
| | | | | | 700 | 6.13 | 34.58 | 1.68 | 27.23 | 85 | 94 | 1.26 |
| | | | | | 800 | 5.44 | 34.57 | 1.87 | 27.30 | 78 | 88 | 1.35 |
| | | | | | 1000 | 4.37 | 34.58 | 2.02 | 27.43 | 66 | 76 | 1.51 |
| | | | | | 1200 | 3.72 | 34.59 | 2.08 | 27.51 | 58 | 68 | 1.65 |

a) Alternate value, 20.20°C.

| | OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $\delta_T$ cl/ton | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | $\delta$ cl/ton | $\Delta D$ dyn m |
| 24 | HORIZON; May 17, 1958; 0505, 0525 GCT; 0°04'N, 127°55'W; sounding, 2350 fm; wind, 130°, force 2; weather, clear; sea, moderate; wire angle, 16°, 16°. | | | | | | | | | | | | | |
| | 0 | 25.66 | 34.94 | 4.40 | | 474 | 0 | 25.66 | 34.94 | 4.40 | 23.14 | 474 | 474 | 0.00 |
| | 10 | 25.66 | 34.96 | 4.53 | | 476 | 10 | 25.66 | 34.96 | 4.53 | 23.12 | 476 | 476 | 0.05 |
| | 34 | 23.82 | 34.90 | 4.07 | | 427 | 20 | 25.37 | 34.90 | 4.50 | 23.18 | 470 | 471 | 0.09 |
| | 58 | 21.12 | 35.22 | 3.19 | | 330 | 30 | 24.45 | 34.90 | 4.28 | 23.45 | 444 | 445 | 0.14 |
| | | | | | | | 50 | 21.90 | 35.20 | 3.24 | 24.42 | 352 | 354 | 0.22 |
| | 82 | 19.28 | 35.26 | 3.15 | | 281 | 75 | 19.82 | 35.26 | 3.16 | 25.04 | 293 | 296 | 0.30 |
| | 113 | 16.37 | 35.17 | 3.27 | | 219 | 100 | 17.22 | 35.20 | 3.24 | 25.64 | 236 | 239 | 0.37 |
| | 139 | 14.20 | 34.97 | 3.09 | | 188 | 125 | 15.00 | 35.03 | 3.17 | 26.02 | 200 | 204 | 0.42 |
| | 174 | 12.80a) | 34.86 | 2.72 | | 169 | 150 | 13.50 | 34.93 | 3.00 | 26.26 | 177 | 181 | 0.47 |
| | 220 | 12.48 | 34.90 | 2.49 | | 160 | 175 | 12.79 | 34.88 | 2.71 | 26.36 | 167 | 172 | 0.52 |
| | 278 | 11.81 | 34.87 | 1.20 | | 150 | 200 | 12.60 | 34.90 | 2.60 | 26.42 | 162 | 167 | 0.56 |
| | 314 | 11.57 | 34.85 | 0.71 | | 147 | 225 | 12.40 | 34.90 | 2.41 | 26.45 | 159 | 165 | 0.60 |
| | 426 | 8.99 | 34.68 | 0.70 | | 117 | 250 | 12.13 | 34.89 | 2.03 | 26.50 | 154 | 160 | 0.64 |
| | 540 | 7.62 | 34.63 | 0.99 | | 101 | 275 | 11.86 | 34.87 | 1.35 | 26.53 | 151 | 158 | 0.68 |
| | 656 | 6.50 | 34.57 | 1.52 | | 90 | 300 | 11.68 | 34.86 | 0.81 | 26.56 | 148 | 155 | 0.72 |
| | 873 | 5.12 | 34.57 | 1.89 | | 74 | 400 | 9.63 | 34.72 | 0.63 | 26.82 | 124 | 132 | 0.86 |
| | 1063 | 4.16 | 34.57 | 1.97 | | 64 | 500 | 7.99 | 34.65 | 0.87 | 27.02 | 105 | 114 | 0.98 |
| | 1287 | 3.44 | 34.58 | 2.27 | | 57 | 600 | 6.95 | 34.60 | 1.27 | 27.13 | 94 | 103 | 1.09 |
| | | | | | | | 700 | 6.19 | 34.57 | 1.71 | 27.21 | 87 | 97 | 1.19 |
| | | | | | | | 800 | 5.56 | 34.57 | 1.86 | 27.29 | 79 | 89 | 1.29 |
| | | | | | | | 1000 | 4.41 | 34.57 | 1.94 | 27.42 | 67 | 77 | 1.45 |
| | | | | | | | 1200 | 3.71 | 34.58 | 2.11 | 27.51 | 58 | 68 | 1.60 |
| 25 | HORIZON; May 18, 1958; 0620 GCT; 0°02'S, 125°00'W; sounding, 2530 fm; wind, 130°, force 2; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | | | | |
| | 0 | 25.53 | 35.03 | 4.52 | | 466 | 0 | 25.53 | 35.03 | 4.52 | 23.22 | 466 | 466 | 0.00 |
| | 9 | 25.51 | 35.04 | 4.68 | | 464 | 10 | 25.51 | 35.04 | 4.68 | 23.25 | 464 | 464 | 0.05 |
| | 34 | 24.60 | 35.16 | 4.24 | | 430 | 20 | 25.41 | 35.06 | 4.66 | 23.29 | 460 | 461 | 0.09 |
| | 58 | 22.48 | 35.17 | 3.49 | | 370 | 30 | 25.04 | 35.12 | 4.45 | 23.44 | 445 | 446 | 0.14 |
| | 83 | 19.02 | 35.19 | 3.31 | | 280 | 50 | 23.08 | 35.16 | 3.66 | 24.06 | 386 | 388 | 0.22 |
| | 118 | 16.59 | 35.12 | 3.36 | | 227 | 75 | 20.60 | 35.20 | 3.33 | 24.78 | 318 | 321 | 0.31 |
| | 145 | 14.62 | 34.96 | 3.13 | | 198 | 100 | 17.49 | 35.17 | 3.38 | 25.54 | 245 | 248 | 0.38 |
| | 182 | 12.86 | 34.87 | 3.09 | | 170 | 125 | 15.60 | 35.05 | 3.22 | 25.90 | 211 | 215 | 0.44 |
| | 230 | 12.20 | 34.90 | 1.94 | | 154 | 150 | 14.30 | 34.94 | 3.12 | 26.09 | 193 | 197 | 0.49 |
| | 292 | 11.72 | 34.84 | 0.84 | | 151 | 175 | 13.10 | 34.88 | 3.13 | 26.30 | 173 | 178 | 0.54 |
| | 329 | 11.08 | 34.81 | 0.48 | | 142 | 200 | 12.56 | 34.90 | 2.75 | 26.42 | 162 | 167 | 0.58 |
| | 447 | 8.85 | 34.67 | 0.74 | | 116 | 225 | 12.27 | 34.90 | 2.12 | 26.48 | 156 | 162 | 0.62 |
| | 564 | 7.38 | 34.62 | 1.18 | | 98 | 250 | 12.08 | 34.88 | 1.65 | 26.50 | 154 | 160 | 0.66 |
| | 681 | 6.36 | 34.55 | 1.58 | | 90 | 275 | 11.90 | 34.86 | 1.24 | 26.52 | 152 | 159 | 0.70 |
| | 903 | 5.00 | 34.58 | 2.01 | | 72 | 300 | 11.61 | 34.84 | 0.71 | 26.56 | 148 | 155 | 0.74 |
| | 1095 | 4.18 | 34.56 | 2.10 | | 65 | 400 | 9.77 | 34.72 | 0.58 | 26.80 | 126 | 134 | 0.89 |
| | 1317 | 3.52 | 34.56 | 2.18 | | 59 | 500 | 8.10 | 34.65 | 0.94 | 27.01 | 106 | 115 | 1.02 |
| | | | | | | | 600 | 7.00 | 34.58 | 1.32 | 27.11 | 96 | 105 | 1.13 |
| | | | | | | | 700 | 6.19 | 34.56 | 1.71 | 27.21 | 87 | 97 | 1.23 |
| | | | | | | | 800 | 5.57 | 34.57 | 1.94 | 27.29 | 79 | 89 | 1.32 |
| | | | | | | | 1000 | 4.42 | 34.57 | 2.08 | 27.43 | 66 | 76 | 1.48 |
| | | | | | | | 1200 | 3.80 | 34.56 | 2.15 | 27.48 | 61 | 71 | 1.63 |

a) Alternate value, 13.52°C.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| HORIZON; May 19, 1958; 0915, 0939 GCT; 0°12.5'S, 122°01'W; sounding, 2330 fm; wind, 120°, force 3; weather, partly cloudy; sea, moderate; wire angle, 03°, 04°. | | | | | | | | | | | | | 26 |
| 0 | 25.75 | 34.63 | 4.61 | | 501 | 0 | 25.75 | 34.63 | 4.61 | 22.86 | 501 | 501 | 0.00 |
| 10 | 25.46a) | 34.67 | 4.43 | | 490 | 10 | 25.46 | 34.67 | 4.43 | 22.97 | 490 | 490 | 0.05 |
| 34 | 22.90 | 34.97 | 3.82 | | 396 | 20 | 24.47 | 34.76 | 4.31 | 23.34 | 455 | 456 | 0.10 |
| | | | | | | 30 | 23.30 | 34.92 | 3.97 | 23.81 | 410 | 411 | 0.14 |
| 60 | 20.18 | 35.35 | 3.20 | | 297 | 50 | 21.38 | 35.30 | 3.31 | 24.64 | 331 | 333 | 0.21 |
| 85 | 17.90 | 35.26 | 3.26 | | 248 | 75 | 18.50 | 35.30 | 3.28 | 25.39 | 260 | 263 | 0.29 |
| 118 | 15.56 | 35.12 | 3.21 | | 205 | 100 | 15.98 | 35.15 | 3.23 | 25.89 | 212 | 215 | 0.35 |
| 147 | 14.71 | 35.06 | 3.20 | | 192 | 125 | 15.39 | 35.11 | 3.22 | 25.99 | 203 | 207 | 0.40 |
| 185 | 13.51 | 34.88 | 2.99 | | 181 | 150 | 14.69 | 35.06 | 3.20 | 26.10 | 192 | 196 | 0.45 |
| 233 | 12.42 | 34.79 | 2.22 | | 167 | 175 | 13.79 | 34.92 | 3.05 | 26.19 | 184 | 189 | 0.50 |
| 294 | 11.80 | 34.84 | 1.04 | | 152 | 200 | 13.11 | 34.84 | 2.87 | 26.27 | 176 | 181 | 0.55 |
| 331 | 11.26 | 34.63r | 0.52 | | | 225 | 12.59 | 34.80 | 2.47 | 26.34 | 169 | 175 | 0.59 |
| 448 | 8.32 | 34.52r | 0.81 | | | 250 | 12.23 | 34.81 | 1.94 | 26.41 | 163 | 169 | 0.63 |
| 568 | 7.12 | 34.58 | 1.21 | | 98 | 275 | 11.95 | 34.83 | 1.31 | 26.49 | 155 | 162 | 0.68 |
| 691 | 6.20 | 34.53 | 1.71 | | 90 | 300 | 11.70 | 34.84 | 0.89 | 26.54 | 150 | 157 | 0.71 |
| | | | | | | 400 | 9.30 | 34.70 | 0.54 | 26.85 | 121 | 129 | 0.86 |
| | | | | | | 500 | 7.80 | 34.64 | 0.95 | 27.04 | 103 | 112 | 0.98 |
| | | | | | | 600 | 6.90 | 34.56 | 1.31 | 27.10 | 97 | 106 | 1.09 |
| HORIZON; May 20, 1958; 0855 GCT; 0°04'N, 118°57'W; sounding, 2159 fm; wind, 100°, force 3; weather, clear; sea, moderate; wire angle, 25°. | | | | | | | | | | | | | 27 |
| 0 | 25.14 | 34.87 | 4.53 | | 467 | 0 | 25.14 | 34.87 | 4.53 | 23.21 | 467 | 467 | 0.00 |
| 8 | 24.90 | 34.86 | 4.57 | | 460 | 10 | 24.34 | 34.88 | 4.37 | 23.47 | 443 | 443 | 0.05 |
| 31 | 21.78 | 34.96 | 3.52 | | 366 | 20 | 22.90 | 34.90 | 3.91 | 23.92 | 400 | 401 | 0.09 |
| 53 | 19.85 | 35.35 | 3.09 | | 288 | 30 | 22.00 | 34.94 | 3.60 | 24.20 | 373 | 374 | 0.13 |
| 76 | 18.06 | 35.22 | 3.26 | | 254 | 50 | 20.13 | 35.33 | 3.13 | 25.00 | 297 | 299 | 0.19 |
| 108 | 15.88 | 35.13 | 3.26 | | 211 | 75 | 18.10 | 35.22 | 3.25 | 25.44 | 255 | 258 | 0.26 |
| 135 | 15.28 | 34.88r | 3.21 | | | 100 | 16.22 | 35.14 | 3.26 | 25.82 | 219 | 222 | 0.32 |
| 172 | 13.60 | 34.94 | 3.15 | | 179 | 125 | 15.39 | 35.06 | 3.22 | 25.95 | 206 | 210 | 0.38 |
| 206 | 12.64 | 34.92 | 2.41 | | 161 | 150 | 14.75 | 34.98 | 3.19 | 26.04 | 198 | 202 | 0.43 |
| 254 | 12.02 | 34.88 | 1.34 | | 153 | 175 | 13.45 | 34.94 | 3.10 | 26.28 | 175 | 180 | 0.48 |
| 284 | 11.65 | 34.85 | 0.66 | | 149 | 200 | 12.73 | 34.92 | 2.54 | 26.41 | 163 | 168 | 0.52 |
| 373 | 9.40 | 34.71 | 0.48 | | 121 | 225 | 12.44 | 34.91 | 2.15 | 26.46 | 158 | 164 | 0.56 |
| 462 | 8.06 | 34.66 | 0.77 | | 104 | 250 | 12.11 | 34.88 | 1.55 | 26.50 | 154 | 160 | 0.60 |
| 553 | 7.28 | 34.60 | 1.32 | | 99 | 275 | 11.79 | 34.86 | 0.84 | 26.54 | 150 | 157 | 0.64 |
| 719 | 6.07 | 34.54 | 1.95 | | 87 | 300 | 11.35 | 34.83 | 0.48 | 26.61 | 144 | 151 | 0.68 |
| 868 | 5.02 | 34.55 | 2.01 | | 74 | 400 | 8.86 | 34.69 | 0.53 | 26.92 | 114 | 122 | 0.82 |
| 1051 | 4.15 | 34.56 | 2.02 | | 64 | 500 | 7.72 | 34.64 | 0.99 | 27.04 | 103 | 111 | 0.93 |
| | | | | | | 600 | 6.90 | 34.56 | 1.60 | 27.11 | 96 | 105 | 1.04 |
| | | | | | | 700 | 6.18 | 34.54 | 1.92 | 27.20 | 88 | 98 | 1.14 |
| | | | | | | 800 | 5.58 | 34.54 | 1.99 | 27.27 | 81 | 91 | 1.24 |
| | | | | | | 1000 | 4.34 | 34.56 | 2.03 | 27.43 | 66 | 76 | 1.40 |

a) Alternate value, 25.37°C.

SIO

DOLPHIN

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

28 HORIZON; May 21, 1958; 0819 GCT; 0°02'S, 115°58'W; sounding, 2146 fm; wind, 120°, force 3; weather, partly cloudy; sea, moderate; wire angle, 06°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.98 | 34.96 | 4.54 | 455 | 0 | 24.98 | 34.96 | 4.54 | 23.34 | 455 | 455 | 0.00 |
| 10 | 24.86 | 34.94 | 4.56 | 452 | 10 | 24.86 | 34.94 | 4.56 | 23.36 | 453 | 453 | 0.05 |
| 34 | 22.62 | 35.00 | 3.98 | 386 | 20 | 24.08 | 34.92 | 4.38 | 23.58 | 432 | 433 | 0.09 |
| 59 | 19.12 | 35.29 | 3.25 | 275 | 30 | 23.00 | 34.97 | 4.10 | 23.93 | 399 | 400 | 0.13 |
| 83 | 15.92 | 35.08 | 3.26 | 215 | 50 | 20.00 | 35.29 | 3.27 | 25.00 | 297 | 299 | 0.20 |
| 119 | 14.10 | 34.97 | 3.20 | 186 | 75 | 16.40 | 35.14 | 3.26 | 25.79 | 222 | 224 | 0.27 |
| 149 | 12.84 | 34.92 | 2.49 | 165 | 100 | 14.66 | 35.00 | 3.24 | 26.07 | 195 | 198 | 0.32 |
| 190 | 12.59 | 34.90 | 2.21 | 162 | 125 | 13.75 | 34.95 | 3.14 | 26.22 | 181 | 184 | 0.37 |
| 239 | 12.16 | 34.92 | 1.78 | 152 | 150 | 12.80 | 34.91 | 2.48 | 26.39 | 165 | 169 | 0.41 |
| 302 | 11.48 | 34.85 | 0.52 | 146 | 175 | 12.64 | 34.91 | 2.32 | 26.41 | 163 | 168 | 0.45 |
| 340 | 10.27 | 34.75 | 0.34 | 132 | 200 | 12.49 | 34.90 | 2.16 | 26.44 | 160 | 165 | 0.50 |
| 459 | 8.03 | 34.63 | 0.85 | 107 | 225 | 12.22 | 34.90 | 1.87 | 26.49 | 155 | 161 | 0.54 |
| 573 | 7.04 | 34.59 | 1.42 | 96 | 250 | 12.06 | 34.90 | 1.59 | 26.52 | 152 | 158 | 0.58 |
| 684 | 6.10 | 34.56 | 1.72 | 86 | 275 | 11.83 | 34.88 | 1.00 | 26.55 | 149 | 156 | 0.61 |
| 870 | 4.83 | 34.56 | 1.87 | 72 | 300 | 11.50 | 34.85 | 0.57 | 26.59 | 146 | 153 | 0.65 |
| 1016 | 4.24 | 34.54 | 2.20 | 67 | 400 | 8.75 | 34.66 | 0.57 | 26.92 | 114 | 122 | 0.79 |
| 1183 | 3.60 | 34.58 | 2.17 | 58 | 500 | 7.67 | 34.62 | 1.07 | 27.05 | 102 | 110 | 0.91 |
| | | | | | 600 | 6.84 | 34.58 | 1.52 | 27.13 | 94 | 103 | 1.01 |
| | | | | | 700 | 5.97 | 34.56 | 1.75 | 27.23 | 85 | 94 | 1.11 |
| | | | | | 800 | 5.28 | 34.55 | 1.82 | 27.31 | 77 | 87 | 1.20 |
| | | | | | 1000 | 4.30 | 34.54 | 2.19 | 27.42 | 67 | 77 | 1.37 |

29 HORIZON; May 22, 1958; 0700 GCT; 0°02'S, 112°57.5'W; sounding, 2138 fm; wind, 110°, force 2; weather, partly cloudy; sea, moderate; wire angle, 20°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.01 | 34.81 | 4.62 | 438 | 0 | 24.01 | 34.81 | 4.62 | 23.52 | 438 | 438 | 0.00 |
| 9 | 23.55 | 34.85 | 4.41 | 422 | 10 | 23.50 | 34.85 | 4.40 | 23.70 | 421 | 421 | 0.04 |
| 33 | 19.46 | 35.12 | 3.43 | 295 | 20 | 22.20 | 34.94 | 3.75 | 24.14 | 379 | 380 | 0.08 |
| 56 | 17.08 | 35.17 | 3.34 | 235 | 30 | 20.20 | 35.06 | 3.45 | 24.77 | 319 | 320 | 0.12 |
| 80 | 16.09 | 35.01 | 3.40 | 225 | 50 | 17.71 | 35.20 | 3.35 | 25.51 | 248 | 250 | 0.18 |
| 113 | 14.68 | 34.97 | 3.05 | 198 | 75 | 16.28 | 35.03 | 3.39 | 25.73 | 227 | 229 | 0.23 |
| 141 | 13.54 | 34.96 | 3.12 | 176 | 100 | 15.30 | 34.98 | 3.20 | 25.91 | 210 | 213 | 0.29 |
| 177 | 12.73 | 34.93 | 2.40 | 163 | 125 | 14.10 | 34.97 | 3.10 | 26.16 | 186 | 190 | 0.34 |
| 219 | 12.21 | 34.90 | 1.83 | 155 | 150 | 13.27 | 34.96 | 2.95 | 26.32 | 171 | 175 | 0.39 |
| 276 | 12.02 | 34.88 | 1.39 | 153 | 175 | 12.75 | 34.94 | 2.42 | 26.41 | 163 | 168 | 0.43 |
| 310 | 11.65 | 34.87 | 0.83 | 147 | 200 | 12.42 | 34.92 | 2.09 | 26.46 | 158 | 163 | 0.47 |
| 417 | 8.54 | 34.68 | 0.65 | 111 | 225 | 12.20 | 34.90 | 1.80 | 26.49 | 155 | 161 | 0.51 |
| 524 | 7.22 | 34.63 | 1.22 | 96 | 250 | 12.10 | 34.89 | 1.54 | 26.50 | 154 | 160 | 0.55 |
| 630 | 6.70 | 34.60 | 1.34 | 91 | 275 | 12.03 | 34.88 | 1.41 | 26.51 | 153 | 160 | 0.59 |
| 825 | 5.28 | 34.55 | 2.06 | 77 | 300 | 11.80 | 34.87 | 1.10 | 26.54 | 150 | 157 | 0.63 |
| 994 | 4.50 | 34.56 | 2.01 | 68 | 400 | 8.84 | 34.70 | 0.58 | 26.92 | 114 | 122 | 0.77 |
| 1188 | 3.68 | 34.60 | 2.10 | 57 | 500 | 7.47 | 34.64 | 1.19 | 27.08 | 99 | 107 | 0.88 |
| | | | | | 600 | 6.83 | 34.61 | 1.29 | 27.16 | 92 | 101 | 0.99 |
| | | | | | 700 | 6.16 | 34.57 | 1.69 | 27.22 | 86 | 96 | 1.09 |
| | | | | | 800 | 5.45 | 34.56 | 2.05 | 27.29 | 79 | 89 | 1.18 |
| | | | | | 1000 | 4.47 | 34.55 | 2.01 | 27.40 | 69 | 79 | 1.35 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

30

HORIZON; May 23, 1958; 0832 GCT; 0°01.5'N, 109°59'W; sounding, 2040 fm; wind, 110°, force 3; weather, partly cloudy; sea, moderate; wire angle, 23°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.26 | 34.91 | 4.41 | 410 | 0 | 23.26 | 34.91 | 4.41 | 23.81 | 410 | 410 | 0.00 |
| 9 | 23.10 | 34.93 | 4.42 | 403 | 10 | 23.09 | 34.93 | 4.42 | 23.88 | 403 | 403 | 0.04 |
| 23 | 22.20 | 34.97 | 4.13 | 377 | 20 | 22.70 | 34.96 | 4.30 | 24.01 | 391 | 392 | 0.08 |
| 41 | 19.46 | 35.01 | 3.56 | 303 | 30 | 21.15 | 35.00 | 3.86 | 24.47 | 347 | 348 | 0.12 |
| 64 | 16.94 | 35.01 | 3.33 | 244 | 50 | 18.00 | 35.01 | 3.39 | 25.29 | 269 | 271 | 0.18 |
| 97 | 15.81 | 35.07 | 3.37 | 215 | 75 | 16.60 | 35.03 | 3.37 | 25.66 | 234 | 236 | 0.24 |
| 132 | 14.18 | 34.99 | 3.22 | 187 | 100 | 15.70 | 35.06 | 3.37 | 25.87 | 214 | 217 | 0.30 |
| 162 | 12.98 | 34.96 | 2.67 | 165 | 125 | 14.59 | 35.00 | 3.28 | 26.09 | 193 | 197 | 0.35 |
| 201 | 12.79 | 34.94 | 2.35 | 163 | 150 | 13.13 | 34.96 | 2.80 | 26.36 | 167 | 171 | 0.40 |
| 250 | 12.44 | 34.90 | 2.04 | 160 | 175 | 12.91 | 34.95 | 2.63 | 26.40 | 164 | 169 | 0.44 |
| 280 | 11.88 | 34.88 | 1.00 | 150 | 200 | 12.80 | 34.94 | 2.36 | 26.41 | 163 | 168 | 0.48 |
| 377 | 10.71 | 34.79 | 0.44 | 137 | 225 | 12.63 | 34.92 | 2.22 | 26.43 | 161 | 167 | 0.52 |
| 471 | 8.34 | 34.66 | 0.70 | 110 | 250 | 12.44 | 34.90 | 2.04 | 26.44 | 160 | 166 | 0.56 |
| 564 | 7.29 | 34.60 | 1.19 | 99 | 275 | 11.94 | 34.88 | 1.14 | 26.53 | 151 | 158 | 0.61 |
| 732 | 6.08 | 34.61 | 1.56 | 82 | 300 | 11.61 | 34.85 | 0.72 | 26.56 | 148 | 155 | 0.64 |
| 880 | 5.26 | 34.54 | 1.97 | 78 | 400 | 10.21 | 34.76 | 0.46 | 26.74 | 131 | 140 | 0.79 |
| 1049 | 4.28 | 34.57 | 2.01 | 65 | 500 | 7.76 | 34.62 | 1.03 | 27.03 | 104 | 112 | 0.92 |
| | | | | | 600 | 7.10 | 34.60 | 1.23 | 27.11 | 96 | 106 | 1.03 |
| | | | | | 700 | 6.41 | 34.60 | 1.40 | 27.21 | 87 | 97 | 1.13 |
| | | | | | 800 | 5.61 | 34.55 | 1.91 | 27.27 | 81 | 91 | 1.22 |
| | | | | | 1000 | 4.49 | 34.56 | 2.00 | 27.41 | 68 | 78 | 1.39 |

31

HORIZON; May 24, 1958; 0745 GCT; 0°02'S, 106°57.5'W; sounding, 1965 fm; wind, 100°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.52 | 34.87 | 4.49 | 420 | 0 | 23.52 | 34.87 | 4.49 | 23.71 | 420 | 420 | 0.00 |
| 10 | 23.49 | 34.87 | 4.65 | 418 | 10 | 23.49 | 34.87 | 4.65 | 23.73 | 418 | 418 | 0.04 |
| 25 | 23.10 | 34.89 | 4.42 | 407 | 20 | 23.27 | 34.88 | 4.52 | 23.79 | 412 | 413 | 0.08 |
| 45 | 21.74 | 35.01 | 4.00 | 361 | 30 | 22.93 | 34.90 | 4.38 | 23.90 | 402 | 403 | 0.12 |
| 70 | 18.34 | 35.11 | 3.39 | 270 | 50 | 21.52 | 35.03 | 3.94 | 24.39 | 355 | 357 | 0.20 |
| 111 | 15.92 | 35.05 | 3.39 | 219 | 75 | 17.80 | 35.09 | 3.39 | 25.42 | 257 | 260 | 0.28 |
| 150 | 14.41 | 34.99 | 3.20 | 191 | 100 | 16.30 | 35.06 | 3.39 | 25.74 | 226 | 229 | 0.34 |
| 190 | 13.00 | 34.95 | 2.57 | 167 | 125 | 15.33 | 35.02 | 3.33 | 25.94 | 207 | 211 | 0.39 |
| 238 | 12.62 | 34.92 | 2.24 | 161 | 150 | 14.41 | 34.99 | 3.20 | 26.11 | 191 | 195 | 0.44 |
| 302 | 11.46 | 34.84 | 0.57 | 146 | 175 | 13.20 | 34.96 | 2.71 | 26.34 | 169 | 174 | 0.49 |
| 341 | 11.00 | 34.83 | 0.66 | 139 | 200 | 12.93 | 34.94 | 2.53 | 26.39 | 165 | 170 | 0.53 |
| 464 | 8.06 | 34.65 | 0.94 | 106 | 225 | 12.73 | 34.93 | 2.33 | 26.42 | 162 | 168 | 0.58 |
| 586 | 7.10 | 34.60 | 1.20 | 96 | 250 | 12.41 | 34.91 | 2.07 | 26.46 | 158 | 164 | 0.62 |
| 706 | 6.02 | 34.56 | 1.86 | 85 | 275 | 11.91 | 34.87 | 1.05 | 26.52 | 152 | 159 | 0.66 |
| 926 | 4.60 | 34.56 | 1.92 | 69 | 300 | 11.50 | 34.84 | 0.58 | 26.59 | 146 | 153 | 0.70 |
| 1117 | 3.88 | 34.60 | 1.97 | 59 | 400 | 9.62 | 34.74 | 0.55 | 26.83 | 123 | 131 | 0.84 |
| 1337 | 3.24 | 34.60 | 2.13 | 53 | 500 | 7.65 | 34.62 | 1.02 | 27.05 | 102 | 110 | 0.96 |
| | | | | | 600 | 6.98 | 34.59 | 1.29 | 27.12 | 95 | 104 | 1.07 |
| | | | | | 700 | 6.11 | 34.56 | 1.85 | 27.22 | 86 | 96 | 1.17 |
| | | | | | 800 | 5.37 | 34.56 | 1.95 | 27.30 | 78 | 88 | 1.26 |
| | | | | | 1000 | 4.27 | 34.58 | 1.94 | 27.45 | 64 | 74 | 1.42 |
| | | | | | 1200 | 3.67 | 34.60 | 2.01 | 27.52 | 57 | 67 | 1.56 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| **32** | HORIZON; May 25, 1958; 0747 GCT; 0°03.5'N, 103°46'W; sounding, 1825 fm; wind, 120°, force 1; weather, partly cloudy; sea, slight; wire angle, 16°. | | | | | | | | | | | | |
| 0 | 23.20 | 34.90 | 4.53 | | 409 | 0 | 23.20 | 34.90 | 4.53 | 23.82 | 409 | 409 | 0.00 |
| 10 | 22.97 | 34.93 | 4.59 | | 400 | 10 | 22.97 | 34.93 | 4.59 | 23.92 | 400 | 400 | 0.04 |
| 24 | 21.75 | 34.92 | 4.22 | | 369 | 20 | 22.13 | 34.92 | 4.36 | 24.14 | 379 | 380 | 0.08 |
| 43 | 18.44 | 34.91 | 3.28 | | 286 | 30 | 21.36 | 34.92 | 4.13 | 24.36 | 358 | 359 | 0.12 |
| 67 | 16.10 | 34.90 | 2.93 | | 233 | 50 | 17.41 | 34.91 | 2.98 | 25.36 | 262 | 264 | 0.18 |
| 105 | 14.80 | 35.01 | 3.20 | | 197 | 75 | 15.44 | 34.93 | 3.11 | 25.85 | 216 | 218 | 0.24 |
| 143 | 13.56 | 34.99 | 3.08 | | 173 | 100 | 14.83 | 35.01 | 3.20 | 26.04 | 198 | 201 | 0.29 |
| 177 | 13.10 | 34.96 | 2.66 | | 168 | 125 | 13.87 | 35.00 | 3.12 | 26.24 | 179 | 182 | 0.34 |
| 219 | 12.64 | 34.94 | 2.25 | | 160 | 150 | 13.40 | 34.98 | 2.93 | 26.31 | 172 | 176 | 0.38 |
| 275 | 12.18 | 34.91 | 1.57 | | 154 | 175 | 13.12 | 34.96 | 2.67 | 26.35 | 168 | 173 | 0.43 |
| 310 | 11.78 | 34.86 | 0.86 | | 150 | 200 | 12.84 | 34.95 | 2.45 | 26.41 | 163 | 168 | 0.47 |
| 417 | 8.58 | 34.67 | 0.61 | | 112 | 225 | 12.61 | 34.94 | 2.23 | 26.45 | 159 | 165 | 0.51 |
| 523 | 7.63 | 34.61 | 0.96 | | 103 | 250 | 12.41 | 34.92 | 1.96 | 26.47 | 157 | 163 | 0.55 |
| 628 | 6.86 | 34.60 | 1.51 | | 93 | 275 | 12.18 | 34.91 | 1.57 | 26.50 | 154 | 161 | 0.59 |
| 819 | 5.32 | 34.56 | 1.86 | | 77 | 300 | 11.89 | 34.88 | 1.02 | 26.53 | 151 | 158 | 0.63 |
| 981 | 4.52 | 34.54 | 2.03 | | 70 | 400 | 9.18 | 34.70 | 0.55 | 26.88 | 118 | 126 | 0.78 |
| 1141 | 4.00 | 34.58 | 2.01 | | 61 | 500 | 7.75 | 34.61 | 0.88 | 27.03 | 104 | 112 | 0.89 |
| | | | | | | 600 | 7.08 | 34.60 | 1.32 | 27.12 | 95 | 104 | 1.00 |
| | | | | | | 700 | 6.24 | 34.59 | 1.71 | 27.22 | 86 | 96 | 1.10 |
| | | | | | | 800 | 5.43 | 34.57 | 1.84 | 27.30 | 78 | 88 | 1.20 |
| | | | | | | 1000 | 4.41 | 34.55 | 2.03 | 27.41 | 68 | 78 | 1.36 |
| **33** | HORIZON; May 26, 1958; 0420 GCT; 0°08'N, 100°58'W; sounding, 1750 fm; wind, 110°, force 1; weather, partly cloudy; sea, slight; wire angle, 22°. | | | | | | | | | | | | |
| 0 | 23.73 | 34.98 | 4.61 | | 418 | 0 | 23.73 | 34.98 | 4.61 | 23.73 | 418 | 418 | 0.00 |
| 9 | 22.90 | 34.94 | 4.28 | | 398 | 10 | 22.89 | 34.94 | 4.27 | 23.94 | 398 | 398 | 0.04 |
| 23 | 21.00 | 34.96 | 4.16 | | 346 | 20 | 21.50 | 34.96 | 4.21 | 24.35 | 359 | 360 | 0.08 |
| 41 | 18.40 | 34.89 | 3.28 | | 287 | 30 | 20.11 | 34.93 | 3.79 | 24.70 | 325 | 326 | 0.11 |
| 64 | 16.81 | 34.93 | 3.13 | | 247 | 50 | 17.66 | 34.92 | 3.17 | 25.32 | 266 | 268 | 0.17 |
| 99 | 14.84 | 34.89 | 2.37r | | 207 | 75 | 16.60 | 34.93 | 3.13 | 25.58 | 242 | 244 | 0.24 |
| 134 | 13.60 | 35.00 | 3.13 | | 174 | 100 | 14.82 | 34.89 | 3.15 | 25.95 | 206 | 209 | 0.29 |
| 167 | 13.36 | 34.97 | 2.88 | | 171 | 125 | 13.73 | 35.00 | 3.14 | 26.27 | 176 | 179 | 0.34 |
| 208 | 13.02 | 34.93 | 2.42 | | 168 | 150 | 13.49 | 34.98 | 3.03 | 26.31 | 172 | 176 | 0.39 |
| 259 | 12.48 | 34.88 | 1.66 | | 162 | 175 | 13.30 | 34.96 | 2.77 | 26.32 | 171 | 176 | 0.43 |
| 291 | 11.65 | 34.85 | 0.74 | | 149 | 200 | 13.09 | 34.93 | 2.50 | 26.35 | 168 | 173 | 0.47 |
| 390 | 8.70 | 34.66 | 0.66 | | 114 | 225 | 12.88 | 34.92 | 2.34 | 26.38 | 166 | 172 | 0.52 |
| 489 | 7.80 | 34.74 | 0.92 | | | 250 | 12.60 | 34.89 | 2.01 | 26.41 | 163 | 169 | 0.56 |
| 588 | 7.20 | 34.58 | 1.32 | | 99 | 275 | 12.12 | 34.86 | 1.17 | 26.48 | 156 | 163 | 0.60 |
| 769 | 5.65 | 34.56 | 1.85 | | 81 | 300 | 11.44 | 34.83 | 0.64 | 26.59 | 146 | 153 | 0.64 |
| 925 | 4.82 | 34.54 | 1.98 | | 73 | 400 | 8.56 | 34.66 | 0.67 | 26.93 | 113 | 120 | 0.78 |
| 1107 | 4.16 | 34.55 | 1.90 | | 66 | 500 | 7.71 | 34.60 | 0.98 | 27.03 | 104 | 112 | 0.89 |
| | | | | | | 600 | 7.11 | 34.58 | 1.34 | 27.09 | 98 | 108 | 1.00 |
| | | | | | | 700 | 6.30 | 34.58 | 1.51 | 27.20 | 88 | 98 | 1.11 |
| | | | | | | 800 | 5.43 | 34.55 | 1.91 | 27.29 | 79 | 89 | 1.20 |
| | | | | | | 1000 | 4.49 | 34.55 | 1.95 | 27.40 | 69 | 79 | 1.37 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |

34

HORIZON; May 27, 1958; 0303 GCT; 0°04.5'N, 97°56'W; sounding, 1788 fm; wind, 120°, force 2; weather, partly cloudy; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.84 | 35.14 | 4.59 | 410 | 0 | 23.84 | 35.14 | 4.59 | 23.81 | 410 | 410 | 0.00 |
| 9 | 23.42 | 35.16 | 4.62 | 397 | 10 | 23.35 | 35.16 | 4.62 | 23.99 | 393 | 393 | 0.04 |
| 23 | 21.60 | 35.17 | 4.22 | 347 | 20 | 21.80 | 35.17 | 4.28 | 24.43 | 351 | 352 | 0.08 |
| 42 | 17.34 | 35.11 | 3.56 | 246 | 30 | 19.60 | 35.16 | 3.99 | 25.02 | 295 | 296 | 0.11 |
| 66 | 16.40 | 34.96 | 3.11 | 236 | 50 | 16.84 | 35.02 | 3.28 | 25.59 | 241 | 243 | 0.16 |
| 99 | 13.92 | 34.94 | 2.94 | 185 | 75 | 14.81 | 34.95 | 2.99 | 26.00 | 202 | 204 | 0.22 |
| 132 | 13.37 | 34.93 | 2.73 | 174 | 100 | 13.91 | 34.94 | 2.94 | 26.19 | 184 | 187 | 0.27 |
| 164 | 13.26 | 34.96 | 2.34 | 170 | 125 | 13.49 | 34.93 | 2.80 | 26.26 | 177 | 180 | 0.31 |
| 204 | 12.70 | 34.91 | 1.86 | 163 | 150 | 13.28 | 34.96 | 2.39 | 26.32 | 171 | 175 | 0.36 |
| 257 | 12.22 | 34.88 | 1.37 | 157 | 175 | 13.20 | 34.96 | 2.24 | 26.34 | 169 | 174 | 0.40 |
| 289 | 11.30 | 34.81 | 0.50 | 146 | 200 | 12.80 | 34.92 | 1.93 | 26.40 | 164 | 169 | 0.45 |
| 391 | 8.80 | 34.67 | 0.47 | 115 | 225 | 12.58 | 34.90 | 1.75 | 26.42 | 162 | 168 | 0.49 |
| 492 | 7.58 | 34.65 | 0.97 | 99 | 250 | 12.33 | 34.88 | 1.47 | 26.46 | 158 | 164 | 0.53 |
| 592 | 6.96 | 34.60 | 1.32 | 94 | 275 | 11.80 | 34.85 | 0.88 | 26.53 | 151 | 158 | 0.57 |
| 782 | 5.76 | 34.57 | 1.54 | 81 | 300 | 11.01 | 34.78 | 0.49 | 26.63 | 142 | 149 | 0.61 |
| 954 | 4.72 | 34.55 | 2.08 | 71 | 400 | 8.67 | 34.67 | 0.49 | 26.92 | 114 | 122 | 0.74 |
| 1159 | 3.88 | 34.60 | 2.02 | 59 | 500 | 7.52 | 34.64 | 1.01 | 27.08 | 99 | 107 | 0.86 |
| | | | | | 600 | 6.90 | 34.60 | 1.32 | 27.14 | 93 | 102 | 0.96 |
| | | | | | 700 | 6.23 | 34.58 | 1.38 | 27.22 | 86 | 96 | 1.06 |
| | | | | | 800 | 5.59 | 34.56 | 1.65 | 27.28 | 80 | 90 | 1.15 |
| | | | | | 1000 | 4.53 | 34.56 | 2.07 | 27.41 | 68 | 78 | 1.32 |

35

HORIZON; May 28, 1958; 0255 GCT; 0°02.5'N, 94°51'W; sounding, 1794 fm; wind, 200°, force 1; weather, clear; sea, moderate; wire angle, 18°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.62 | 34.98 | 4.61 | 415 | 0 | 23.62 | 34.98 | 4.61 | 23.77 | 414 | 414 | 0.00 |
| 9 | 22.70 | 34.97 | 4.31 | 390 | 10 | 22.50 | 34.98 | 4.24 | 24.08 | 384 | 384 | 0.04 |
| 23 | 20.76 | 35.05 | 3.81 | 333 | 20 | 21.35 | 35.02 | 3.95 | 24.43 | 351 | 352 | 0.08 |
| 42 | 17.74 | 35.14 | 3.29 | 252 | 30 | 19.90 | 35.10 | 3.62 | 24.88 | 308 | 309 | 0.11 |
| 66 | 15.92 | 34.98 | 3.19 | 223 | 50 | 16.70 | 35.00 | 3.22 | 25.60 | 240 | 242 | 0.16 |
| 103 | 14.70 | 35.09 | 3.12 | 190 | 75 | 15.61 | 35.02 | 3.19 | 25.87 | 214 | 216 | 0.22 |
| 139 | 14.20 | 35.05 | 2.93 | 181 | 100 | 14.76 | 35.09 | 3.13 | 26.11 | 191 | 194 | 0.27 |
| 175 | 13.71a) | 34.98 | 2.71 | 177 | 125 | 14.48 | 35.08 | 3.06 | 26.16 | 186 | 190 | 0.32 |
| 218 | 13.52 | 34.97 | 2.56 | 175 | 150 | 14.01 | 35.03 | 2.87 | 26.23 | 180 | 184 | 0.37 |
| 265 | 12.02 | 34.90 | 1.04 | 151 | 175 | 13.71 | 34.98 | 2.71 | 26.26 | 177 | 182 | 0.41 |
| 310 | 11.18 | 34.84 | 0.67 | 141 | 200 | 13.60 | 34.97 | 2.63 | 26.27 | 176 | 181 | 0.46 |
| 418 | 9.18 | 34.72 | 0.52 | 117 | 225 | 13.47 | 34.97 | 2.51 | 26.30 | 173 | 179 | 0.50 |
| 527 | 7.80 | 34.67 | 0.76 | 101 | 250 | 12.60 | 34.93 | 1.68 | 26.44 | 160 | 166 | 0.55 |
| 637 | 6.47r | 34.60 | 1.25 | (88) | 275 | 11.90 | 34.89 | 0.99 | 26.54 | 150 | 157 | 0.59 |
| 843 | 5.38 | 34.55 | 1.77 | 79 | 300 | 11.43 | 34.86 | 0.77 | 26.61 | 144 | 151 | 0.63 |
| 1027 | 4.48 | 34.52 | 1.80 | 71 | 400 | 9.56 | 34.74 | 0.52 | 26.84 | 122 | 130 | 0.77 |
| 1245 | 3.50 | 34.56 | 2.12 | 59 | 500 | 8.03 | 34.68 | 0.68 | 27.04 | 103 | 112 | 0.89 |
| | | | | | 600 | 7.06 | 34.60 | 1.13 | 27.12 | 95 | 105 | 1.00 |
| | | | | | 700 | 6.22 | 34.58 | 1.50 | 27.22 | 86 | 96 | 1.10 |
| | | | | | 800 | 5.61 | 34.56 | 1.71 | 27.27 | 81 | 91 | 1.19 |
| | | | | | 1000 | 4.55 | 34.52 | 1.80 | 27.37 | 72 | 82 | 1.36 |
| | | | | | 1200 | 3.77 | 34.55 | 2.01 | 27.47 | 62 | 72 | 1.52 |

a) Alternate value, 13.25°C.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | cl/ton | dyn m |
| **36** | HORIZON; May 29, 1958; 0153 GCT; 0°04'N, 91°51'W; sounding, 1724 fm; wind, 090°, force 1; weather, partly cloudy; sea, slight; wire angle, 06°. | | | | | | | | | | | | |
| 0 | 21.88 | 35.14 | 5.34 | | 355 | 0 | 21.88 | 35.14 | 5.34 | 24.39 | 355 | 355 | 0.00 |
| 10 | 18.82 | 35.10 | 3.60 | | 281 | 10 | 18.82 | 35.10 | 3.60 | 25.17 | 281 | 281 | 0.03 |
| 25 | 18.64 | 35.07 | 3.63 | | 279 | 20 | 18.71 | 35.08 | 3.62 | 25.18 | 280 | 281 | 0.06 |
| 45 | 18.06 | 35.04 | 3.46 | | 267 | 30 | 18.63 | 35.07 | 3.63 | 25.19 | 279 | 280 | 0.09 |
| 69 | 16.40 | 34.93 | 3.20 | | 238 | 50 | 18.04 | 35.04 | 3.45 | 25.32 | 266 | 268 | 0.14 |
| 109 | 15.02 | 34.98 | 3.20 | | 204 | 75 | 16.38 | 34.93 | 3.20 | 25.62 | 238 | 240 | 0.21 |
| 150 | 14.98 | 35.08 | 3.17 | | 197 | 100 | 15.20 | 34.96 | 3.20 | 25.92 | 209 | 212 | 0.26 |
| 189 | 14.96 | 35.08 | 3.01 | | 195 | 125 | 15.01 | 35.02 | 3.19 | 26.01 | 201 | 205 | 0.31 |
| 239 | 14.56 | 35.05 | 2.75 | | 190 | 150 | 14.98 | 35.08 | 3.17 | 26.07 | 195 | 199 | 0.37 |
| 302 | 11.70 | 34.85 | 1.00 | | 150 | 175 | 14.97 | 35.08 | 3.07 | 26.08 | 194 | 199 | 0.42 |
| 341 | 10.92 | 34.80 | 0.33 | | 140 | 200 | 14.95 | 35.08 | 3.00 | 26.08 | 194 | 200 | 0.46 |
| 464 | 9.00 | 34.70 | 0.56 | | 116 | 225 | 14.87 | 35.08 | 2.93 | 26.09 | 193 | 200 | 0.51 |
| 586 | 7.32 | 34.59 | 1.16 | | 100 | 250 | 14.26 | 35.03 | 2.72 | 26.18 | 185 | 192 | 0.56 |
| 710 | 6.46 | 34.59 | 1.32 | | 89 | 275 | 13.27 | 34.97 | 2.41 | 26.33 | 170 | 177 | 0.61 |
| 937 | 4.67 | 34.53 | 1.93 | | 72 | 300 | 11.77 | 34.86 | 1.06 | 26.54 | 150 | 157 | 0.65 |
| 1133 | 3.92 | 34.58 | 1.84 | | 61 | 400 | 9.92 | 34.74 | 0.41 | 26.79 | 127 | 135 | 0.80 |
| 1360 | 3.23 | 34.59 | 2.16 | | 54 | 500 | 8.47 | 34.70 | 0.73 | 26.99 | 108 | 117 | 0.92 |
| | | | | | | 600 | 7.19 | 34.59 | 1.19 | 27.09 | 98 | 108 | 1.04 |
| | | | | | | 700 | 6.49 | 34.59 | 1.31 | 27.19 | 89 | 99 | 1.14 |
| | | | | | | 800 | 5.81 | 34.57 | 1.61 | 27.26 | 82 | 92 | 1.24 |
| | | | | | | 1000 | 4.42 | 34.55 | 1.89 | 27.41 | 68 | 78 | 1.41 |
| | | | | | | 1200 | 3.68 | 34.58 | 1.96 | 27.51 | 58 | 68 | 1.55 |
| **37** | HORIZON; May 30, 1958; 0115 GCT; 0°04.5'N, 88°55.5'W; sounding, 1286 fm; wind, 140°, force 1; weather, overcast; sea, slight; wire angle, 12°. | | | | | | | | | | | | |
| 0 | 22.66 | 35.05 | 4.45 | | 383 | 0 | 22.66 | 35.05 | 4.45 | 24.09 | 383 | 383 | 0.00 |
| 10 | 22.24 | 35.03 | 4.68 | | 373 | 10 | 22.24 | 35.03 | 4.68 | 24.20 | 373 | 373 | 0.04 |
| 24 | 20.98 | 35.04 | 4.17 | | 339 | 20 | 21.09 | 35.04 | 4.23 | 24.53 | 341 | 342 | 0.07 |
| 44 | 19.90 | 35.07 | 3.83 | | 310 | 30 | 20.86 | 35.04 | 4.15 | 24.59 | 336 | 337 | 0.11 |
| 69 | 16.97 | 35.16 | 2.92 | | 233 | 50 | 19.82 | 35.08 | 3.81 | 24.89 | 307 | 309 | 0.17 |
| 108 | 15.64 | 35.08 | 2.84 | | 210 | 75 | 16.90 | 35.16 | 2.94 | 25.68 | 232 | 234 | 0.24 |
| 147 | 14.61 | 34.99 | 2.68 | | 196 | 100 | 16.10 | 35.11 | 2.89 | 25.83 | 218 | 221 | 0.30 |
| 186 | 14.42 | 35.01 | 2.41 | | 190 | 125 | 15.01 | 35.01 | 2.78 | 26.00 | 202 | 206 | 0.35 |
| 235 | 13.09 | 34.94 | 1.32 | | 169 | 150 | 14.59 | 34.99 | 2.67 | 26.08 | 194 | 198 | 0.40 |
| 299 | 11.84 | 34.87 | 0.51 | | 151 | 175 | 14.47 | 35.00 | 2.52 | 26.11 | 191 | 196 | 0.45 |
| 338 | 10.86 | 34.81 | 0.54 | | 137 | 200 | 14.20 | 35.00 | 2.21 | 26.16 | 186 | 192 | 0.50 |
| 460 | 8.28 | 34.64 | 0.61 | | 110 | 225 | 13.53 | 34.96 | 1.79 | 26.27 | 176 | 182 | 0.55 |
| 583 | 7.28 | 34.61 | 0.91 | | 98 | 250 | 12.75 | 34.92 | 0.91 | 26.40 | 164 | 170 | 0.59 |
| 707 | 6.32 | 34.59 | 1.10 | | 87 | 275 | 12.27 | 34.90 | 0.59 | 26.48 | 156 | 163 | 0.63 |
| 934 | 4.86 | 34.58 | 1.56 | | 71 | 300 | 11.83 | 34.87 | 0.51 | 26.54 | 150 | 157 | 0.67 |
| 1131 | 4.16 | 34.58 | 1.87 | | 63 | 400 | 9.53 | 34.70 | 0.55 | 26.82 | 124 | 132 | 0.82 |
| 1358 | 3.40 | 34.59 | 1.99 | | 56 | 500 | 7.94 | 34.62 | 0.72 | 27.01 | 106 | 115 | 0.94 |
| | | | | | | 600 | 7.08 | 34.60 | 0.94 | 27.11 | 96 | 106 | 1.05 |
| | | | | | | 700 | 6.41 | 34.59 | 1.09 | 27.19 | 89 | 99 | 1.15 |
| | | | | | | 800 | 5.83 | 34.58 | 1.25 | 27.27 | 81 | 91 | 1.25 |
| | | | | | | 1000 | 4.57 | 34.58 | 1.72 | 27.42 | 67 | 77 | 1.42 |
| | | | | | | 1200 | 3.82 | 34.58 | 1.94 | 27.50 | 59 | 69 | 1.56 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | cl/ton | cl/ton | dyn m |
| STRANGER; August 15, 1958; 1520, 1636 GCT; 5°00'N, 107°26'W; sounding, 2150 fm; wind, 340°, 9 kt; weather, slight drizzle; sea, rough; wire angle, 37°, 45°. | | | | | | | | | | | 1 |
| 0 | 24.80 | 34.22 | 2.79u | 503 | 0 | 24.80 | 34.22 | | 503 | 503 | 0.00 |
| 42 | 24.46 | 34.26 | 2.74u | 490 | 10 | 24.74 | 34.22 | | 502 | 502 | 0.05 |
| 65 | 24.22 | 34.36 | 2.11u | 477 | 20 | 24.67 | 34.23 | | 499 | 500 | 0.10 |
| 87 | 23.65 | 34.49 | 2.07u | 451 | 30 | 24.58 | 34.24 | | 496 | 497 | 0.15 |
| 100 | 23.03 | 34.62 | 2.52u | 424 | 50 | 24.38 | 34.29 | | 486 | 488 | 0.25 |
| 111 | 22.63 | 34.70 | 2.36u | 408 | 75 | 24.01 | 34.41 | | 470 | 473 | 0.37 |
| 126 | 22.39 | 34.78 | 3.10 | 394 | 100 | 23.03 | 34.62 | | 425 | 428 | 0.48 |
| 167 | 15.41 | 34.79 | 0.92 | 237 | 150 | 20.80 | 34.78 | 2.73 | 354 | 359 | 0.68 |
| 206 | 13.68 | 34.88 | 0.72 | 183 | 200 | 13.83 | 34.88 | 0.73 | 188 | 193 | 0.82 |
| 241 | 13.10 | 34.88 | 0.85 | 173 | 250 | 12.88 | 34.87 | 0.91 | 170 | 176 | 0.91 |
| | | | | | 300 | 11.23 | 34.72 | 1.24 | 151 | 158 | 0.99 |
| 319 | 10.88 | 34.69 | 1.25 | 146 | 400 | 9.80 | 34.65 | 0.76 | 132 | 140 | 1.14 |
| 393 | 9.88 | 34.65 | 0.80 | 133 | 500 | 8.57 | 34.62 | 0.17 | 115 | 125 | 1.27 |
| 466 | 9.06 | 34.63 | 0.27 | 122 | 600 | 7.28 | 34.55 | 0.15 | 102 | 112 | 1.39 |
| 541 | 7.90 | 34.60 | 0.10 | 107 | 700 | 6.30 | 34.54 | 0.48 | 90 | 100 | 1.50 |
| 610 | 7.17 | 34.55 | 0.16 | 101 | 800 | 5.48 | 34.53 | 0.84 | 81 | 91 | 1.59 |
| 676 | 6.57 | 34.56 | 0.32 | 92 | 1000 | 4.45 | 34.53 | 1.13 | 70 | 80 | 1.76 |
| 755 | 5.76 | 34.52 | 0.77 | 85 | | | | | | | |
| 919 | 4.82 | 34.54 | 0.97 | 73 | | | | | | | |
| 1089 | 4.10 | 34.53 | 1.26 | 67 | | | | | | | |
| STRANGER; August 15, 1958; 0014, 0130, 0230 GCT; 6°00'N, 107°22.5'W; sounding, 2180 fm; wind, 240°, 9 kt; weather, partly cloudy; sea, missing; wire angle, 41°, 44°, 46°. | | | | | | | | | | | 2 |
| 0 | 26.78 | 34.07 | 4.59 | 572 | 0 | 26.78 | 34.07 | 4.59 | 573 | 573 | 0.00 |
| 20 | 26.79 | 34.07 | 4.62 | 572 | 10 | 26.78 | 34.07 | 4.60 | 573 | 573 | 0.06 |
| 38 | 24.98 | 34.31 | 4.65 | 501 | 20 | 26.79 | 34.07 | 4.62 | 573 | 574 | 0.11 |
| 59 | 23.81 | 34.51 | 4.45 | 454 | 30 | 26.20 | 34.14 | 4.64 | 550 | 551 | 0.17 |
| 77 | 22.43 | 34.77 | 4.43 | 397 | 50 | 24.30 | 34.42 | 4.50 | 475 | 476 | 0.27 |
| 92 | 22.08 | 34.81 | 4.35 | 384 | 75 | 22.57 | 34.74 | 4.44 | 403 | 406 | 0.38 |
| 105 | 21.08 | 34.85 | 4.33 | 355 | 100 | 21.38 | 34.85 | 4.34 | 364 | 367 | 0.48 |
| | | | | | 150 | 17.55 | 34.72 | 2.01 | 279 | 284 | 0.64 |
| 141 | 18.96 | 34.78 | 2.46 | 308 | 200 | 11.99 | 34.68 | 1.37 | 167 | 172 | 0.76 |
| 175 | 13.47 | 34.61 | 1.50 | 200 | 250 | 10.62 | 34.69 | 1.10 | 143 | 148 | 0.84 |
| 225 | 11.08 | 34.70 | 1.33 | 149 | 300 | 10.06 | 34.68 | 0.79 | 134 | 140 | 0.91 |
| | | | | | 400 | 9.18 | 34.65 | 0.42 | 122 | 130 | 1.04 |
| 520 | 8.08 | 34.60 | 0.24 | 110 | 500 | 8.28 | 34.61 | 0.25 | 112 | 121 | 1.17 |
| 649 | 6.62 | 34.53 | 0.33 | 95 | 600 | 7.20 | 34.54 | 0.28 | 102 | 112 | 1.29 |
| 729 | 5.96 | 34.56 | 0.39 | 84 | 700 | 6.17 | 34.55 | 0.36 | 88 | 98 | 1.39 |
| 918 | 4.87 | 34.54 | 0.80 | 74 | 800 | 5.46 | 34.56 | 0.61 | 79 | 89 | 1.48 |
| STRANGER; August 16, 1958; 1030, 1245 GCT; 7°00'N, 107°25'W; sounding, 2190 fm; wind, 190°, 15 kt; weather, cloudy; sea, moderate; wire angle, 26°, 35°. | | | | | | | | | | | 3 |
| 0 | 26.80 | 34.11 | 4.49 | 570 | 0 | 26.80 | 34.11 | 4.49 | 570 | 570 | 0.00 |
| 99 | 21.74 | 34.81 | 3.34 | 376 | 10 | 26.74 | 34.12 | 4.48 | 568 | 568 | 0.06 |
| 120 | 17.36 | 34.68 | 2.11 | 277 | 20 | 26.64 | 34.14 | 4.47 | 563 | 564 | 0.11 |
| 141 | 15.22 | 34.63 | 1.66 | 233 | 30 | 26.53 | 34.18 | 4.47 | 557 | 558 | 0.17 |
| 163 | 13.22 | 34.76 | 0.33 | 184 | 50 | 26.28 | 34.23 | 4.46 | 546 | 548 | 0.28 |
| 181 | 12.52 | 34.78 | 0.31 | 170 | 75 | 25.41 | 34.40 | 4.40 | 508 | 511 | 0.41 |
| 201 | 11.82 | 34.76 | 0.47 | 159 | 100 | 21.03 | 34.80 | 3.12 | 358 | 362 | 0.52 |
| 242 | 11.01 | 34.70 | 0.72 | 148 | 150 | 14.55 | 34.66 | 1.32 | 218 | 222 | 0.67 |
| 301 | 10.18 | 34.67 | 0.81 | 136 | 200 | 11.84 | 34.76 | 0.46 | 159 | 163 | 0.76 |
| 357 | 9.65 | 34.65 | 0.76 | 129 | 250 | 10.90 | 34.70 | 0.75 | 147 | 152 | 0.84 |
| | | | | | 300 | 10.20 | 34.67 | 0.80 | 137 | 144 | 0.92 |
| 959 | 5.07r | 34.52r | 0.64 | | | | | | | | |
| 1204 | 4.00r | 34.54r | 1.01 | | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | cl/ton | cl/ton | dyn m |
| 4 | STRANGER; August 16, 1958; 2057 GCT; 8°00'N, 107°20'W; sounding, 2010 fm; wind, 180°, 12 kt; weather, cloudy; sea, rough; wire angle, 12°. | | | | | | | | | | |
| 0 | 27.23 | 33.14 | 4.58 | 653 | 0 | 27.23 | 33.14 | 4.58 | 653 | 653 | 0.00 |
| 61 | 26.93 | 33.84 | 4.32 | 594 | 10 | 27.20 | 33.45 | 4.54 | 630 | 630 | 0.06 |
| 85 | 23.75 | 34.72 | 4.16 | 437 | 20 | 27.17 | 33.52 | 4.51 | 624 | 625 | 0.13 |
| 108 | 21.30 | 34.63 | 3.03 | 377 | 30 | 27.12 | 33.58 | 4.47 | 618 | 619 | 0.19 |
| 130 | 14.78 | 34.68 | 0.69 | 221 | 50 | 27.03 | 33.75 | 4.41 | 603 | 605 | 0.31 |
| 172 | 12.31 | 34.74 | 0.34 | 169 | 75 | 26.37 | 34.05 | 4.31 | 562 | 565 | 0.46 |
| 221 | 11.36 | 34.72 | 0.48 | 153 | 100 | 22.05 | 34.64 | 3.39 | 397 | 400 | 0.58 |
| 265 | 10.84 | 34.70 | 0.76 | 145 | 150 | 13.20 | 34.73 | 0.40 | 186 | 190 | 0.73 |
| 331 | 10.06 | 34.68 | 0.51 | 134 | 200 | 11.80 | 34.73 | 0.39 | 160 | 165 | 0.81 |
| 396 | 9.59 | 34.68 | 0.51 | 126 | 250 | 10.97 | 34.70 | 0.72 | 148 | 154 | 0.89 |
| 529 | 7.85 | 34.55 | 0.27a) | 110 | 300 | 10.38 | 34.68 | 0.63 | 139 | 146 | 0.97 |
| | | | | | 400 | 9.54 | 34.68 | 0.52 | 126 | 134 | 1.11 |
| | | | | | 500 | 8.26 | 34.59 | 0.32 | 113 | 122 | 1.24 |
| 5 | STRANGER; August 17, 1958; 1558 GCT; 9°00'N, 107°23'W; sounding, 1910 fm; wind, 200°, 12 kt; weather, moderate drizzle; sea, rough; wire angle, 32°. | | | | | | | | | | |
| 0 | 27.58 | 33.12 | 4.43 | 664 | 0 | 27.58 | 33.12 | 4.43 | 666 | 666 | 0.00 |
| 37 | 27.30 | 33.43 | 4.58 | 634 | 10 | 27.54 | 33.20 | 4.45 | 658 | 659 | 0.07 |
| 49 | 26.10 | 34.23 | 4.84 | 541 | 20 | 27.49 | 33.26 | 4.48 | 653 | 653 | 0.13 |
| 73 | 24.16 | 34.61 | 4.31 | 457 | 30 | 27.41 | 33.35 | 4.52 | 644 | 645 | 0.20 |
| 92 | 22.73 | 34.66 | 3.82 | 413 | 50 | 25.75 | 34.32 | 4.76 | 524 | 526 | 0.31 |
| 147 | 13.01 | 34.77 | 0.09 | 180 | 75 | 24.07 | 34.61 | 4.30 | 454 | 457 | 0.44 |
| 187 | 12.05 | 34.76 | 0.19 | 162 | 100 | 20.90 | 34.69 | 2.36 | 363 | 366 | 0.54 |
| 224 | 11.56 | 34.75 | 0.37 | 154 | 150 | 12.90 | 34.77 | 0.10 | 178 | 181 | 0.68 |
| 280 | 10.96 | 34.69 | 0.23 | 148 | 200 | 11.91 | 34.76 | 0.27 | 160 | 165 | 0.76 |
| 335 | 10.22 | 34.66 | 0.24 | 138 | 250 | 11.27 | 34.72 | 0.32 | 152 | 157 | 0.84 |
| | | | | | 300 | 10.68 | 34.67 | 0.24 | 145 | 152 | 0.92 |
| 6 | STRANGER; August 18, 1958; 0150, 0423 GCT; 10°00'N, 107°23'W; sounding, 1500 fm; wind, 210°, 13 kt; weather, intermittent slight drizzle; sea, moderate; wire angle, 29°, 24°. | | | | | | | | | | |
| 0 | 27.83 | 33.28 | 4.38 | 661 | 0 | 27.83 | 33.28 | 4.40 | 662 | 662 | 0.00 |
| 42 | 27.27 | 33.96 | 4.39 | 594 | 10 | 27.75 | 33.54 | 4.41 | 640 | 641 | 0.07 |
| 72 | 17.24 | 34.69 | 0.78 | 274 | 20 | 27.60 | 33.70 | 4.39 | 624 | 625 | 0.13 |
| 93 | 14.98 | 34.72 | 0.36 | 222 | 30 | 27.47 | 33.81 | 4.38 | 612 | 614 | 0.19 |
| 113 | 13.64 | 34.78 | 0.18 | 191 | 50 | 25.45 | 34.14 | 4.06 | 528 | 530 | 0.30 |
| 184 | 12.07 | 34.81 | 0.39 | 159 | 75 | 16.92 | 34.70 | 0.66 | 266 | 268 | 0.40 |
| 246 | 11.42 | 34.71 | 0.36 | 155 | 100 | 14.22 | 34.81 | 0.26 | 200 | 203 | 0.46 |
| 1267 | 3.50 | 34.53 | 1.17 | 60 | 150 | 12.80 | 34.81 | 0.31 | 173 | 176 | 0.56 |
| 1619 | 2.71 | 34.58 | 1.69 | 50 | 200 | 11.95 | 34.76 | 0.32 | 161 | 165 | 0.64 |
| | | | | | 250 | 11.37 | 34.73 | 0.32 | 152 | 158 | 0.72 |
| 0 | 27.84 | 33.37 | 4.40 | 656 | 300 | 10.54 | 34.72 | 0.37 | 139 | 146 | 0.80 |
| 45 | 26.55 | 34.05 | 4.48 | 567 | 400 | 9.41 | 34.62 | 0.28 | 128 | 136 | 0.94 |
| 64 | 21.05 | 34.43 | 1.91 | 386 | 500 | 7.86 | 34.53 | 0.12 | 112 | 120 | 1.07 |
| 85 | 15.94 | 34.73 | 0.44 | 242 | 600 | 6.80 | 34.51 | 0.08 | 99 | 108 | 1.18 |
| 107 | 13.73 | 34.81 | 0.23 | 191 | 700 | 6.00 | 34.51 | 0.15 | 89 | 98 | 1.29 |
| 184 | 12.20 | 34.79 | 0.33 | 163 | 800 | 5.17 | 34.52 | 0.43 | 79 | 88 | 1.38 |
| 249 | 11.39 | 34.73 | 0.31 | 152 | 1000 | 4.31 | 34.52 | 0.81 | 69 | 79 | 1.55 |
| 315 | 10.29 | 34.72 | 0.36 | 134 | 1200 | 3.67 | 34.53 | 1.11 | 62 | 72 | 1.70 |
| 382 | 9.68 | 34.66 | 0.32 | 129 | 1500 | 3.02 | 34.56 | 1.50 | 54 | 65 | 1.90 |
| 522 | 7.54 | 34.52 | 0.11 | 108 | | | | | | | |
| 668 | 6.26 | 34.51 | 0.08 | 92 | | | | | | | |

a) Alternate value, 0.23 ml/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | cl/ton | cl/ton | dyn m |
| STRANGER; August 18, 1958; 1517 GCT; 9°00'N, 106°57.5'W; sounding, 1900 fm; wind, 210°, 9 kt; weather, overcast; sea, very rough; wire angle, 30°. | | | | | | | | | | | 7 |
| 0 | 27.44 | 33.01 | 4.56 | 669 | 0 | 27.44 | 33.01 | 4.56 | 669 | 669 | 0.00 |
| 31 | 27.46 | 33.21 | 4.44 | 654 | 10 | 27.44 | 33.07 | 4.52 | 665 | 665 | 0.07 |
| 47 | 25.90 | 34.33 | 4.49 | 528 | 20 | 27.45 | 33.14 | 4.48 | 660 | 661 | 0.13 |
| 71 | 23.87 | 34.69 | 4.16 | 442 | 30 | 27.46 | 33.20 | 4.45 | 656 | 657 | 0.20 |
| 92 | 19.90 | 34.55 | 2.12 | 348 | 50 | 25.44 | 34.48 | 4.47 | 503 | 505 | 0.32 |
| 170 | 12.20 | 34.76 | 0.31 | 165 | 75 | 23.46 | 34.66 | 4.15 | 434 | 436 | 0.43 |
| 232 | 11.39 | 34.70 | 0.35 | 154 | 100 | 17.50 | 34.69 | 1.15 | 280 | 283 | 0.52 |
| 292 | 10.84 | 34.70 | 0.33 | 146 | 150 | 12.73 | 34.76 | 0.32 | 175 | 179 | 0.64 |
| 350 | 10.14 | 34.67 | 0.56 | 137 | 200 | 11.77 | 34.72 | 0.34 | 160 | 165 | 0.72 |
| 487 | 8.01 | 34.54 | 0.23 | 113 | 250 | 11.18 | 34.70 | 0.33 | 151 | 157 | 0.80 |
| 623 | 6.47 | 34.49 | 0.16 | 96 | 300 | 10.74 | 34.70 | 0.35 | 144 | 151 | 0.88 |
| 741 | 5.63 | 34.47 | 0.23 | 87 | 400 | 9.40 | 34.62 | 0.44 | 128 | 136 | 1.03 |
| 859 | 4.78 | 34.49 | 0.65 | 77 | 500 | 7.83 | 34.53 | 0.22 | 111 | 120 | 1.15 |
| 978 | 4.44 | 34.50 | 1.16 | 72 | 600 | 6.68 | 34.50 | 0.17 | 98 | 107 | 1.27 |
| 1175 | 3.76 | 34.54 | 1.31 | 63 | 700 | 5.89 | 34.47 | 0.18 | 91 | 100 | 1.37 |
| 1382 | 3.27 | 34.52 | 1.51 | 59 | 800 | 5.18 | 34.48 | 0.42 | 82 | 91 | 1.47 |
| 1694 | 2.63 | 34.56 | 1.85 | 51 | 1000 | 4.38 | 34.50 | 1.19 | 72 | 82 | 1.64 |
| | | | | | 1200 | 3.67 | 34.53 | 1.35 | 62 | 72 | 1.79 |
| | | | | | 1500 | 3.01 | 34.53 | 1.66 | 56 | 67 | 2.00 |
| STRANGER; August 19, 1958; 0123, 0255 GCT; 8°00'N, 106°57.5'W; sounding, 2100 fm; wind, 210°, 18 kt; weather, partly cloudy; sea, rough; wire angle, 29°, 35°. | | | | | | | | | | | 8 |
| 0 | 27.24 | 33.62 | 4.49 | 619 | 0 | 27.24 | 33.62 | 4.49 | 619 | 619 | 0.00 |
| 63 | 26.98 | 33.80 | 4.51 | 598 | 10 | 27.21 | 33.64 | 4.49 | 617 | 617 | 0.06 |
| 71 | 25.75 | 34.56 | 4.27 | 506 | 20 | 27.18 | 33.67 | 4.50 | 614 | 614 | 0.12 |
| 93 | 23.54 | 34.72 | 4.06 | 431 | 30 | 27.14 | 33.70 | 4.50 | 610 | 611 | 0.18 |
| 127 | 15.10 | 34.67 | 0.84 | 228 | 50 | 27.03 | 33.76 | 4.51 | 602 | 604 | 0.31 |
| 179 | 12.30 | 34.74 | 0.48 | 169 | 75 | 25.43 | 34.62 | 4.26 | 493 | 496 | 0.44 |
| 240 | 10.97 | 34.71 | 0.52 | 147 | 100 | 21.57 | 34.71 | 3.03 | 379 | 382 | 0.55 |
| 304 | 10.28 | 34.70 | 0.63 | 136 | 150 | 13.70 | 34.73 | 0.62 | 196 | 200 | 0.70 |
| 368 | 9.73 | 34.63 | 0.45 | 132 | 200 | 11.68 | 34.73 | 0.48 | 158 | 163 | 0.79 |
| 506 | 8.22 | 34.57 | 0.13 | 114 | 250 | 10.83 | 34.71 | 0.55 | 145 | 150 | 0.87 |
| 642 | 6.50 | 34.51 | 0.23 | 95 | 300 | 10.31 | 34.70 | 0.62 | 137 | 143 | 0.94 |
| 762 | 5.67 | 34.49 | 0.43 | 86 | 400 | 9.42 | 34.61 | 0.38 | 129 | 137 | 1.08 |
| 882 | 5.03 | 34.52 | 0.57 | 77 | 500 | 8.32 | 34.57 | 0.14 | 115 | 124 | 1.21 |
| 1003 | 4.50 | 34.52 | 0.84 | 71 | 600 | 7.07 | 34.53 | 0.18 | 101 | 110 | 1.33 |
| 1211 | 3.74 | - | 1.22 | | 700 | 6.03 | 34.49 | 0.36 | 91 | 100 | 1.43 |
| | | | | | 800 | 5.46 | 34.50 | 0.46 | 83 | 93 | 1.53 |
| 1255 | 3.67 | 34.56 | 1.20 | 60 | 1000 | 4.50 | 34.52 | 0.84 | 71 | 82 | 1.71 |
| 1480 | 3.04 | 34.55 | 1.31 | 56 | 1200 | 3.78 | 34.56 | 1.22 | 61 | 71 | 1.86 |
| 1665 | 2.70 | 34.61 | 1.99 | 47 | 1500 | 3.00 | 34.55 | 1.45 | 55 | 65 | 2.06 |
| 1816 | 2.38 | 34.58 | 2.19 | 47 | | | | | | | |
| STRANGER; August 19, 1958; 1249 GCT; 7°00'N, 107°21'W; sounding, missing; wind, 200°, 14 kt; weather, overcast; sea, very rough; wire angle, 18°. | | | | | | | | | | | 9 |
| 0 | 26.82 | 34.17 | 4.60 | 567 | 0 | 26.82 | 34.17 | 4.60 | 567 | 567 | 0.00 |
| 91 | 25.62 | 34.40 | 4.23 | 515 | 10 | 26.80 | 34.18 | 4.58 | 565 | 566 | 0.06 |
| 114 | 19.65 | 34.76 | 2.85 | 326 | 20 | 26.72 | 34.19 | 4.57 | 565 | 566 | 0.11 |
| 135 | 15.60 | 34.64 | 1.97 | 241 | 30 | 26.61 | 34.21 | 4.54 | 557 | 559 | 0.17 |
| 153 | 14.27 | 34.61 | 1.58 | 216 | 50 | 26.39 | 34.25 | 4.47 | 548 | 550 | 0.28 |
| 188 | 11.93 | 34.64 | 1.37 | 169 | 75 | 26.00 | 34.32 | 4.34 | 531 | 534 | 0.42 |
| 259 | 10.63 | 34.70 | 1.37 | 142 | 100 | 23.75 | 34.58 | 3.71 | 447 | 451 | 0.54 |
| 328 | 9.88 | 34.68 | 0.84 | 131 | 150 | 14.34 | 34.61 | 1.62 | 218 | 222 | 0.71 |
| 397 | 9.42 | 34.65 | 0.57 | 126 | 200 | 11.63 | 34.66 | 1.40 | 162 | 167 | 0.80 |
| 552 | 7.91 | 34.58 | 0.30 | 109 | 250 | 10.75 | 34.70 | 1.40 | 144 | 150 | 0.88 |
| 707 | 6.39 | 34.64r | 0.43 | (84) | 300 | 10.12 | 34.69 | 1.02 | 134 | 141 | 0.96 |
| 842 | 5.54 | 34.54 | 0.67 | 81 | 400 | 9.40 | 34.65 | 0.55 | 126 | 134 | 1.09 |
| 978 | 4.84 | 34.51 | 0.74 | 76 | 500 | 8.51 | 34.59 | 0.36 | 117 | 126 | 1.22 |
| 1115 | 4.18 | 34.52 | 0.90 | 68 | 600 | 7.30 | 34.56 | 0.31 | 102 | 112 | 1.34 |
| 1344 | 3.36 | 34.56 | 1.50 | 57 | 700 | 6.40 | 34.56 | 0.42 | 90 | 100 | 1.45 |
| 1574 | 2.91 | 34.57 | 1.87 | 52 | 800 | 5.77 | 34.54 | 0.62 | 84 | 94 | 1.54 |
| 1901 | 2.32 | 34.59 | 2.16 | 46 | 1000 | 4.70 | 34.51 | 0.77 | 74 | 85 | 1.72 |
| | | | | | 1200 | 3.83 | 34.54 | 1.11 | 63 | 74 | 1.88 |
| | | | | | 1500 | 3.06 | 34.57 | 1.77 | 54 | 64 | 2.09 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\delta_T$ | Z | T | S | $O_2$ | $\delta_T$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | cl/ton | m | °C | ‰ | ml/L | cl/ton | cl/ton | dyn m |
| 10 | STRANGER; August 19, 1958; 2315 GCT; 6°00'N, 107°26'W; sounding, 2155 fm; wind, 190°, 18 kt; weather, overcast; sea, high; wire angle, 45°. | | | | | | | | | | |
| 6 | 26.64 | 34.09 | 4.45 | 567 | 0 | (26.64) | (34.09) | (4.45) | (567) | (567) | (0.00) |
| 41 | 25.94 | 34.20 | 4.55 | 538 | 10 | 26.58 | 34.10 | 4.46 | 564 | 565 | 0.06 |
| 51 | 25.46 | 34.22 | 4.61 | 522 | 20 | 26.42 | 34.12 | 4.48 | 558 | 559 | 0.11 |
| 84 | 24.20 | 34.60 | 4.15 | 459 | 30 | 26.21 | 34.15 | 4.50 | 550 | 551 | 0.17 |
| 116 | 21.23 | 34.72 | 3.54 | 369 | 50 | 25.48 | 34.22 | 4.61 | 523 | 525 | 0.28 |
| 151 | 16.18 | 34.64 | 1.87 | 253 | 75 | 24.67 | 34.43 | 4.37 | 484 | 487 | 0.40 |
| 187 | 13.65 | 34.61 | 1.54 | 204 | 100 | 22.72 | 34.66 | 3.71 | 413 | 417 | 0.52 |
| 235 | 11.22 | 34.67 | 1.68a) | 154 | 150 | 16.20 | 34.64 | 1.88 | 254 | 259 | 0.68 |
| 277 | 10.51 | 34.65 | 1.15 | 143 | 200 | 12.72 | 34.64 | 1.63 | 184 | 188 | 0.80 |
| 397 | 9.24 | 34.64 | 0.50 | 124 | 250 | 10.91 | 34.66 | 1.43 | 150 | 155 | 0.88 |
| 514 | 7.96 | 34.58 | 0.23 | 109 | 300 | 10.28 | 34.65 | 1.01 | 140 | 146 | 0.96 |
| 620 | 6.98 | 34.54 | 0.38 | 99 | 400 | 9.21 | 34.64 | 0.47 | 124 | 131 | 1.10 |
| 726 | 6.10 | 34.52 | 0.51 | 90 | 500 | 8.10 | 34.59 | 0.23 | 111 | 120 | 1.22 |
| 836 | 5.33 | 34.52 | 0.55 | 80 | 600 | 7.15 | 34.55 | 0.33 | 100 | 110 | 1.34 |
| 1023 | 4.42 | 34.50 | 1.09 | 72 | 700 | 6.31 | 34.52 | 0.51 | 92 | 102 | 1.44 |
| 1224 | 3.69 | 34.54 | 1.46 | 61 | 800 | 5.57 | 34.52 | 0.54 | 83 | 93 | 1.54 |
| 1528 | 2.91 | 34.54 | 1.85 | 54 | 1000 | 4.50 | 34.50 | 1.02 | 73 | 83 | 1.72 |
| | | | | | 1200 | 3.78 | 34.54 | 1.42 | 63 | 73 | 1.87 |
| | | | | | 1500 | 2.99 | 34.54 | 1.84 | 55 | 66 | 2.08 |
| 11 | STRANGER; August 20, 1958; 1113, 1247 GCT; 4°55'N, 106°57'W; sounding, 2105 fm; wind, 180°, 18 kt; weather, cloudy; sea, very rough; wire angle, 39°, 33°. | | | | | | | | | | |
| 6 | 24.80 | 34.30 | 4.65 | 497 | 0 | (24.80) | (34.30) | (4.65) | (498) | (498) | (0.00) |
| 64 | 24.68 | 34.28 | 4.30 | 495 | 10 | 24.79 | 34.30 | 4.60 | 497 | 498 | 0.05 |
| 74 | 23.75 | 34.42 | 4.61 | 459 | 20 | 24.77 | 34.29 | 4.37 | 497 | 498 | 0.10 |
| 92 | 23.58 | 34.52 | 4.52 | 447 | 30 | 24.74 | 34.29 | 4.34 | 496 | 498 | 0.15 |
| 123 | 22.52 | 34.72 | 4.36 | 403 | 50 | 24.70 | 34.28 | 4.30 | 496 | 498 | 0.25 |
| 170 | 15.36 | 34.84 | 1.81 | 221 | 75 | 23.74 | 34.42 | 4.60 | 459 | 462 | 0.37 |
| 210 | 13.14 | 34.87 | 1.29 | 175 | 100 | 23.50 | 34.53 | 4.50 | 444 | 448 | 0.49 |
| 255 | 12.33 | 34.85 | 0.77 | 161 | 150 | 18.30 | 34.80 | 2.66 | 291 | 296 | 0.67 |
| 311 | 11.20 | 34.71 | 0.91 | 151 | 200 | 13.57 | 34.87 | 1.43 | 183 | 188 | 0.79 |
| 438 | 9.48 | 34.63 | 0.44 | 128 | 250 | 12.40 | 34.85 | 0.78 | 162 | 168 | 0.88 |
| 574 | 7.38 | 34.51 | 0.20 | 106 | 300 | 11.41 | 34.73 | 0.92 | 153 | 160 | 0.96 |
| 699 | 6.12 | 34.52 | 0.52 | 90 | 400 | 9.98 | 34.66 | 0.56 | 134 | 143 | 1.11 |
| 828 | 5.32 | 34.48 | 0.76 | 83 | 500 | 8.51 | 34.57 | 0.25 | 118 | 127 | 1.25 |
| 958 | 4.63 | 34.47 | 1.09 | 76 | 600 | 7.12 | 34.51 | 0.25 | 103 | 113 | 1.37 |
| | | | | | 700 | 6.11 | 34.52 | 0.53 | 90 | 99 | 1.47 |
| 992 | 4.42 | 34.47 | 1.21 | 74 | 800 | 5.53 | 34.49 | 0.69 | 85 | 95 | 1.57 |
| 1125 | 4.02 | 34.49 | 1.42 | 69 | 1000 | 4.40 | 34.47 | 1.24 | 74 | 84 | 1.75 |
| 1349 | 3.42 | 34.52 | 1.58 | 61 | 1200 | 3.82 | 34.50 | 1.47 | 66 | 76 | 1.91 |
| 1577 | 2.90 | 34.56 | 1.95 | 53 | 1500 | 3.00 | 34.56 | 1.90 | 54 | 64 | 2.12 |
| 1904 | 2.44 | 34.57 | 2.18 | 49 | | | | | | | |

a) Alternate value, 1.73 ml/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; April 25, 1958; 1905 GCT; 25°26'N, 119°09.5'W; sounding, 2200 fm; wind, 350°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.[a] 2

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.08 | 34.14 | 4.93 | 0 | 19.08 | 34.14 | 4.93 | 24.36 | 358 | 0.00 |
| 11 | 19.06 | 34.14 | 4.98 | 10 | 19.07 | 34.14 | 4.97 | 24.37 | 357 | 0.04 |
| 31 | 18.98 | 34.14 | 4.94 | 20 | 19.02 | 34.14 | 4.96 | 24.38 | 356 | 0.07 |
| 54 | 18.60 | 34.14 | 4.97 | 30 | 18.99 | 34.14 | 4.95 | 24.39 | 355 | 0.11 |
| 69 | 18.56 | 34.22 | 4.95 | 50 | 18.63 | 34.14 | 4.96 | 24.47 | 347 | 0.18 |
| 82 | 18.40 | 34.20 | 4.88 | 75 | 18.47 | 34.21 | 4.90 | 24.57 | 338 | 0.26 |
| 97 | 15.00 | 33.78 | 4.88 | 100 | 14.30 | 33.76 | 4.80 | 25.18 | 279 | 0.34 |
| 122 | 13.39 | 33.73 | 4.60 | | | | | | | |

SPENCER F. BAIRD; April 26, 1958; 1525 GCT; 23°10'N, 119°42'W; sounding, 2095 fm; wind, 010°, force 3; weather, cloudy; sea, rough; wire angle, 20°. 4

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.25 | 34.45 | 5.15 | 0.38 | 0 | 20.25 | 34.45 | 5.15 | 24.30 | 364 | 0.00 |
| 9 | 20.24 | 34.43 | 5.30 | 0.42 | 10 | 20.24 | 34.43 | 5.32 | 24.29 | 365 | 0.04 |
| 28 | 20.24 | 34.44 | 5.30 | 0.42 | 20 | 20.24 | 34.43 | 5.32 | 24.29 | 365 | 0.07 |
| 56 | 18.98 | 34.20 | 5.61 | 0.49 | 30 | 20.22 | 34.43 | 5.32 | 24.30 | 364 | 0.11 |
| 69 | 18.98 | 34.29 | 5.40 | 0.48b) | 50 | 20.22 | 34.43 | 5.33 | 24.30 | 364 | 0.18 |
| 87 | 18.67 | 34.29 | 4.44 | 0.45 | 75 | 18.87 | 34.29 | 4.88 | 24.54 | 341 | 0.27 |
| 100 | 17.56 | 34.13 | 5.46 | 0.55 | 100 | 17.56 | 34.13 | 5.46 | 24.74 | 322 | 0.36 |
| 121 | 14.25 | 33.89 | 4.62 | (0.004)b) | 150 | 11.34 | 33.71 | 4.18 | 25.73 | 227 | 0.49 |
| 147 | 11.47 | 33.70 | 4.24 | 1.47b) | 200 | 9.78 | 34.06 | 2.51 | 26.28 | 175 | 0.60 |
| 174 | 10.41 | 33.88 | 3.14 | 2.13b) | 250 | 9.25 | 34.24 | 1.66 | 26.50 | 154 | 0.68 |
| 202 | 9.75 | 34.07 | 2.50 | 2.46 | 300 | 8.79 | 34.33 | 1.06 | 26.65 | 140 | 0.76 |
| 263 | 9.16 | 34.28 | 1.46 | 3.30b) | 400 | 7.62 | 34.40 | 0.37 | 26.88 | 118 | 0.89 |
| 358 | 8.10 | 34.39 | 0.53 | 3.33b) | 500 | 6.70 | 34.42 | 0.21 | 27.03 | 104 | 1.01 |
| 484 | 6.84 | 34.42 | 0.21 | 3.86b) | 600 | 6.00 | 34.46 | 0.21 | 27.15 | 93 | 1.12 |
| 726 | 5.30 | 34.49 | 0.26 | 4.07 | 700 | 5.42 | 34.48 | 0.24 | 27.24 | 84 | 1.21 |
| 1077 | 3.97 | 34.54 | 0.44 | 4.17b) | 800 | 4.98 | 34.50 | 0.29 | 27.30 | 78 | 1.30 |
| | | | | | 1000 | 4.25 | 34.53 | 0.40 | 27.41 | 68 | 1.46 |

SPENCER F. BAIRD; April 27, 1958; 1821 GCT; 21°13'N, 117°23'W; sounding, 2115 fm; wind, 360°, force 2; weather, cloudy; sea, rough; wire angle, 13°. 6

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.22 | 34.56 | 5.24 | 0.38 | 0 | 21.22 | 34.56 | 5.24 | 24.11 | 381 | 0.00 |
| 10 | 21.08 | 34.56 | 5.22 | 0.50 | 10 | 21.08 | 34.56 | 5.22 | 24.15 | 377 | 0.04 |
| 29 | 21.06 | 34.57 | 5.23 | 0.45 | 20 | 21.07 | 34.56 | 5.22 | 24.15 | 377 | 0.08 |
| 53 | 20.79 | 34.54 | 5.27 | 0.42c) | 30 | 21.05 | 34.57 | 5.24 | 24.16 | 376 | 0.11 |
| 68 | 20.63 | 34.53 | 5.32 | 0.43 | 50 | 20.82 | 34.54 | 5.26 | 24.21 | 372 | 0.19 |
| 81 | 19.33 | 34.29 | 5.45 | 0.44 | 75 | 20.04 | 34.41 | 5.42 | 24.32 | 361 | 0.28 |
| 95 | 17.85 | 34.08 | 5.30 | 0.59 | 100 | 17.17 | 34.00 | 5.13 | 24.74 | 322 | 0.37 |
| 117 | 14.07 | 33.81 | 4.09 | 1.22 | 150 | 12.11 | 34.00 | 2.47 | 25.81 | 220 | 0.50 |
| 144 | 12.30 | 33.94 | 2.74 | 1.87c) | 200 | 11.62 | 34.60 | 0.27 | 26.38 | 166 | 0.60 |
| 167 | 11.52 | 34.19 | 1.97 | 2.31 | 250 | 10.95 | 34.64 | 0.16 | 26.52 | 152 | 0.68 |
| 198 | 11.63 | 34.60 | 0.30 | 2.80 | 300 | 10.13 | 34.61 | 0.15 | 26.65 | 140 | 0.76 |
| 252 | 10.90 | 34.64 | 0.16 | 2.90c) | 400 | 8.68 | 34.54 | 0.17 | 26.83 | 123 | 0.89 |
| 348 | 9.42 | 34.57 | 0.19 | 3.04 | 500 | 7.40 | 34.51 | 0.10 | 27.00 | 107 | 1.02 |
| 467 | 7.80 | 34.51 | 0.12 | 3.27 | 600 | 6.40 | 34.51 | 0.04 | 27.14 | 94 | 1.12 |
| 708 | 5.74 | 34.51 | 0.05 | 3.46 | 700 | 5.78 | 34.51 | 0.05 | 27.22 | 86 | 1.22 |
| 1045 | 4.15 | 34.54 | 0.58 | 3.51 | 800 | 5.28 | 34.52 | 0.16 | 27.28 | 80 | 1.32 |
| | | | | | 1000 | 4.35 | 34.54 | 0.49 | 27.40 | 68 | 1.48 |

a) The hydrographic and biological data collected by Tuna Oceanography Research (STOR) of Scripps Institution on Cruise TO-58-1 (SCOT Expedition) have been published in U. S. Fish and Wildlife Service Special Scientific Report--Fisheries No. 345.

b) Duplicate values: 69 m, 0.90; 121 m, (0.06); 147 m, 1.88; 174 m, 2.03; 263 m, 2.73; 358 m, 3.43; 484 m, 3.52; 1077 m, 3.79 µg at/L.

c) Duplicate values: 53 m, 0.49; 144 m, 1.78; 252 m, 2.81 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 8 | SPENCER F. BAIRD; April 28, 1958; 1848 GCT; 18°41'N, 114°53'W; sounding, 1983 fm; wind, 020°, force 3; weather, clear; sea, moderate; wire angle, 15°. | | | | | | | | | | |
| 0 | 24.08 | 34.34 | 4.66 | 0.36 | 0 | 24.08 | 34.34 | 4.66 | 23.14 | 475 | 0.00 |
| 9 | 23.97 | 34.36 | 4.78 | 0.39 | 10 | 23.95 | 34.36 | 4.76 | 23.19 | 469 | 0.05 |
| 29 | 22.52 | 34.48 | 4.94 | 0.38 | 20 | 23.24 | 34.43 | 4.89 | 23.46 | 444 | 0.09 |
| 57 | 21.42 | 34.51 | 4.86 | 0.30a) | 30 | 22.45 | 34.48 | 4.96 | 23.72 | 419 | 0.14 |
| 71 | 20.95 | 34.47 | 5.02 | 0.31 | 50 | 21.45 | 34.51 | 5.10 | 24.01 | 391 | 0.22 |
| 89 | 19.30 | 34.26 | 5.12 | 0.42 | 75 | 20.67 | 34.43 | 5.08 | 24.17 | 375 | 0.31 |
| 103 | 16.47 | 34.05 | 3.52 | 1.33 | 100 | 17.17 | 34.09 | 4.08 | 24.80 | 316 | 0.40 |
| 125 | 13.60 | 34.08 | 2.19 | 2.05a) | 150 | 12.82 | 34.51 | 1.40 | 26.07 | 195 | 0.53 |
| 151 | 12.83 | 34.52 | 0.51 | 2.77 | 200 | 12.05 | 34.68 | 0.13 | 26.36 | 168 | 0.62 |
| 178 | 12.58 | 34.67 | 0.15 | 2.94a) | 250 | 11.39 | 34.71 | 0.08 | 26.50 | 154 | 0.70 |
| 210 | 11.86 | 34.69 | 0.13 | 2.98 | 300 | 10.80 | 34.70 | 0.05 | 26.60 | 145 | 0.78 |
| 273 | 11.14 | 34.72 | 0.05 | 3.08 | 400 | 9.41 | 34.61 | 0.05 | 26.76 | 130 | 0.92 |
| 371 | 9.82 | 34.63 | 0.05 | 3.16 | 500 | 7.90 | 34.55 | 0.07 | 26.95 | 111 | 1.05 |
| 502 | 7.86 | 34.55 | 0.07 | 3.41 | 600 | 6.85 | 34.53 | 0.09 | 27.09 | 98 | 1.17 |
| 747 | 5.66 | 34.52 | 0.19 | 3.54 | 700 | 5.98 | 34.52 | 0.16 | 27.20 | 88 | 1.27 |
| 1101 | 3.98 | 34.56 | 0.48 | 3.63 | 800 | 5.36 | 34.52 | 0.23 | 27.28 | 80 | 1.36 |
| | | | | | 1000 | 4.42 | 34.55 | 0.40 | 27.40 | 69 | 1.53 |
| 13 | SPENCER F. BAIRD; April 29, 1958; 2205 GCT; 18°08.5'N, 114°32'W; sounding, 2020 fm; wind, 020°, force 3; weather, cloudy; sea, slight; wire angle, 25°. | | | | | | | | | | |
| 0 | 24.24 | 34.31 | 4.92 | 0.35 | 0 | 24.24 | 34.31 | 4.92 | 23.07 | 481 | 0.00 |
| 9 | 24.20 | 34.31 | 4.78 | 0.35 | 10 | 24.20 | 34.31 | 4.80 | 23.09 | 479 | 0.05 |
| 28 | 24.06 | 34.31 | 4.88 | 0.35 | 20 | 24.12 | 34.31 | 4.84 | 23.11 | 477 | 0.10 |
| 54 | 22.82 | 34.49 | 4.92 | 0.38 | 30 | 23.40 | 34.39 | 4.92 | 23.38 | 451 | 0.14 |
| 65 | 22.48 | 34.47 | 5.00 | 0.40 | 50 | 22.90 | 34.48 | 4.92 | 23.59 | 431 | 0.23 |
| 82 | 20.92 | 34.41 | 5.18 | 0.47 | 75 | 21.74 | 34.44 | 5.11 | 23.89 | 402 | 0.34 |
| 94 | 19.00 | 34.23 | 4.72 | 0.70 | 100 | 16.53 | 34.10 | 3.46 | 24.96 | 301 | 0.42 |
| 113 | 14.51 | 34.08 | 2.51 | 1.88 | 150 | 12.69 | 34.54 | 0.66 | 26.12 | 190 | 0.55 |
| 135 | 13.76 | 34.51 | 0.52 | 2.73 | 200 | 11.84 | 34.70 | 0.20 | 26.41 | 163 | 0.64 |
| 158 | 12.53 | 34.58 | 0.66 | 2.76 | 250 | 11.00 | 34.69 | 0.07 | 26.56 | 149 | 0.72 |
| 186 | 12.04b) | 34.70 | 0.31 | 2.96 | 300 | 10.26 | 34.64 | 0.15 | 26.65 | 140 | 0.80 |
| 239 | 11.18 | 34.70 | 0.07 | 3.02 | 400 | 8.76 | 34.57 | 0.33 | 26.84 | 122 | 0.93 |
| 325 | 9.83 | 34.61 | 0.20 | 3.20 | 500 | 7.65 | 34.54 | 0.33 | 26.99 | 108 | 1.05 |
| 439 | 8.25 | 34.56 | 0.39 | 3.35 | 600 | 6.78 | 34.53 | 0.13 | 27.10 | 97 | 1.17 |
| 660 | 6.28 | 34.52 | 0.07 | 3.54 | 700 | 6.02 | 34.52 | 0.12 | 27.20 | 88 | 1.27 |
| 1000 | 4.49 | 34.53 | 0.46 | 3.64 | 800 | 5.47 | 34.52 | 0.25 | 27.26 | 82 | 1.36 |
| | | | | | 1000 | 4.49 | 34.53 | 0.46 | 27.38 | 71 | 1.53 |
| 15 | SPENCER F. BAIRD; April 30, 1958; 1840 GCT; 15°28.5'N, 112°23'W; sounding, 1847 fm; wind, 040°, force 2; weather, cloudy; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | 27.06 | 33.90 | 4.60 | 0.47c) | 0 | 27.06 | 33.90 | 4.60 | 21.89 | 593 | 0.00 |
| 10 | 26.82 | 33.91 | 4.66 | 0.43c) | 10 | 26.83 | 33.91 | 4.66 | 21.98 | 585 | 0.06 |
| 29 | 26.07 | 34.01 | 4.60 | 0.40 | 20 | 26.69 | 33.92 | 4.66 | 22.03 | 580 | 0.12 |
| 58 | 25.58 | 34.09 | 4.64 | 0.39 | 30 | 26.05 | 34.02 | 4.60 | 22.30 | 554 | 0.17 |
| 73 | 24.45 | 34.13 | 4.62 | 0.46 | 50 | 25.72 | 34.07 | 4.62 | 22.45 | 540 | 0.28 |
| 91 | 21.66 | 34.42 | 2.95 | 1.30 | 75 | 24.16 | 34.14 | 4.53 | 22.96 | 491 | 0.41 |
| 105 | 18.29 | 34.48 | 1.16 | 2.11 | 100 | 19.47 | 34.47 | 1.70 | 24.52 | 343 | 0.52 |
| 128 | 14.78 | 34.67 | 0.00 | 2.80 | 150 | 13.28 | 34.77 | 0.00 | 26.18 | 185 | 0.64 |
| 157 | 13.10 | 34.78 | 0.00 | 2.88 | 200 | 12.26 | 34.81 | 0.02 | 26.42 | 162 | 0.73 |
| 184 | 12.58 | 34.84 | 0.03 | 2.90 | 250 | 11.56 | 34.78 | 0.00 | 26.53 | 152 | 0.81 |
| 217 | 11.94 | 34.78 | 0.00 | 2.93 | 300 | 10.70 | 34.72 | 0.00 | 26.63 | 142 | 0.89 |
| 281 | 11.00 | 34.74 | 0.00 | 3.00 | 400 | 9.34 | 34.65 | 0.00 | 26.81 | 125 | 1.03 |
| 384 | 9.54 | 34.66 | 0.00 | 3.19 | 500 | 8.04 | 34.57 | 0.00 | 26.96 | 111 | 1.16 |
| 521 | 7.74 | 34.56 | 0.00 | 3.41 | 600 | 6.94 | 34.54 | 0.01 | 27.08 | 99 | 1.27 |
| 773 | 5.76 | 34.52 | 0.08 | 3.50 | 700 | 6.16 | 34.52 | 0.04 | 27.18 | 90 | 1.38 |
| 1135 | 4.04 | 34.56 | 0.61 | 3.41c) | 800 | 5.60 | 34.52 | 0.09 | 27.24 | 84 | 1.47 |
| | | | | | 1000 | 4.68 | 34.54 | 0.40 | 27.37 | 72 | 1.65 |

a) Duplicate values: 57 m, 0.40; 125 m, 1.97; 178 m, 2.86 µg at/L.
b) Alternate value, 11.81°C, uncertain.
c) Duplicate values: 0 m, 0.35; 10 m, 0.35; 1135 m, 3.60 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; May 1, 1958; 1745 GCT; 13°03'N, 110°44'W; sounding, 2230 fm; wind, 050°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°. 17

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.78 | 33.84 | 4.21 | 0.30 | 0 | 28.78 | 33.84 | 4.21 | 21.29 | 651 | 0.00 |
| 10 | 28.68 | 33.86 | 4.27 | 0.37a) | 10 | 28.68 | 33.86 | 4.27 | 21.33 | 646 | 0.06 |
| 29 | 28.49 | 33.82 | 4.00 | 0.32 | 20 | 28.60 | 33.84 | 4.08 | 21.35 | 645 | 0.13 |
| 59 | 28.09 | 33.84 | 4.20 | 0.33 | 30 | 28.48 | 33.82 | 4.02 | 21.37 | 642 | 0.19 |
| 73 | 27.24 | 33.86 | 4.60 | 0.44a) | 50 | 28.26 | 33.83 | 4.12 | 21.45 | 635 | 0.32 |
| 93 | 25.43 | 34.14 | 3.86 | 0.72 | 75 | 27.10 | 33.86 | 4.62 | 21.86 | 597 | 0.48 |
| 106 | 21.88 | 34.45 | 2.27 | 1.50 | 100 | 23.50 | 34.28 | 3.30 | 23.27 | 462 | 0.61 |
| 129 | 15.62 | 34.70 | 0.20 | 2.62 | 150 | 13.39 | 34.77 | 0.00 | 26.16 | 186 | 0.76 |
| 156 | 13.18 | 34.78 | 0.00 | 2.66a) | 200 | 12.00 | 34.81 | 0.00 | 26.46 | 158 | 0.85 |
| 183 | 12.39 | 34.83 | 0.00 | 2.81a) | 250 | 11.30 | 34.77 | 0.00 | 26.57 | 148 | 0.93 |
| 215 | 11.76 | 34.79 | 0.00 | 2.81 | 300 | 10.68 | 34.74 | 0.00 | 26.65 | 140 | 1.00 |
| 279 | 10.99 | 34.76 | 0.00 | 2.90 | 400 | 9.20 | 34.64 | 0.00 | 26.83 | 123 | 1.14 |
| 384 | 9.42 | 34.65 | 0.00 | 3.17 | 500 | 7.90 | 34.61 | 0.00 | 27.00 | 107 | 1.26 |
| 520 | 7.64 | 34.60 | 0.00 | 3.45 | 600 | 6.85 | 34.58 | 0.00 | 27.13 | 94 | 1.37 |
| 771 | 5.66 | 34.56 | 0.00 | 3.58 | 700 | 6.08 | 34.57 | 0.00 | 27.22 | 86 | 1.47 |
| 1128p | 4.06 | 34.60 | 0.51 | 3.60 | 800 | (5.52) | (34.56) | (0.00) | (27.29) | (79) | (1.56) |
| | | | | | 1000 | (4.62) | (34.58) | (0.30) | (27.40) | (69) | (1.73) |

SPENCER F. BAIRD; May 3, 1958; 1403 GCT; 10°14'N, 109°13.5'W; sounding, 1500 fm; wind, 080°, force 3; weather, partly cloudy; sea, moderate; wire angle, 32°. 23

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.58 | 33.46 | 3.33 | 0.26 | 0 | 29.58 | 33.46 | 3.33 | 20.75 | 704 | 0.00 |
| 8 | 29.58 | 33.44 | 3.40 | 0.30 | 10 | 29.60 | 33.45 | 3.40 | 20.73 | 706 | 0.07 |
| 25 | 29.60 | 33.46 | 3.43 | 0.33 | 20 | 29.60 | 33.45 | 3.42 | 20.73 | 706 | 0.14 |
| 46 | 28.91 | 33.84 | 3.42 | 0.35 | 30 | 29.55 | 33.58 | 3.47 | 20.84 | 694 | 0.21 |
| 53 | 28.68 | 33.81 | 4.47 | 0.32 | 50 | 28.90 | 33.83 | 3.53 | 21.26 | 654 | 0.34 |
| 61 | 28.72 | 34.04 | 4.44 | 0.37 | 75 | 26.80 | 33.92 | 4.30 | 21.99 | 584 | 0.50 |
| 73 | 27.31 | 33.89 | 4.40 | 0.39 | 100 | 20.10 | 34.53 | 1.84 | 24.40 | 354 | 0.62 |
| 82 | 24.95 | 34.02 | 3.58 | 0.86 | 150 | 12.83 | 34.85 | 0.00 | 26.33 | 170 | 0.74 |
| 99 | 20.38 | 34.51 | 1.95 | 1.74 | 200 | 11.69 | 34.76 | 0.00 | 26.48 | 156 | 0.82 |
| 116 | 16.23 | 34.72 | 0.36 | 2.42 | 250 | 11.10 | 34.73 | 0.00 | 26.57 | 148 | 0.90 |
| 138 | 13.16 | 34.81 | 0.00 | 2.72 | 300 | 10.38 | 34.71 | 0.00 | 26.68 | 137 | 0.97 |
| 174 | 12.04 | 34.78 | 0.00 | 2.81b) | 400 | 9.12 | 34.64 | 0.00 | 26.84 | 122 | 1.11 |
| 237 | 11.26 | 34.74 | 0.00 | 2.77 | 500 | 7.80 | 34.58 | 0.00 | 26.99 | 107 | 1.23 |
| 310 | 10.22 | 34.70 | 0.00 | 3.00 | 600 | 6.75 | 34.55 | 0.00 | 27.13 | 95 | 1.34 |
| 507 | 7.70 | 34.58 | 0.00 | 3.40 | 700 | 6.08 | 34.53 | 0.00 | 27.19 | 88 | 1.44 |
| 734 | 5.90 | 34.53 | 0.00 | 3.58 | | | | | | | |

SPENCER F. BAIRD; May 4, 1958; 1755 GCT; 10°22'N, 106°56'W; sounding, 1870 fm; wind, 050°, force 4; weather, partly cloudy; sea, moderate; wire angle, 25°. 28

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.49 | 33.84 | 3.88 | 0.31 | 0 | 29.49 | 33.84 | 3.88 | 21.06 | 674 | 0.00 |
| 8 | 29.44 | 33.82 | 3.91 | 0.34 | 10 | 29.44 | 33.83 | 3.92 | 21.06 | 674 | 0.07 |
| 27 | 29.44 | 33.83 | 3.93 | 0.35 | 20 | 29.43 | 33.83 | 3.93 | 21.06 | 674 | 0.13 |
| 53 | 29.06 | 34.09 | 3.99 | 0.34 | 30 | 29.40 | 33.87 | 3.97 | 21.11 | 669 | 0.20 |
| 65 | 28.20 | 34.12 | 4.44 | 0.38 | 50 | 29.06 | 34.09 | 4.04 | 21.38 | 643 | 0.33 |
| 81 | 23.84 | 34.22 | 3.66 | 0.99 | 75 | 26.00 | 34.14 | 4.21 | 22.41 | 544 | 0.48 |
| 92 | 19.42 | 34.60 | 1.70 | 1.92c) | 100 | 16.02 | 34.65 | 0.78 | 25.49 | 250 | 0.58 |
| 111 | 14.81 | 34.79 | 0.19 | 2.52 | 150 | 12.38 | 34.83 | 0.32 | 26.41 | 163 | 0.68 |
| 131 | 12.92 | 34.87 | 0.18 | 2.62c) | 200 | 11.71 | 34.80 | 0.30 | 26.51 | 153 | 0.76 |
| 154 | 12.30 | 34.83 | 0.35 | 2.56 | 250 | 11.18 | 34.78 | 0.38 | 26.59 | 146 | 0.84 |
| 178 | 11.96 | 34.81 | 0.29 | 2.64 | 300 | 10.63 | 34.75 | 0.39 | 26.66 | 139 | 0.92 |
| 232 | 11.38 | 34.79 | 0.36 | 2.66 | 400 | 9.77 | 34.71 | 0.44 | 26.79 | 127 | 1.06 |
| 312 | 10.54 | 34.74 | 0.39 | 2.63 | 500 | 8.62 | 34.65 | 0.38 | 26.91 | 115 | 1.18 |
| 425 | 9.52 | 34.70 | 0.49 | 2.91 | 600 | 7.44 | 34.59 | 0.09 | 27.05 | 102 | 1.30 |
| 648 | 6.96 | 34.57 | 0.00 | 3.13c) | 700 | 6.55 | 34.56 | 0.10 | 27.16 | 92 | 1.41 |
| 982 | 4.72 | 34.56 | 1.03 | 2.74 | 800 | 5.88 | 34.56 | 0.41 | 27.24 | 84 | 1.51 |
| | | | | | 1000 | (4.60) | (34.56) | (1.09) | (27.39) | (69) | (1.68) |

a) Duplicate values: 10 m, 0.30; 73 m, 0.51; 156 m, 2.77; 183 m, 2.74 µg at/L.
b) Duplicate value, 2.74 µg at/L.
c) Duplicate values: 92 m, 1.82; 131 m, 2.54; 648 m, 2.89 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 30 | SPENCER F. BAIRD; May 5, 1958; 1743 GCT; 10°14'N, 103°53.5'W; sounding, 1600 fm; wind, 070°, force 2; weather, cloudy; sea, moderate; wire angle, 25°. | | | | | | | | | | |
| 0 | 29.83 | 33.96 | 4.26 | 0.42a) | 0 | 29.83 | 33.96 | 4.26 | 21.03 | 676 | 0.00 |
| 9 | 29.65 | 33.94 | 4.42 | 0.36 | 10 | 29.64 | 33.94 | 4.44 | 21.07 | 672 | 0.07 |
| 27 | 28.70 | 33.77 | 4.34 | 0.36 | 20 | 29.51 | 33.90 | 4.45 | 21.09 | 669 | 0.13 |
| 48 | 27.10 | 33.89 | 4.28 | 0.42 | 30 | 28.43 | 33.78 | 4.32 | 21.35 | 646 | 0.20 |
| 57 | 24.40 | 34.23 | 3.69 | 0.80 | 50 | 26.72 | 33.95 | 4.25 | 22.05 | 578 | 0.32 |
| 65 | 22.02 | 34.29 | 2.27 | 1.56a) | 75 | 20.00 | 34.50 | 1.48 | 24.40 | 354 | 0.44 |
| 79 | 19.25 | 34.61 | 1.28 | 1.98 | 100 | 15.83 | 34.75 | 0.45 | 25.62 | 238 | 0.52 |
| 89 | 17.18 | 34.72 | 0.74 | 1.52a) | 150 | 13.01 | 34.84 | 0.29 | 26.28 | 175 | 0.62 |
| 115 | 14.56 | 34.79 | 0.26 | 2.44 | 200 | 12.07 | 34.84 | 0.41 | 26.47 | 157 | 0.70 |
| 137 | 13.40 | 34.81 | 0.27 | 2.47 | 250 | 11.44 | 34.82 | 0.41 | 26.57 | 147 | 0.78 |
| 170 | 12.60 | 34.85 | 0.33 | 2.40a) | 300 | 10.93 | 34.79 | 0.19 | 26.65 | 140 | 0.86 |
| 223 | 11.77 | 34.83 | 0.46 | 2.48 | 400 | 9.70 | 34.71 | 0.01 | 26.80 | 126 | 1.00 |
| 315 | 10.76 | 34.78 | 0.11 | 2.69 | 500 | 8.48 | 34.65 | 0.00 | 26.95 | 112 | 1.12 |
| 427 | 9.34 | 34.69 | 0.00 | 2.98a) | 600 | 7.36 | 34.61 | 0.03 | 27.08 | 99 | 1.24 |
| 709 | 6.16 | 34.57 | 0.10 | 3.22a) | 700 | 6.25 | 34.57 | 0.08 | 27.20 | 88 | 1.34 |
| 975 | 4.74 | 34.58 | 0.48 | 3.42 | 800 | 5.48 | 34.57 | 0.24 | 27.29 | 80 | 1.44 |
| | | | | | 1000 | (4.64) | (34.58) | (0.50) | (27.40) | (68) | (1.60) |
| 32 | SPENCER F. BAIRD; May 6, 1958; 1740 GCT; 10°07.5'N, 100°40.5'W; sounding, 1878 fm; wind, 070°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | |
| 0 | 29.78 | 33.53 | 4.28 | 0.28 | 0 | 29.78 | 33.53 | 4.28 | 20.73 | 705 | 0.00 |
| 10 | 29.65 | 33.55 | 4.20 | 0.32 | 10 | 29.65 | 33.55 | 4.20 | 20.78 | 700 | 0.07 |
| 30 | 29.63 | 33.62 | 4.28 | 0.33 | 20 | 29.64 | 33.59 | 4.23 | 20.82 | 696 | 0.14 |
| 60 | 29.33 | 34.15 | 4.33 | 0.38 | 30 | 29.63 | 33.62 | 4.28 | 20.85 | 694 | 0.21 |
| 75 | 28.02 | 34.34 | 4.23 | 0.43 | 50 | 29.43 | 34.02 | 4.31 | 21.19 | 660 | 0.34 |
| 94 | 22.04 | 34.59 | 3.27 | 1.05 | 75 | 28.02 | 34.34 | 4.23 | 21.91 | 592 | 0.50 |
| 109 | 18.48 | 34.73 | 2.19 | 1.82 | 100 | 19.35 | 34.70 | 2.46 | 24.74 | 322 | 0.62 |
| 133 | 14.78 | 34.81 | 1.35 | 2.61 | 150 | 13.59 | 34.83 | 1.26 | 26.16 | 186 | 0.74 |
| 161 | 13.02 | 34.85 | 1.20 | 2.60 | 200 | 12.39 | 34.87 | 1.17 | 26.43 | 161 | 0.83 |
| 189 | 12.54 | 34.86 | 1.29 | 2.58b) | 250 | 11.85 | 34.85 | 0.53 | 26.52 | 152 | 0.91 |
| 221 | 12.18 | 34.88 | 0.83 | 2.66 | 300 | 11.28 | 34.78 | 0.27 | 26.57 | 148 | 0.99 |
| 285 | 11.43 | 34.79 | 0.33 | 2.68 | 400 | 9.90 | 34.74 | 0.00 | 26.79 | 127 | 1.13 |
| 388 | 10.10 | 34.75 | 0.00 | 3.04 | 500 | 8.14 | 34.63 | 0.00 | 26.97 | 110 | 1.26 |
| 523 | 7.77 | 34.60 | 0.00 | 3.49 | 600 | 6.90 | 34.58 | 0.03 | 27.12 | 95 | 1.37 |
| 780 | 5.52 | 34.58 | 0.17 | 3.63 | 700 | 6.07 | 34.58 | 0.11 | 27.23 | 85 | 1.47 |
| 1143 | 3.88 | 34.59 | 0.70 | 3.49 | 800 | 5.42 | 34.58 | 0.17 | 27.31 | 77 | 1.56 |
| | | | | | 1000 | 4.48 | 34.58 | 0.49 | 27.42 | 67 | 1.72 |
| 34 | SPENCER F. BAIRD; May 7, 1958; 1743 GCT; 9°44'N, 97°14'W; sounding, 2078 fm; wind, 080°, force 1; weather, cloudy; sea, rough; wire angle, 03°. | | | | | | | | | | |
| 0 | 29.70 | 33.98 | 4.28 | 0.40 | 0 | 29.70 | 33.98 | 4.28 | 21.08 | 670 | 0.00 |
| 5 | 29.58 | 33.96 | 4.25 | 0.40 | 10 | 29.54 | 33.96 | 4.29 | 21.12 | 667 | 0.07 |
| 10 | 29.54 | 33.96 | 4.29 | 0.38 | 20 | 29.50 | 33.96 | 4.26 | 21.15 | 665 | 0.13 |
| 20 | 29.50 | 33.96 | 4.26 | 0.40 | 30 | 26.28 | 34.02 | 4.58 | 22.23 | 561 | 0.20 |
| 25 | 27.91 | 33.89 | 4.71 | 0.40 | 50 | 20.60 | 34.55 | 2.37 | 24.28 | 365 | 0.29 |
| 35 | 24.86 | 34.14 | 4.17 | 0.74 | 75 | 15.29 | 34.76 | 0.83 | 25.74 | 227 | 0.36 |
| 55 | 19.04 | 34.67 | 1.77 | 1.86 | 100 | 14.00 | 34.88 | 0.36 | 26.11 | 191 | 0.42 |
| 74 | 15.37 | 34.76 | 0.85 | 2.33c) | 150 | 12.65 | 34.87 | 0.30 | 26.38 | 166 | 0.50 |
| 99 | 14.01 | 34.88 | 0.36 | 2.41c) | 200 | 11.61 | 34.78 | 0.49 | 26.51 | 153 | 0.59 |
| 160 | 12.06 | 34.80 | 0.55 | 2.44c) | 250 | 11.09 | 34.77 | 0.37 | 26.61 | 144 | 0.66 |
| 304 | 10.45 | 34.75 | 0.22 | 2.81c) | 300 | 10.50 | 34.75 | 0.25 | 26.70 | 136 | 0.74 |
| 416 | 8.73 | 34.65 | 0.04 | 3.33 | 400 | 8.98 | 34.66 | 0.03 | 26.88 | 118 | 0.87 |
| 631 | 6.13 | 34.58 | 0.03 | 3.62 | 500 | 7.44 | 34.61 | 0.00 | 27.06 | 101 | 0.99 |
| 833 | 5.00 | 34.54 | 0.33 | 3.62c) | 600 | 6.42 | 34.58 | 0.01 | 27.20 | 88 | 1.09 |
| 1030 | 4.16 | 34.58 | 0.65 | 3.51c) | 700 | 5.75 | 34.57 | 0.12 | 27.26 | 82 | 1.19 |
| 1140 | 3.76 | 34.58 | 0.83 | 3.54 | 800 | 5.18 | 34.54 | 0.28 | 27.31 | 77 | 1.27 |
| | | | | | 1000 | 4.28 | 34.57 | 0.60 | 27.44 | 65 | 1.44 |

a) Duplicate values: 0 m, 0.34; 65 m, 1.49; 89 m, 2.16; 170 m, 2.48; 427 m, 3.14; 709 m, 3.34 µg at/L.
b) Duplicate value, 2.36 µg at/L.
c) Duplicate values: 74 m, 2.40; 99 m, 2.51; 160 m, 2.53; 304 m, 2.71; 833 m, 3.70; 1030 m, 3.58 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |

37

SPENCER F. BAIRD; May 9, 1958; 1650 GCT; 5°10'N, 95°53.5'W; sounding, 2328 fm; wind, 180°, force 3; weather, drizzle; sea, rough; wire angle, 09°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.32 | 32.12 | 3.84 | 0.32a) | 0 | 29.32 | 32.12 | 3.84 | 19.82 | 792 | 0.00 |
| 5 | 29.31 | 32.10 | 3.89 | - | 10 | 29.34 | 32.09 | 4.11 | 19.80 | 795 | 0.08 |
| 10 | 29.34 | 32.09 | 4.11 | 0.34 | 20 | 29.44 | 32.82 | 4.59 | 20.30 | 746 | 0.16 |
| 20 | 29.44 | 32.82 | 4.59 | 0.36 | 30 | 28.16 | 33.59 | 4.58 | 21.30 | 650 | 0.23 |
| 25 | 29.14 | 33.58 | 4.56 | 0.40 | 50 | 22.13 | 34.68 | 3.27 | 23.96 | 396 | 0.33 |
| 35 | 27.60 | 33.76 | 4.61 | 0.46 | 75 | 17.77 | 34.95 | 1.87 | 25.31 | 267 | 0.42 |
| 53 | 21.98 | 34.72 | 3.21 | 1.11 | 100 | 15.80 | 34.95 | 1.46 | 25.78 | 223 | 0.48 |
| 72 | 18.06 | 34.95 | 1.96 | 1.66 | 150 | 13.80 | 34.93 | 1.01 | 26.19 | 184 | 0.58 |
| 95 | 16.14 | 34.95 | 1.56 | 1.76 | 200 | 13.28 | 34.90 | 0.86 | 26.28 | 175 | 0.67 |
| 146 | 13.90 | 34.93 | 1.05 | 2.11 | 250 | 12.74 | 34.86 | 0.68 | 26.36 | 168 | 0.76 |
| 290 | 12.26 | 34.83 | 0.56 | 2.43a) | 300 | 12.12 | 34.82 | 0.53 | 26.45 | 159 | 0.84 |
| 384 | 10.64 | 34.72 | 0.44 | 2.68 | 400 | 10.40 | 34.71 | 0.40 | 26.68 | 137 | 1.00 |
| 575 | 7.28 | 34.59 | 0.00 | 3.29 | 500 | 8.60 | 34.63 | 0.14 | 26.92 | 114 | 1.14 |
| 769 | 5.56 | 34.55 | 0.54 | 3.36 | 600 | 6.97 | 34.58 | 0.04 | 27.12 | 96 | 1.25 |
| 960 | 4.60 | 34.54 | 1.11 | 3.17 | 700 | 6.06 | 34.56 | 0.33 | 27.22 | 86 | 1.35 |
| 1065 | 4.20 | 34.56 | 1.34 | 2.76a) | 800 | 5.37 | 34.55 | 0.65 | 27.29 | 79 | 1.44 |
| | | | | | 1000 | 4.45 | 34.55 | 1.22 | 27.40 | 69 | 1.61 |

38

SPENCER F. BAIRD; May 10, 1958; 0211 GCT; 4°15'N, 95°52'W; sounding, 1870 fm; wind, 180°, force 4; weather, cloudy; sea, rough; wire angle, 21°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.02 | 31.83 | 4.61u | 0.27 | 0 | 29.02 | 31.83 | | 19.70 | 803 | 0.00 |
| 4 | 29.00 | 31.82 | 3.18 | 0.31 | 10 | 29.01 | 31.82 | 3.39 | 19.70 | 804 | 0.08 |
| 9 | 29.02 | 31.82 | 3.40 | 0.30 | 20 | 29.10 | 31.83 | 3.50 | 19.68 | 806 | 0.16 |
| 16 | 29.05 | 31.82 | 3.15 | 0.30 | 30 | 27.40 | 32.74 | 3.73 | 20.90 | 687 | 0.24 |
| 23 | 29.10 | 31.91 | 3.79 | 0.30 | 50 | 21.20 | 34.55 | 2.95 | 24.13 | 379 | 0.34 |
| 41 | 23.58 | 34.22 | 3.55 | 0.77 | 75 | 17.38 | 34.91 | 1.44 | 25.39 | 260 | 0.42 |
| 58 | 19.22 | 34.76 | 2.34 | 1.48 | 100 | 16.00 | 34.96 | 1.13 | 25.74 | 226 | 0.48 |
| 80 | 16.99 | 34.94 | 1.28 | 1.79 | 150 | 13.67 | 34.95 | 1.10 | 26.24 | 179 | 0.59 |
| 146 | 13.70 | 34.95 | 1.13 | 2.09 | 200 | 13.07 | 34.91 | 0.90 | 26.33 | 170 | 0.68 |
| 239 | 12.59 | 34.88 | 0.66 | 2.20b) | 250 | 12.38 | 34.87 | 0.57 | 26.44 | 160 | 0.76 |
| 391 | 9.60 | 34.71 | 0.21 | 2.90 | 300 | 11.49 | 34.81 | 0.40 | 26.56 | 148 | 0.84 |
| | | | | | 400 | (9.40) | (34.70) | (0.21) | (26.84) | (122) | (0.98) |

39

SPENCER F. BAIRD; May 10, 1958; 0550 GCT; 4°49'N, 95°54'W; sounding, 1680 fm; wind, 140°, force 3; weather, overcast; sea, rough; wire angle, 19°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.20 | 32.17 | 4.40 | 0.28 | 0 | 29.20 | 32.17 | 4.40 | 19.90 | 785 | 0.00 |
| 4 | 29.19 | 32.19 | 4.30 | 0.31 | 10 | 29.23 | 32.18 | 4.24 | 19.90 | 785 | 0.08 |
| 9 | 29.22 | 32.18 | 4.23 | 0.28 | 20 | 29.26 | 32.22 | 4.41 | 19.91 | 783 | 0.16 |
| 16 | 29.22 | 32.19 | 4.34 | 0.32 | 30 | 29.10 | 32.94 | 4.48 | 20.52 | 726 | 0.23 |
| 23 | 29.28 | 32.24 | 4.48 | 0.30 | 50 | 23.47 | 34.46 | 4.21 | 23.40 | 449 | 0.35 |
| 41 | 24.68 | 34.14 | 4.40 | 0.62 | 75 | 17.65 | 34.97 | 2.23 | 25.36 | 263 | 0.44 |
| 59 | 20.37 | 34.76 | 2.98 | 1.03 | 100 | 15.92 | 35.00 | 1.77 | 25.79 | 222 | 0.50 |
| 82 | 17.02 | 35.01 | 2.01 | 1.60c) | 150 | 14.17 | 34.96 | 1.48 | 26.14 | 188 | 0.60 |
| 154 | 14.03 | 34.95 | 1.46 | 2.06 | 200 | 13.30 | 34.93 | 1.15 | 26.30 | 174 | 0.70 |
| 252 | 12.59 | 34.90 | 0.75 | 2.16c) | 250 | 12.60 | 34.90 | 0.77 | 26.42 | 162 | 0.78 |
| 409 | 10.32 | 34.74 | 0.25 | 2.76 | 300 | 11.89 | 34.86 | 0.48 | 26.52 | 152 | 0.87 |
| | | | | | 400 | 10.46 | 34.75 | 0.26 | 26.70 | 136 | 1.02 |

a) Duplicate values: 0 m, 0.39; 290 m, 2.36; 1065 m, 3.17 µg at/L.
b) Duplicate value, 2.44 µg at/L.
c) Duplicate values: 82 m, 1.33; 252 m, 2.44 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 40 | SPENCER F. BAIRD; May 10, 1958; 0928 GCT; 5°24'N, 95°55'W; sounding, 1900 fm; wind, 210°, force 1; weather, overcast; sea, slight; wire angle, 08°. | | | | | | | | | | |
| 0 | 29.20 | 32.02 | 4.55 | 0.38 | 0 | 29.20 | 32.02 | 4.55 | 19.78 | 796 | 0.00 |
| 5 | 29.20 | 32.03 | 4.48 | 0.35 | 10 | 29.22 | 32.06 | 4.58 | 19.82 | 793 | 0.08 |
| 10 | 29.22 | 32.06 | 4.58 | 0.32 | 20 | 29.22 | 33.65 | 4.70 | 21.00 | 679 | 0.16 |
| 18 | 29.24 | 33.33 | 4.71 | 0.37 | 30 | 25.50 | 34.29 | 4.63 | 22.64 | 522 | 0.22 |
| 25 | 29.58 | 34.16 | 4.88 | 0.40 | 50 | 23.00 | 34.66 | 3.92 | 23.70 | 420 | 0.32 |
| 44 | 24.55 | 34.54 | 4.46 | 0.67 | 75 | 18.57 | 34.97 | 2.40 | 25.14 | 284 | 0.41 |
| 64 | 19.41 | 34.93 | 2.68 | 1.47 | 100 | 16.53 | 35.00 | 1.80 | 25.65 | 235 | 0.47 |
| 87 | 17.32 | 34.99 | 2.00 | 1.71 | 150 | 14.13 | 34.99 | 1.38 | 26.18 | 185 | 0.58 |
| 162 | 13.78 | 34.98 | 1.33 | 2.00 | 200 | 13.30 | 34.96 | 1.18 | 26.32 | 171 | 0.67 |
| 261 | 12.50 | 34.92 | 0.85 | 2.23 | 250 | 12.66 | 34.93 | 0.92 | 26.43 | 161 | 0.76 |
| 421 | 9.92 | 34.76 | 0.21 | 2.34 | 300 | 11.93 | 34.88 | 0.65 | 26.54 | 151 | 0.84 |
| | | | | | 400 | 10.27 | 34.78 | 0.28 | 26.76 | 130 | 0.99 |
| 41 | SPENCER F. BAIRD; May 10, 1958; 1257 GCT; 5°58'N, 95°56'W; sounding, 1950 fm; wind, 240°, force 1; weather, overcast; sea, moderate; wire angle, 13°. | | | | | | | | | | |
| 0 | 29.24 | 32.17 | 4.40 | 0.33 | 0 | 29.24 | 32.17 | 4.40 | 19.88 | 787 | 0.00 |
| 5 | 29.26 | 32.18 | 4.45 | 0.36 | 10 | 29.34 | 32.23 | 4.58 | 19.90 | 784 | 0.08 |
| 10 | 29.34 | 32.23 | 4.58 | 0.32 | | | | | | | |
| 17 | 28.92 | 33.58 | 4.50 | 0.40 | | | | | | | |
| 42a) | 25.52 | 34.53 | - | - | | | | | | | |
| 62 | 21.58 | 34.85 | - | - | | | | | | | |
| 137 | 14.02 | 34.94 | - | - | | | | | | | |
| 238 | 12.79 | 34.88 | - | - | | | | | | | |
| 395 | 10.64 | 34.74 | - | - | | | | | | | |
| 42 | SPENCER F. BAIRD; May 10, 1958; 1641 GCT; 6°35.5'N, 95°57'W; sounding, 1915 fm; wind, direction missing, force 1; weather, overcast; sea, moderate; wire angle, 19°. | | | | | | | | | | |
| 0 | 29.66 | 33.12 | 4.44 | 0.34 | 0 | 29.66 | 33.12 | 4.44 | 20.46 | 731 | 0.00 |
| 4 | 29.64 | 33.10 | 4.50 | 0.36 | 10 | 29.62 | 33.20 | 4.46 | 20.53 | 724 | 0.07 |
| 9 | 29.64 | 33.19 | 4.45 | 0.34 | 20 | 29.20 | 33.58 | 4.53 | 20.95 | 684 | 0.14 |
| 19 | 29.24 | 33.57 | 4.53 | 0.35 | 30 | 28.20 | 33.62 | 4.62 | 21.33 | 648 | 0.21 |
| 23 | 29.03 | 33.58 | 4.55 | 0.36 | 50 | 23.26 | 34.70 | 3.96 | 23.65 | 425 | 0.32 |
| 32 | 27.18 | 33.68 | 4.70 | 0.45 | 75 | 19.46 | 34.78 | 2.20 | 24.76 | 320 | 0.41 |
| 50 | 23.26 | 34.70 | 3.96 | 0.74 | 100 | 14.39 | 34.79 | 1.63 | 25.96 | 205 | 0.48 |
| 67 | 20.07 | 34.70 | 2.72 | 1.42 | 150 | 13.28 | 34.91 | 1.21 | 26.28 | 175 | 0.57 |
| 88 | 15.27 | 34.74 | 1.71 | 1.99b) | 200 | 12.72 | 34.89 | 1.02 | 26.39 | 165 | 0.66 |
| 133 | 13.46 | 34.91 | 1.25 | 2.20 | 250 | 12.07 | 34.87 | 0.78 | 26.49 | 155 | 0.74 |
| 263 | 11.92 | 34.86 | 0.71 | 2.52 | 300 | 11.27 | 34.80 | 0.46 | 26.59 | 146 | 0.82 |
| 344 | 10.58 | 34.72 | 0.16 | 2.58 | 400 | 9.78 | 34.68 | 0.05 | 26.76 | 130 | 0.97 |
| 517 | 8.38 | 34.62 | 0.00 | 3.33 | 500 | 8.60 | 34.63 | 0.00 | 26.92 | 115 | 1.10 |
| 695 | 6.22 | 34.57 | 0.15 | 3.60 | 600 | 7.34 | 34.60 | 0.04 | 27.07 | 100 | 1.21 |
| 877 | 5.06 | 34.52 | 0.61 | 3.54 | 700 | 6.17 | 34.57 | 0.19 | 27.21 | 87 | 1.32 |
| 977 | 4.66 | 34.56 | 0.72 | 3.64 | 800 | 5.49 | 34.53 | 0.46 | 27.27 | 81 | 1.41 |
| | | | | | 1000 | (4.57) | (34.58) | (0.72) | (27.42) | (67) | (1.58) |
| 43 | SPENCER F. BAIRD; May 11, 1958; 0040 GCT; 7°43'N, 95°57'W; sounding, 2050 fm; wind, 210°, force 3; weather, drizzle; sea, moderate; wire angle, 30°. | | | | | | | | | | |
| 0 | 30.40 | 33.63 | 3.91 | 0.34 | 0 | 30.40 | 33.63 | 3.91 | 20.63 | 715 | 0.00 |
| 4 | 30.39 | 33.66 | 3.95 | 0.38 | 10 | 30.38 | 33.68 | 3.40 | 20.68 | 710 | 0.07 |
| 8 | 30.39 | 33.68 | 3.39 | 0.36 | 20 | 29.90 | 33.85 | 4.51 | 20.92 | 687 | 0.14 |
| 15 | 30.17 | 33.81 | 4.11 | 0.37 | 30 | 27.78 | 34.02 | 4.64 | 21.76 | 606 | 0.21 |
| 21 | 29.86 | 33.86 | 4.59 | 0.19 | 50 | 20.80 | 34.60 | 2.24 | 24.26 | 367 | 0.30 |
| 37 | 26.38 | 34.08 | 4.65 | 0.32 | 75 | 15.30 | 34.74 | 0.57 | 25.72 | 228 | 0.38 |
| 49 | 21.06 | 34.58 | 2.37 | 1.50 | 100 | 13.18 | 34.80 | 0.36 | 26.23 | 180 | 0.43 |
| 64 | 16.80 | 34.70 | 0.84 | 2.30 | 150 | 12.15 | 34.80 | 0.48 | 26.44 | 160 | 0.52 |
| 117 | 12.63 | 34.82 | 0.31 | 2.62 | 200 | 11.38 | 34.77 | 0.81 | 26.56 | 149 | 0.60 |
| 200 | 11.38 | 34.77 | 0.81 | 2.54c) | 250 | 10.82 | 34.74 | 0.70 | 26.62 | 143 | 0.67 |
| 346 | 9.99 | 34.69 | 0.41 | 2.93 | 300 | 10.35 | 34.71 | 0.53 | 26.69 | 136 | 0.74 |

a) Pretrip; depth too uncertain for interpolation.
b) Duplicate value, 1.88 µg at/L.
c) Duplicate value, 2.44 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; May 11, 1958; 0622 GCT; 7°12.5'N, 95°52.5'W; sounding, 2400+ fm; wind, 200°, force 2; weather, partly cloudy; sea, moderate; wire angle, 25°. 44

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.94 | 33.67 | 4.13 | 0.24a) | 0 | 29.94 | 33.67 | 4.13 | 20.77 | 700 | 0.00 |
| 4 | 29.93 | 33.68 | 4.21 | 0.38 | 10 | 29.95 | 33.66 | 2.94 | 20.77 | 701 | 0.07 |
| 9 | 29.96 | 33.66 | 2.93 | 0.38 | 20 | 29.60 | 33.71 | 3.80 | 20.92 | 686 | 0.14 |
| 16 | 29.85 | 33.68 | 3.38 | 0.33 | 30 | 28.00 | 33.86 | 4.12 | 21.58 | 624 | 0.20 |
| 23 | 29.28 | 33.75 | 4.28 | 0.36 | 50 | 23.38 | 34.37 | 2.99 | 23.36 | 453 | 0.31 |
| 40 | 26.29 | 33.95 | 3.88 | 0.54 | 75 | 16.80 | 34.66 | 1.60 | 25.32 | 266 | 0.40 |
| 56 | 21.60 | 34.61 | 2.38 | 1.24 | 100 | 14.58 | 34.73 | 1.07 | 25.88 | 213 | 0.46 |
| 76 | 16.77 | 34.66 | 1.61 | 1.94 | 150 | 12.26 | 34.81 | 0.52 | 26.42 | 162 | 0.56 |
| 135 | 12.58 | 34.83 | 0.45 | 2.56a) | 200 | 11.55 | 34.78 | 0.78 | 26.52 | 152 | 0.64 |
| 224 | 11.24 | 34.76 | 0.87 | 2.52 | 250 | 10.98 | 34.75 | 0.79 | 26.60 | 144 | 0.71 |
| 373 | 9.89 | 34.70 | 0.09 | 2.98 | 300 | 10.48 | 34.72 | 0.54 | 26.67 | 138 | 0.79 |

SPENCER F. BAIRD; May 11, 1958; 1656 GCT; 6°51.5'N, 94°29'W; sounding, 1940 fm; wind, 290°, force 3; weather, cloudy; sea, moderate; wire angle, 17°. 45

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.70 | 32.98 | 4.05 | 0.32 | 0 | 29.70 | 32.98 | 4.05 | 20.34 | 742 | 0.00 |
| 4 | 29.70 | 32.98 | 4.01 | 0.18 | 10 | 29.75 | 33.02 | 4.00 | 20.35 | 742 | 0.07 |
| 9 | 29.74 | 33.01 | 4.00 | 0.18 | 20 | 29.75 | 33.46 | 4.10 | 20.70 | 708 | 0.15 |
| 19 | 29.76 | 33.46 | 4.06 | 0.36 | 30 | 28.75 | 33.67 | 4.71 | 21.17 | 662 | 0.22 |
| 24 | 29.54 | 33.53 | 4.46 | 0.37 | 50 | 23.90 | 34.22 | 3.64 | 23.10 | 478 | 0.33 |
| 33 | 28.12 | 33.77 | 4.83 | 0.42 | 75 | 19.91 | 34.70 | 2.90 | 24.58 | 337 | 0.43 |
| 52 | 23.49 | 34.30 | 3.48 | 1.03 | 100 | 14.60 | 34.70 | 1.68 | 24.85 | 216 | 0.50 |
| 69 | 20.87 | 34.70 | 3.03 | 1.22 | 150 | 13.00 | 34.89 | 1.09 | 26.33 | 170 | 0.60 |
| 91 | 15.20 | 34.68 | 1.86 | 1.86b) | 200 | 12.25 | 34.84 | 0.83 | 26.43 | 161 | 0.68 |
| 146 | 13.08 | 34.90 | 1.14 | 2.18 | 250 | 11.60 | 34.78 | 0.65 | 26.52 | 152 | 0.76 |
| 277 | 11.25 | 34.76 | 0.57 | 2.52 | 300 | 10.99 | 34.74 | 0.56 | 26.60 | 145 | 0.84 |
| 378 | 9.95 | 34.69 | 0.49 | 2.77 | 400 | 9.65 | 34.68 | 0.45 | 26.78 | 128 | 0.99 |
| 578 | 7.40 | 34.58 | 0.03 | 3.44 | 500 | 8.40 | 34.62 | 0.19 | 26.94 | 113 | 1.12 |
| 763 | 5.78 | 34.54 | 0.28 | 3.46 | 600 | 7.15 | 34.57 | 0.05 | 27.08 | 99 | 1.23 |
| 951 | 4.67 | 34.58u | 0.78 | 3.45 | 700 | 6.25 | 34.55 | 0.18 | 27.19 | 89 | 1.34 |
| 1057 | 4.26 | 34.54u | 0.93 | 3.34 | 800 | 5.54 | | 0.37 | | | |
| | | | | | 1000 | 4.45 | | 0.83 | | | |

SPENCER F. BAIRD; May 12, 1958; 1711 GCT; 8°01.5'N, 91°32'W; sounding, 2265 fm; wind, 250°, force 1; weather, partly cloudy; sea, moderate; wire angle, 12°. 47

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.82 | 33.89 | 4.38 | 0.37 | 0 | 29.82 | 33.89 | 4.38 | 20.97 | 681 | 0.00 |
| 10 | 29.60 | 33.90 | 4.31 | 0.40 | 10 | 29.60 | 33.90 | 4.31 | 21.06 | 673 | 0.07 |
| 29 | 27.49 | 33.92 | 4.76 | 0.40 | 20 | 29.43 | 33.90 | 4.33 | 21.12 | 668 | 0.13 |
| 53 | 22.22 | 34.40 | 2.76 | 1.35c) | 30 | 27.37 | 33.93 | 4.57 | 21.82 | 601 | 0.20 |
| 63 | 20.61 | 34.68 | 2.49 | 1.41 | 50 | 25.05 | 34.21 | 3.92 | 22.75 | 511 | 0.31 |
| 72 | 18.33 | 34.72 | 1.25 | 1.89 | 75 | 17.70 | 34.74 | 0.99 | 25.16 | 282 | 0.41 |
| 89 | 15.99 | 34.78 | 0.61 | 2.27c) | 100 | 15.30 | 34.79 | 0.51 | 25.78 | 223 | 0.47 |
| 103 | 15.13 | 34.79 | 0.49 | 2.29 | 150 | 12.83 | 34.86 | 0.40 | 26.32 | 171 | 0.57 |
| 136 | 13.20 | 34.83 | 0.39 | 2.34 | 200 | 11.98 | 34.83 | 0.41 | 26.48 | 156 | 0.66 |
| 162 | 12.62 | 34.87 | 0.41 | 2.38 | 250 | 11.27 | 34.79 | 0.18 | 26.58 | 146 | 0.73 |
| 202 | 11.98 | 34.83 | 0.41 | 2.48 | 300 | 10.61 | 34.75 | 0.05 | 26.67 | 138 | 0.81 |
| 264 | 11.06 | 34.78 | 0.08 | 2.64 | 400 | 9.38 | 34.68 | 0.08 | 26.83 | 123 | 0.95 |
| 372 | 9.78 | 34.70 | 0.09 | 2.77c) | 500 | 7.60 | 34.61 | 0.00 | 27.05 | 102 | 1.07 |
| 502 | 7.58 | 34.61 | 0.00 | 3.45c) | 600 | 6.58 | 34.59 | 0.09 | 27.16 | 92 | 1.17 |
| 820 | 5.08 | 34.57 | 0.36 | 3.45 | 700 | 5.77 | 34.58 | 0.23 | 27.25 | 83 | 1.27 |
| 1107 | 3.93 | 34.59 | 0.87 | 3.26c) | 800 | 5.18 | 34.57 | 0.34 | 27.32 | 76 | 1.36 |
| | | | | | 1000 | 4.35 | 34.58 | 0.66 | 27.44 | 65 | 1.52 |

a) Duplicate values: 0 m, 0.15; 135 m, 2.46 μg at/L.
b) Duplicate value, 1.98 μg at/L.
c) Duplicate values: 53 m, 1.28; 89 m, 2.20; 372 m, 2.89; 502 m, 3.38; 1107 m, 3.19 μg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 49 | SPENCER F. BAIRD; May 13, 1958; 2255 GCT; 9°48.5'N, 89°14.5'W; sounding, 1850 fm; wind, 040°, force 3; weather, partly cloudy; sea, rough; wire angle, 35°. | | | | | | | | | | |
| 0 | 28.40 | 34.52 | 4.65 | 0.44a) | 0 | 28.40 | 34.52 | 4.65 | 21.93 | 590 | 0.00 |
| 2 | 28.40 | 34.52 | 4.55 | 0.47 | 10 | 27.27 | 34.52 | 4.51 | 22.29 | 555 | 0.06 |
| 5 | 28.42 | 34.52 | 4.88 | 0.45 | 20 | 18.30 | 34.72 | 3.20 | 25.01 | 296 | 0.10 |
| 7 | 28.26 | 34.52 | 4.63 | 0.48 | 30 | 16.27 | 34.78 | 0.93 | 25.54 | 245 | 0.13 |
| 10 | 27.27 | 34.52 | 4.51 | 0.50a) | 50 | 14.45 | 34.82 | 0.76 | 25.98 | 204 | 0.17 |
| 12 | 25.10 | 34.57 | 5.52 | 0.50 | 75 | 13.36 | 34.86 | 0.74 | 26.24 | 179 | 0.22 |
| 15 | 21.21 | 34.57 | 4.88 | 0.68 | 100 | 12.87 | 34.86 | 0.83 | 26.33 | 170 | 0.27 |
| 22 | 17.78 | 34.75 | 2.86 | 1.54 | 150 | 12.35 | 34.82 | 0.60 | 26.40 | 164 | 0.35 |
| 28 | 16.56 | 34.77 | 1.25 | 2.02 | 200 | 11.81 | 34.79 | 0.48 | 26.48 | 156 | 0.43 |
| 33 | 15.96 | 34.81 | 0.84 | 2.07 | 250 | 11.18 | 34.76 | 0.61 | 26.58 | 146 | 0.51 |
| 38 | 15.26 | 34.83 | 0.79 | 2.25 | | | | | | | |
| 47 | 14.64 | 34.82 | 0.79 | 2.20 | | | | | | | |
| 63 | 13.78 | 34.86 | 0.69 | 2.29 | | | | | | | |
| 94 | 12.98 | 34.86 | 0.85 | 2.34 | | | | | | | |
| 168 | 12.16 | 34.81 | 0.45 | 2.44 | | | | | | | |
| 256 | 11.09 | 34.76 | 0.63 | 2.45 | | | | | | | |
| 50 | SPENCER F. BAIRD; May 14, 1958; 1700 GCT; 7°42'N, 88°08'W; sounding, 1840 fm; wind, 180°, force 1; weather, partly cloudy; sea, moderate; wire angle, 23°. | | | | | | | | | | |
| 0 | 29.98 | 34.04 | 3.98 | 0.39 | 0 | 29.98 | 34.04 | 3.98 | 21.04 | 675 | 0.00 |
| 9 | 29.49 | 34.04 | 4.05 | 0.41 | 10 | 29.49 | 34.06 | 4.06 | 21.21 | 658 | 0.07 |
| 18 | 29.58 | 34.11 | 4.10 | 0.41 | 20 | 29.30 | 34.13 | 4.11 | 21.33 | 647 | 0.13 |
| 41 | 22.88 | 34.41 | 3.56 | 0.95 | 30 | 27.50 | 34.23 | 4.00 | 22.03 | 580 | 0.19 |
| 60 | 17.30 | 34.74 | 1.10 | 2.04 | 50 | 20.30 | 34.57 | 2.59 | 24.37 | 357 | 0.29 |
| 68 | 16.36 | 34.79 | 1.03 | 2.08 | 75 | 16.23 | 34.79 | 0.78 | 25.55 | 244 | 0.36 |
| 85 | 14.76 | 34.77 | 0.62 | 2.33 | 100 | 13.78 | 34.81 | 0.62 | 26.11 | 191 | 0.42 |
| 98 | 13.84 | 34.82 | 0.58 | 2.35 | 150 | 12.97 | 34.90 | 0.73 | 26.35 | 169 | 0.51 |
| 127 | 13.18 | 34.88 | 0.74 | 2.35 | 200 | 12.43 | 34.86 | 0.74 | 26.41 | 163 | 0.60 |
| 149 | 12.98 | 34.90 | 0.73 | 2.29 | 250 | 11.80 | 34.81 | 0.45 | 26.50 | 154 | 0.68 |
| 180 | 12.67b) | 34.88 | 0.81 | 2.31 | 300 | 11.03 | 34.76 | 0.53 | 26.61 | 144 | 0.76 |
| 233 | 12.02 | 34.83 | 0.44 | 2.49 | 400 | 9.43 | 34.66 | 0.43 | 26.80 | 126 | 0.90 |
| 328 | 10.60 | 34.74 | 0.59 | 2.68 | 500 | 8.22 | 34.61 | 0.31 | 26.94 | 113 | 1.02 |
| 443 | 8.88 | 34.63 | 0.34 | 3.13 | 600 | 7.09 | 34.58 | 0.30 | 27.10 | 97 | 1.14 |
| 740 | 5.88 | 34.56 | 0.33 | 3.34 | 700 | 6.18 | 34.56 | 0.32 | 27.22 | 86 | 1.24 |
| 1025 | 4.50 | 34.52 | 0.77 | 3.32c) | 800 | 5.52 | 34.55 | 0.42 | 27.28 | 80 | 1.33 |
| | | | | | 1000 | 4.60 | 34.52 | 0.73 | 27.37 | 72 | 1.51 |
| 56 | SPENCER F. BAIRD; May 16, 1958; 1220 GCT; 5°31.5'N, 86°43'W; sounding, 1250 fm; wind, 180°, force 3; weather, overcast; sea, moderate; wire angle, 10°. | | | | | | | | | | |
| 0 | 28.96 | 32.31 | 4.11 | 0.24 | 0 | 28.96 | 32.31 | 4.11 | 20.10 | 766 | 0.00 |
| 5 | 28.95 | 32.30 | 4.21 | 0.30 | 10 | 29.12 | 32.38 | 4.14 | 20.08 | 767 | 0.08 |
| 10 | 29.12 | 32.38 | 4.14 | 0.30 | 20 | 29.82 | 33.04 | 4.23 | 20.34 | 742 | 0.15 |
| 20 | 29.82 | 33.04 | 4.23 | 0.32 | 30 | 27.86 | 33.57 | 4.44 | 21.37 | 643 | 0.22 |
| 24 | 28.66 | 33.40 | 4.48 | 0.38 | 50 | 22.80 | 34.72 | 3.21 | 23.82 | 409 | 0.33 |
| 34 | 27.22 | 33.73 | 4.38 | 0.47 | 75 | 18.81 | 34.76 | 2.05 | 24.90 | 306 | 0.42 |
| 53 | 21.82 | 34.76 | 3.00 | 1.16 | 100 | 15.70 | 34.78 | 1.47 | 25.67 | 233 | 0.48 |
| 72 | 19.28 | 34.76 | 2.17 | 1.50 | 150 | 13.43 | 34.90 | 0.78 | 26.25 | 178 | 0.59 |
| 95 | 16.54 | 34.75 | 1.61 | 1.85 | 200 | 12.72 | 34.86 | 0.63 | 26.39 | 164 | 0.67 |
| 123 | 14.12 | 34.86 | 1.01 | 2.05 | 250 | 11.70 | 34.80 | 0.56 | 26.50 | 154 | 0.76 |
| 155 | 13.36 | 34.91 | 0.76 | 2.20 | 300 | 10.86 | 34.74 | 0.53 | 26.62 | 143 | 0.83 |
| 299 | 10.87 | 34.74 | 0.53 | 2.58 | 400 | 9.04 | 34.64 | 0.11 | 26.85 | 121 | 0.97 |
| 412 | 8.80 | 34.63 | 0.04 | 3.00 | 500 | 7.73 | 34.61 | 0.14 | 27.03 | 104 | 1.09 |
| 627 | 6.67 | 34.59 | 0.29 | 3.29 | 600 | 6.88 | 34.59 | 0.26 | 27.14 | 94 | 1.20 |
| 941 | 4.80 | 34.56 | 0.94 | 3.18d) | 700 | 6.16 | 34.58 | 0.45 | 27.22 | 86 | 1.30 |
| 1136 | 4.02 | 34.56 | 1.34 | 3.20 | 800 | 5.52 | 34.57 | 0.68 | 27.29 | 79 | 1.39 |
| | | | | | 1000 | 4.54 | 34.56 | 1.09 | 27.40 | 69 | 1.56 |

a) Duplicate values: 0 m, 0.36; 10 m, 0.43 µg at/L.
b) Alternate value, 12.52°C, uncertain.
c) Duplicate value, 3.42 µg at/L.
d) Duplicate value, 3.36 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

58

SPENCER F. BAIRD; May 17, 1958; 1702 GCT; 5°34'N, 83°26'W; sounding, 1750 fm; wind, direction missing, force 1; weather, rain; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.84 | 32.65 | 4.08 | 0.30 | 0 | 28.84 | 32.65 | 4.08 | 20.37 | 740 | 0.00 |
| 10 | 28.98 | 32.94 | 4.20 | - | 10 | 28.98 | 32.94 | 4.20 | 20.56 | 722 | 0.07 |
| 20 | 29.10 | 33.21 | 4.14 | 0.29 | 20 | 29.10 | 33.21 | 4.14 | 20.71 | 707 | 0.14 |
| 35 | 25.68 | 33.95 | 4.19 | 0.53 | 30 | 28.00 | 33.59 | 4.17 | 21.36 | 644 | 0.21 |
| 54 | 18.16 | 34.82 | 1.74 | 1.79 | 50 | 22.80 | 34.30 | 3.34 | 23.48 | 442 | 0.32 |
| 74 | 15.90 | 34.96 | 1.09 | 1.97 | 75 | 15.86 | 34.96 | 1.09 | 25.76 | 224 | 0.40 |
| 92 | 15.25 | 34.96 | 1.09 | 2.06 | 100 | 15.01 | 34.96 | 0.97 | 25.96 | 206 | 0.46 |
| 107 | 14.80 | 34.96 | 0.90 | 2.20 | 150 | 14.05 | 34.94 | 0.75 | 26.15 | 187 | 0.56 |
| 139 | 14.20 | 34.94 | 0.78 | 2.27a) | 200 | 13.38 | 34.94 | 0.60 | 26.29 | 174 | 0.65 |
| 166 | 13.85 | 34.94 | 0.70 | 2.23 | 250 | 12.61 | 34.89 | 0.41 | 26.41 | 163 | 0.74 |
| 206 | 13.28 | 34.94 | 0.59 | 2.46a) | 300 | 11.65 | 34.82 | 0.20 | 26.54 | 150 | 0.82 |
| 269 | 12.27 | 34.87 | 0.32 | 2.30a) | 400 | 9.47 | 34.70 | 0.02 | 26.83 | 123 | 0.96 |
| 379 | 9.82 | 34.72 | 0.02 | 2.90a) | 500 | 8.04 | 34.64 | 0.04 | 27.00 | 106 | 1.09 |
| 511 | 7.91 | 34.64 | 0.04 | 3.19 | 600 | 7.07 | 34.62 | 0.19 | 27.12 | 95 | 1.20 |
| 831 | 5.60 | 34.59 | 0.51 | 3.21a) | 700 | 6.38 | 34.60 | 0.36 | 27.21 | 86 | 1.30 |
| 1120 | 4.21 | 34.60 | 1.08 | 3.14 | 800 | 5.77 | 34.59 | 0.48 | 27.28 | 80 | 1.39 |
| | | | | | 1000 | 4.77 | 34.60 | 0.83 | 27.40 | 68 | 1.56 |

60

SPENCER F. BAIRD; May 18, 1958; 1658 GCT; 5°31'N, 79°54.5'W; sounding, 1640 fm; wind, 190°, force 3; weather, cloudy; sea, moderate; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.85 | 32.92 | 4.09 | 0.39b) | 0 | 26.85 | 32.92 | 4.09 | 21.23 | 658 | 0.00 |
| 4 | 26.78 | 32.94 | 4.02 | 0.44b) | 10 | 26.50 | 33.02 | 3.75 | 21.41 | 640 | 0.06 |
| 8 | 26.63 | 32.97 | 3.87 | 0.41 | 20 | 22.90 | 34.15 | 3.02 | 23.36 | 453 | 0.12 |
| 18 | 23.86 | 33.95 | 3.22 | 0.82 | 30 | 18.68 | 34.78 | 1.38 | 24.96 | 301 | 0.16 |
| 22 | 19.94 | 34.69 | 1.86 | 1.48 | 50 | 16.89 | 34.94 | 1.19 | 25.52 | 247 | 0.21 |
| 31 | 18.57 | 34.79 | 1.36 | 1.72 | 75 | 16.27 | 34.98 | 1.24 | 25.69 | 231 | 0.27 |
| 48 | 16.98 | 34.93 | 1.20 | 1.79b) | 100 | 15.76 | 34.99 | 1.24 | 25.81 | 219 | 0.33 |
| 65 | 16.48 | 34.97 | 1.19 | 1.80 | 150 | 14.64 | 34.95 | 0.85 | 26.03 | 199 | 0.44 |
| 85 | 16.08 | 34.99 | 1.32 | 1.76 | 200 | 13.79 | 34.90 | 0.57 | 26.17 | 186 | 0.53 |
| 137 | 14.88 | 34.96 | 0.93 | 2.09b) | 250 | 12.94 | 34.85 | 0.30 | 26.30 | 173 | 0.63 |
| 264 | 12.70 | 34.83 | 0.24 | 2.38b) | | | | | | | |
| 270p | 12.22 | 34.79 | 0.04 | 2.54 | | | | | | | |
| 530p | 7.59 | 34.58 | 0.00 | 2.98 | | | | | | | |
| 759 | 6.22 | 34.56 | 0.22 | 3.13 | | | | | | | |
| 952 | 5.10 | 34.54 | 0.60 | 3.12 | | | | | | | |
| 1060 | 4.62 | 34.55 | 0.81 | 3.08 | | | | | | | |

62

SPENCER F. BAIRD; May 19, 1958; 1156, 1733 GCT; 5°28'N, 77°46'W; sounding, 920 fm; wind, 240°, force 1; weather, cloudy; sea, slight; wire angle, 13°, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.56 | 32.38 | 3.82 | 0.33 | 0 | 27.56 | 32.38 | 3.82 | 20.59 | 718 | 0.00 |
| 10 | 27.62 | 32.57 | 3.66 | 0.38 | 10 | 27.62 | 32.57 | 3.66 | 20.70 | 707 | 0.07 |
| 20 | 27.46 | 33.26 | 3.56 | 0.44 | 20 | 27.46 | 33.26 | 3.56 | 21.28 | 652 | 0.14 |
| 39 | 26.86 | 33.53 | 3.42 | 0.58 | 30 | 27.46 | 33.27 | 3.56 | 21.30 | 650 | 0.20 |
| 59 | 17.38 | 34.92 | 1.39 | 1.76 | 50 | 22.10 | 34.28 | 2.38 | 23.60 | 430 | 0.31 |
| 66 | 16.82 | 34.92 | 1.23 | 1.82 | 75 | 16.64 | 34.94 | 1.20 | 25.57 | 243 | 0.40 |
| 81 | 16.56 | 34.96 | 1.20 | 1.84 | 100 | 16.12 | 34.97 | 1.23 | 25.71 | 229 | 0.46 |
| 94 | 16.21 | 34.97 | 1.23 | 1.86 | 150 | 14.91 | 34.95 | 1.10 | 25.96 | 205 | 0.57 |
| | | | | | 200 | 13.20 | 34.88 | 0.43 | 26.28 | 175 | 0.67 |
| 115 | 15.90 | 34.96 | 1.20 | 1.96 | 250 | 12.06 | 34.83 | 0.23 | 26.46 | 158 | 0.75 |
| 139 | 15.43 | 34.96 | 1.11 | 2.00 | 300 | 11.19 | 34.78 | 0.07 | 26.59 | 145 | 0.83 |
| 170 | 14.02 | 34.91 | 0.70 | 2.18 | 400 | 9.30 | 34.67 | 0.00 | 26.83 | 123 | 0.97 |
| 227 | 12.47 | 34.85 | 0.27 | 2.50 | 500 | 7.83 | 34.61 | 0.08 | 27.01 | 106 | 1.10 |
| 312 | 10.97 | 34.77 | 0.03 | 2.80c) | 600 | 6.93 | 34.59 | 0.16 | 27.12 | 95 | 1.20 |
| 420 | 8.90 | 34.65 | 0.00 | 3.02c) | 700 | 6.32 | 34.57 | 0.26 | 27.20 | 88 | 1.31 |
| 645 | 6.65 | 34.58 | 0.20 | 3.20 | 800 | 5.75 | 34.56 | 0.43 | 27.26 | 82 | 1.40 |
| 974 | 4.82 | 34.55 | 0.80 | 3.20 | 1000 | (4.68) | (34.55) | (0.88) | (27.38) | (71) | (1.58) |

a) Duplicate values: 139 m, 2.17; 206 m, 2.35; 269 m, 2.51; 379 m, 3.01; 831 m, 3.33 µg at/L.
b) Duplicate values: 0 m, 0.49; 4 m, 0.38; 48 m, 1.86; 137 m, 1.63; 264 m, 2.29 µg at/L.
c) Duplicate values: 312 m, 2.87; 420 m, 3.12 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 70 | SPENCER F. BAIRD; May 24, 1958; 1556 GCT; 7°15'N, 82°41'W; sounding, 1812 fm; wind, 260°, force 1; weather, cloudy; sea, slight; wire angle, 05°. | | | | | | | | | | |
| 0 | 28.88 | 33.10 | 3.99 | 0.32 | 0 | 28.88 | 33.10 | 3.99 | 20.69 | 708 | 0.00 |
| 10 | 28.85 | 33.10 | 3.88 | 0.32 | 10 | 28.85 | 33.10 | 3.88 | 20.72 | 706 | 0.07 |
| 20 | 28.94 | 33.21 | 3.91 | 0.30 | 20 | 28.94 | 33.21 | 3.91 | 20.77 | 701 | 0.14 |
| 30 | 27.14 | 33.82 | 4.04 | 0.47 | 30 | 27.14 | 33.82 | 4.04 | 21.81 | 602 | 0.21 |
| 39 | 21.24 | 34.76 | 2.37 | 1.36 | 50 | 19.38 | 34.92 | 1.80 | 24.88 | 308 | 0.30 |
| 49 | 19.56 | 34.91 | 1.86 | 1.58 | 75 | 17.41 | 34.99 | 1.42 | 25.43 | 256 | 0.37 |
| 68 | 17.64 | 34.99 | 1.49 | 1.78 | 100 | 15.52 | 34.94 | 0.85 | 25.82 | 218 | 0.43 |
| 83 | 17.14 | 34.99 | 1.31 | 1.86 | 150 | 14.41 | 34.94 | 0.69 | 26.07 | 195 | 0.53 |
| 96 | 15.66 | 34.94 | 0.89 | 1.98 | 200 | 13.62 | 34.90 | 0.50 | 26.21 | 182 | 0.63 |
| 146 | 14.46 | 34.94 | 0.71 | 2.15 | 250 | 12.74 | 34.86 | 0.35 | 26.36 | 168 | 0.72 |
| 214 | 13.40 | 34.89 | 0.44 | 2.29 | 300 | 11.71 | 34.81 | 0.30 | 26.50 | 154 | 0.80 |
| 282 | 12.15 | 34.83 | 0.33 | 2.56a) | 400 | 9.21 | 34.67 | 0.06 | 26.84 | 122 | 0.95 |
| 375 | 9.68 | 34.69 | 0.07 | 2.90 | 500 | 7.84 | 34.62 | 0.07 | 27.02 | 105 | 1.07 |
| 473 | 8.10 | 34.63 | 0.06 | 3.15 | 600 | 7.05 | 34.61 | 0.20 | 27.12 | 95 | 1.18 |
| 700 | 6.35 | 34.60 | 0.36 | 3.19 | 700 | 6.35 | 34.60 | 0.36 | 27.22 | 86 | 1.28 |
| 1065 | 4.59 | 34.59 | 0.86 | 3.15a) | 800 | 5.76 | 34.59 | 0.51 | 27.29 | 79 | 1.37 |
| | | | | | 1000 | 4.87 | 34.59 | 0.78 | 27.39 | 70 | 1.54 |
| 72 | SPENCER F. BAIRD; May 25, 1958; 1651 GCT; 9°30'N, 85°52'W; sounding, 1800 fm; wind, 210°, force 2; weather, rain; sea, moderate; wire angle, 03°. | | | | | | | | | | |
| 0 | 29.28 | 33.41 | 4.10 | 0.34 | 0 | 29.28 | 33.41 | 4.10 | 20.80 | 698 | 0.00 |
| 10 | 29.45 | 33.76 | 4.17 | 0.33 | 10 | 29.45 | 33.76 | 4.17 | 21.00 | 679 | 0.07 |
| 20 | 29.49 | 33.76 | 4.12 | 0.32 | 20 | 29.49 | 33.76 | 4.12 | 20.98 | 681 | 0.14 |
| 30 | 27.92 | 33.89 | 4.43 | 0.45b) | 30 | 27.92 | 33.89 | 4.43 | 21.62 | 619 | 0.20 |
| 40 | 25.20 | 34.14 | 4.27 | 0.61 | 50 | 20.40 | 34.62 | 2.32 | 24.38 | 355 | 0.30 |
| 49 | 21.06 | 34.61 | 2.59 | 1.39 | 75 | 16.60 | 34.72 | 1.26 | 25.41 | 257 | 0.38 |
| 69 | 17.62 | 34.71 | 1.56 | 1.81 | 100 | 15.18 | 34.84 | 0.75 | 25.83 | 218 | 0.44 |
| 84 | 15.58 | 34.79 | 0.98 | 2.06 | 150 | 13.53 | 34.89 | 0.57 | 26.23 | 180 | 0.54 |
| 98 | 15.22 | 34.83 | 0.79 | 2.12 | 200 | 12.87 | 34.89 | 0.61 | 26.36 | 168 | 0.63 |
| 148 | 13.54 | 34.89 | 0.57 | 2.27b) | 250 | 12.30 | 34.85 | 0.56 | 26.43 | 161 | 0.71 |
| 215 | 12.68 | 34.89 | 0.64 | 2.26 | 300 | 11.76 | 34.79 | 0.39 | 26.49 | 155 | 0.79 |
| 281 | 11.99 | 34.81 | 0.50 | 2.46 | 400 | 10.19 | 34.72 | 0.04 | 26.72 | 133 | 0.95 |
| 372 | 10.66 | 34.74 | 0.08 | 2.74 | 500 | 8.63 | 34.64 | 0.06 | 26.92 | 115 | 1.08 |
| 469 | 9.06 | 34.66 | 0.04 | 3.05b) | 600 | 7.20 | 34.60 | 0.18 | 27.09 | 98 | 1.20 |
| 696 | 6.24 | 34.58 | 0.26 | 3.18 | 700 | (6.21) | (34.58) | (0.29) | (27.22) | (86) | (1.30) |
| 1062c) | 4.44 | 34.56 | 0.56 | 3.41b) | 800 | (5.59) | (34.57) | (0.36) | (27.28) | (80) | (1.39) |
| | | | | | 1000 | (4.70) | (34.56) | (0.52) | (27.38) | (71) | (1.56) |
| 74 | SPENCER F. BAIRD; May 26, 1958; 1709 GCT; 11°27'N, 88°44.5'W; sounding, 1960 fm; wind, 040°, force 3; weather, overcast; sea, moderate; wire angle, 45°. | | | | | | | | | | |
| 1 | 29.70 | 33.91 | 3.88 | 0.31 | 0 | (29.71) | (33.90) | (3.88) | (21.03) | (676) | (0.00) |
| 7 | 29.66 | 33.94 | 3.82 | 0.32 | 10 | 29.67 | 33.95 | 3.89 | 21.07 | 672 | 0.07 |
| 14 | 29.70 | 33.96 | 3.91 | 0.32 | 20 | 29.47 | 34.05 | 3.91 | 21.19 | 660 | 0.13 |
| 23 | 29.44 | 34.06 | 3.92 | 0.34 | 30 | 28.86 | 34.11 | 4.35 | 21.48 | 633 | 0.20 |
| 29 | 28.86 | 34.11 | 4.35 | 0.38 | 50 | 25.53 | 34.39 | 4.13 | 22.74 | 512 | 0.31 |
| 37 | 28.46 | 34.16 | 4.32 | 0.42 | 75 | 17.69 | 34.80 | 1.34 | 25.21 | 277 | 0.41 |
| 49 | 26.12 | 34.35 | 4.24 | 0.53 | 100 | 16.30 | 34.87 | 1.07 | 25.60 | 239 | 0.48 |
| 56 | 22.14 | 34.64 | 2.85 | 1.18 | 150 | 14.11 | 34.88 | 0.53 | 26.10 | 192 | 0.59 |
| 61 | 19.52 | 34.70 | 1.88 | - | 200 | 12.81 | 34.88 | 0.40 | 26.35 | 168 | 0.68 |
| 86 | 16.93 | 34.85 | 1.19 | 1.91d) | 250 | 12.00 | 34.85 | 0.21 | 26.49 | 155 | 0.76 |
| 119 | 15.47 | 34.88 | 1.00 | - | | | | | | | |
| 155 | 13.90 | 34.88 | 0.50 | - | | | | | | | |
| 208 | 12.61 | 34.88 | 0.39 | 2.50 | | | | | | | |
| 267 | 11.79 | 34.83 | 0.11 | 2.73d) | | | | | | | |
| 335e) | 10.78 | 34.79 | 0.07 | 2.76 | | | | | | | |
| 458e) | 8.89 | 34.66 | 0.05 | 3.13 | | | | | | | |

a) Duplicate values: 282 m, 2.48; 1065 m, 3.27 μg at/L.
b) Duplicate values: 30 m, 0.38; 148 m, 2.34; 469 m, 2.96; 1026 m, 3.33 μg at/L.
c) Alternate depth of 970 meters possible, but not probable.
d) Duplicate values: 86 m, 1.83; 335 m, 2.61 μg at/L.
e) Pretrip; too uncertain for interpolation.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; May 27, 1958; 1654 GCT; 13°16'N, 91°23.5'W; sounding, 910 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 00°. 76

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 31.46 | 33.98 | 5.05 | 0.16 | 0 | 31.46 | 33.98 | 5.05 | 20.50 | 727 | 0.00 |
| 8 | 30.76 | 33.98 | 5.05 | 0.21 | 10 | 30.70 | 33.97 | 5.07 | 20.75 | 703 | 0.07 |
| 15 | 30.40 | 33.96 | 5.13 | 0.22 | 20 | 30.12 | 33.95 | 4.94 | 20.94 | 685 | 0.14 |
| 20 | 30.12 | 33.95 | 4.94 | 0.23 | 30 | 28.88 | 33.98 | 4.27 | 21.37 | 643 | 0.21 |
| 35 | 26.24 | 34.14 | 3.46 | 0.80 | 50 | 19.07 | 34.69 | 1.99 | 24.78 | 317 | 0.30 |
| 50 | 19.07 | 34.69 | 1.99 | 1.66 | 75 | 15.45 | 34.78 | 0.89 | 25.72 | 228 | 0.37 |
| 68 | 16.08 | 34.75 | 0.99 | 1.68 | 100 | 14.38 | 34.83 | 0.62 | 26.01 | 201 | 0.43 |
| 82 | 15.06 | 34.81 | 0.83 | 1.76 | 150 | 13.63 | 34.85 | 0.48 | 26.16 | 186 | 0.52 |
| 96 | 14.42 | 34.83 | 0.61 | 2.23 | 200 | 12.85 | 34.82 | 0.29 | 26.30 | 173 | 0.62 |
| 145 | 13.73 | 34.85 | 0.51 | 2.32 | 250 | 12.12 | 34.79 | 0.20 | 26.42 | 162 | 0.71 |
| 214 | 12.62 | 34.81 | 0.22 | 2.51 | 300 | 11.40 | 34.77 | 0.19 | 26.54 | 150 | 0.78 |
| 282 | 11.72 | 34.78 | 0.22 | 2.53a) | 400 | 9.68 | 34.68 | 0.05 | 26.78 | 128 | 0.93 |
| 376 | 10.08 | 34.70 | 0.06 | 2.94a) | 500 | (8.01) | (34.61) | (0.08) | (26.98) | (108) | (1.06) |
| 475 | 8.41 | 34.62 | 0.07 | 3.08a) | 600 | (6.95) | (34.58) | (0.09) | (27.12) | (95) | (1.17) |
| 708 | 6.01 | 34.57 | 0.10 | 3.34 | 700 | (6.06) | (34.57) | (0.10) | (27.23) | (85) | (1.27) |
| 1068 | 4.24 | 34.56 | 0.20 | 3.34a) | 800 | 5.46 | 34.57 | 0.12 | 27.30 | 78 | (1.36) |
| | | | | | 1000 | 4.54 | 34.56 | 0.18 | 27.40 | 69 | (1.53) |

SPENCER F. BAIRD; May 27, 1958; 0550 GCT; 14°12'N, 92°47'W; sounding, 633 fm; wind, direction missing, force 1; weather, missing; sea, slight; wire angle, 00°. 77

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.91 | 34.25 | 3.88 | 0.28 | 0 | 30.91 | 34.25 | 3.88 | 20.90 | 689 | 0.00 |
| 5 | 30.90 | 34.19 | 3.85 | 0.36 | 10 | 30.35 | 34.14 | 3.87 | 20.97 | 682 | 0.07 |
| 10 | 30.35 | 34.14 | 3.87 | 0.33 | 20 | 29.70 | 34.11 | 4.47 | 21.18 | 661 | 0.14 |
| 15 | 30.14 | 34.16 | 3.93 | 0.36 | 30 | 28.26 | 34.15 | 4.62 | 21.70 | 612 | 0.20 |
| 20 | 29.70 | 34.11 | 4.47 | 0.38 | 50 | 22.90 | 34.29 | 3.16 | 23.44 | 445 | 0.30 |
| 30 | 28.26 | 34.15 | 4.62 | 0.42 | 75 | 16.52 | 34.78 | 0.69 | 25.48 | 251 | 0.39 |
| 49 | 23.32 | 34.25 | 3.32 | 1.06 | 100 | 14.97 | 34.88 | 0.58 | 25.91 | 210 | 0.45 |
| 58 | 20.19 | 34.56 | 0.92 | 1.80 | 150 | 13.23 | 34.88 | 0.29 | 26.27 | 176 | 0.55 |
| 67 | 17.62 | 34.70 | 0.75 | 2.35b) | 200 | 12.48 | 34.87 | 0.15 | 26.41 | 163 | 0.64 |
| 85 | 15.62 | 34.86 | 0.65 | 2.26 | 250 | 11.98 | 34.83 | 0.20 | 26.48 | 156 | 0.72 |
| 140 | 13.45 | 34.88 | 0.36 | 2.50 | 300 | 11.37 | 34.79 | 0.20 | 26.56 | 148 | 0.80 |
| 184 | 12.66 | 34.88 | 0.15 | 2.72 | 400 | 9.78 | 34.72 | 0.08 | 26.80 | 126 | 0.94 |
| 279 | 11.64 | 34.81 | 0.22 | 2.70 | 500 | (7.90) | (34.64) | (0.07) | (27.03) | (104) | (1.07) |
| 374 | 10.21 | 34.74 | 0.08 | 2.93 | 600 | (6.94) | (34.62) | (0.08) | (27.15) | (93) | (1.17) |
| 469 | 8.40 | 34.66 | 0.07 | 3.23b) | 700 | (6.22) | (34.60) | (0.10) | (27.23) | (85) | (1.27) |
| 718 | 6.11 | 34.60 | 0.11 | 3.30 | | | | | | | |

SPENCER F. BAIRD; May 28, 1958; 1417 GCT; 14°14'N, 93°48'W; sounding, 2800 fm; wind, 150°, force 1; weather, partly cloudy; sea, slight; wire angle, 10°. 78

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.64 | 34.26 | 4.22 | 0.30 | 0 | 30.64 | 34.26 | 4.22 | 20.97 | 682 | 0.00 |
| 5 | 30.65 | 34.14 | 4.31 | 0.31 | 10 | 30.66 | 34.14 | 4.31 | 20.87 | 691 | 0.07 |
| 10 | 30.66 | 34.14 | 4.31 | 0.32 | 20 | 29.08 | 34.04 | 4.77 | 21.34 | 646 | 0.14 |
| 15 | 30.26 | 34.11 | 4.34 | 0.34 | 30 | 27.38 | 34.16 | 4.88 | 21.98 | 585 | 0.20 |
| 20 | 29.08 | 34.04 | 4.77 | 0.34 | 50 | 20.30 | 34.48 | 2.27 | 24.30 | 363 | 0.29 |
| 29 | 27.52 | 34.15 | 4.90 | 0.40 | 75 | 16.04 | 34.78 | 0.91 | 25.58 | 242 | 0.37 |
| 48 | 21.98 | 34.34 | 2.76 | 1.35 | 100 | 15.20 | 34.80 | 0.57 | 25.79 | 222 | 0.43 |
| 67 | 16.74 | 34.77 | 1.34 | 1.79 | 150 | 13.40 | 34.84 | 0.27 | 26.21 | 182 | 0.53 |
| 80 | 15.70 | 34.78 | 0.68 | 2.22 | 200 | 12.45 | 34.84 | 0.13 | 26.40 | 164 | 0.62 |
| 99 | 15.24 | 34.80 | 0.58 | 2.24 | 250 | 11.63 | 34.80 | 0.14 | 26.52 | 152 | 0.70 |
| 186 | 12.67 | 34.85 | 0.15 | 2.57c) | 300 | 10.83 | 34.76 | 0.13 | 26.63 | 142 | 0.78 |
| 278 | 11.20 | 34.78 | 0.17 | 2.70 | 400 | 9.21 | 34.66 | 0.09 | 26.84 | 122 | 0.92 |
| 367 | 9.83 | 34.69 | 0.08 | 2.82 | 500 | 7.65 | 34.59 | 0.12 | 27.02 | 105 | 1.04 |
| 456 | 8.18 | 34.61 | 0.12 | 3.07 | 600 | 6.88 | 34.56 | 0.10 | 27.11 | 96 | 1.14 |
| 685 | 6.29 | 34.54 | 0.08 | 3.30 | 700 | (6.21) | (34.54) | (0.08) | (27.19) | (89) | (1.25) |
| 1036 | 4.44 | 34.54 | 0.29 | 3.46 | 800 | (5.67) | (34.54) | (0.13) | (27.25) | (83) | (1.34) |
| | | | | | 1000 | (4.62) | (34.54) | (0.27) | (27.38) | (71) | (1.52) |

a) Duplicate values: 282 m, 2.64; 376 m, 2.84; 475 m, 3.16; 1068 m, 3.57 μg at/L.
b) Duplicate values: 67 m, 2.46; 469 m, 3.07 μg at/L.
c) Duplicate value, 2.57 μg at/L.

SIO
TO-58-1
SCOT

79 SPENCER F. BAIRD; May 28, 1958; 1945 GCT; 14°37.5'N, 93°52'W; sounding, 1200 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 10°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 0 | 30.30 | 33.96 | 4.24 | 0.34 | 0 | 30.30 | 33.96 | 4.24 | 20.86 | 692 | 0.00 |
| 5 | 30.24 | 33.98 | 4.47 | 0.31 | 10 | 30.16 | 33.96 | 4.38 | 20.92 | 687 | 0.07 |
| 10 | 30.16 | 33.96 | 4.38 | 0.33 | 20 | 29.94 | 33.96 | 4.52 | 21.00 | 679 | 0.14 |
| 15 | 30.14 | 33.96 | 4.32 | 0.34 | 30 | 26.74 | 34.15 | 4.44 | 22.19 | 565 | 0.20 |
| 20 | 29.94 | 33.96 | 4.52 | 0.34 | 50 | 19.78 | 34.59 | 1.86 | 24.53 | 342 | 0.29 |
| 29 | 26.82 | 34.11 | 4.47 | 0.44 | 75 | 16.75 | 34.77 | 0.99 | 25.42 | 257 | 0.36 |
| 48 | 20.46 | 34.58 | 1.93 | 1.72 | 100 | 15.25 | 34.81 | 0.79 | 25.79 | 222 | 0.43 |
| 68 | 17.53 | 34.74 | 1.40 | 1.84a) | 150 | 13.73 | 34.83 | 0.55 | 26.14 | 189 | 0.53 |
| 81 | 16.24 | 34.78 | 0.75 | 2.21 | 200 | 12.47 | 34.83 | 0.37 | 26.38 | 166 | 0.62 |
| 99 | 15.28 | 34.81 | 0.79 | 2.33 | 250 | 11.83 | 34.80 | 0.22 | 26.48 | 156 | 0.70 |
| 190 | 12.62 | 34.83 | 0.40 | 2.54 | 300 | 11.18 | 34.76 | 0.10 | 26.58 | 146 | 0.78 |
| 287 | 11.36 | 34.77 | 0.11 | 2.78 | 400 | 9.59 | 34.68 | 0.10 | 26.80 | 126 | 0.93 |
| 378 | 9.99 | 34.70 | 0.09 | 3.03 | 500 | 7.80 | 34.60 | 0.13 | 27.01 | 106 | 1.05 |
| 471 | 8.22 | 34.61 | 0.12 | 3.32a) | 600 | 6.85 | 34.59 | 0.11 | 27.14 | 94 | 1.16 |
| 706 | 6.10 | 34.58 | 0.10 | 3.60 | 700 | 6.14 | 34.58 | 0.10 | 27.22 | 86 | 1.26 |
| 1061 | 4.32 | 34.58 | 0.34 | 3.79 | 800 | 5.59 | 34.58 | 0.14 | 27.29 | 79 | 1.35 |
| | | | | | 1000 | 4.61 | 34.58 | 0.29 | 27.41 | 68 | 1.52 |

80 SPENCER F. BAIRD; May 29, 1958; 0100 GCT; 15°13.5'N, 93°46'W; sounding, 102 fm; wind, 330°, force 1; weather, cloudy; sea, rough; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.83 | 34.04 | 4.90 | 0.29 | 0 | 29.83 | 34.04 | 4.90 | 21.08 | 671 | 0.00 |
| 5 | 29.84 | 34.00 | 4.82 | 0.32 | 10 | 29.65 | 33.98 | 4.73 | 21.09 | 670 | 0.07 |
| 10 | 29.65 | 33.98 | 4.73 | 0.38 | 20 | 28.92 | 34.00 | 4.97 | 21.36 | 644 | 0.13 |
| 15 | 29.59 | 33.98 | 4.64 | 0.33 | 30 | 27.40 | 34.01 | 5.19 | 21.87 | 595 | 0.20 |
| 20 | 28.92 | 34.00 | 4.97 | 0.38 | 50 | 22.40 | 34.33 | 3.78 | 23.62 | 428 | 0.30 |
| 30 | 27.40 | 34.01 | 5.19 | 0.44 | 75 | 17.07 | 34.74 | 1.43 | 25.32 | 267 | 0.38 |
| 40 | 24.80 | 34.14 | 4.88 | 0.57 | 100 | 15.20 | 34.78 | 0.53 | 25.78 | 223 | 0.45 |
| 74 | 17.11 | 34.74 | 1.44 | 1.89 | 150 | (13.60) | (34.88) | (0.18) | (26.20) | (183) | (0.55) |
| 98 | 15.30 | 34.78 | 0.58 | 2.26 | | | | | | | |
| 120 | 14.42 | 34.82 | 0.31 | 2.44 | | | | | | | |
| 144 | 13.75 | 34.87 | 0.20 | 2.43 | | | | | | | |

81 SPENCER F. BAIRD; May 29, 1958; 0554 GCT; 14°47'N, 94°21'W; sounding, 1380 fm; wind, 340°, force 2; weather, missing; sea, slight; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.34 | 33.98 | 3.42 | 0.32 | 0 | 29.34 | 33.98 | 3.42 | 21.20 | 659 | 0.00 |
| 5 | 29.33 | 34.00 | 4.24 | 0.32 | 10 | 29.34 | 33.99 | 3.49 | 21.21 | 658 | 0.06 |
| 10 | 29.34 | 33.99 | 3.49 | 0.34 | 20 | 28.86 | 33.96 | 3.05 | 21.35 | 646 | 0.13 |
| 15 | 29.35 | 33.98 | 3.15 | 0.34 | 30 | 25.74 | 34.09 | 4.64 | 22.45 | 540 | 0.19 |
| 20 | 28.86 | 33.96 | 3.05 | 0.58b) | 50 | 19.47 | 34.63 | 1.20 | 24.64 | 331 | 0.28 |
| 29 | 25.82 | 34.08 | 4.68 | 0.56 | 75 | 16.59 | 34.79 | 0.83 | 25.47 | 252 | 0.35 |
| 48 | 19.88 | 34.60 | 1.30 | 1.81 | 100 | 14.84 | 34.85 | 0.52 | 25.91 | 210 | 0.41 |
| 67 | 17.44 | 34.76 | 0.91 | 2.13 | 150 | 13.50 | 34.87 | 0.32 | 26.21 | 182 | 0.51 |
| 81 | 15.96 | 34.81 | 0.76 | 2.37b) | 200 | 12.43 | 34.86 | 0.19 | 26.42 | 162 | 0.60 |
| 100 | 14.84 | 34.85 | 0.52 | 2.44 | 250 | 11.79 | 34.82 | 0.14 | 26.51 | 153 | 0.68 |
| 192 | 12.56 | 34.87 | 0.19 | 2.63 | 300 | 11.19 | 34.78 | 0.10 | 26.59 | 146 | 0.76 |
| 289 | 11.31 | 34.78 | 0.11 | 2.78 | 400 | 9.57 | 34.71 | 0.08 | 26.82 | 124 | 0.90 |
| 381 | 9.92 | 34.72 | 0.08 | 3.08 | 500 | (7.92) | (34.63) | (0.12) | (27.02) | (105) | (1.02) |
| 474 | 8.18 | 34.64 | 0.11 | 3.37b) | | | | | | | |
| 711 | - | 34.56 | 0.08 | 3.44b) | | | | | | | |
| 1067 | 4.28 | 34.54 | 0.32 | 3.62 | | | | | | | |

a) Duplicate values: 68 m, 1.96; 471 m, 3.24 µg at/L.
b) Duplicate values: 20 m, 0.37; 81 m, 2.29; 474 m, 3.24; 711 m, 3.52 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

82

SPENCER F. BAIRD; May 29, 1958; 1421 GCT; 15°48'N, 94°53'W; sounding, 125 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 35°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.38 | 34.04 | 4.58 | 0.32 | 0 | 28.38 | 34.04 | 4.58 | 21.58 | 623 | 0.00 |
| 4 | 28.38 | 34.00 | 4.40 | 0.31 | 10 | 28.40 | 34.01 | 4.50 | 21.55 | 626 | 0.06 |
| 8 | 28.40 | 34.00 | 4.50 | 0.32 | 20 | 27.48 | 34.05 | 5.46 | 21.88 | 595 | 0.12 |
| 12 | 28.40 | 34.01 | 4.51 | 0.34 | 30 | 23.15 | 34.29 | 3.79 | 23.37 | 452 | 0.18 |
| 16 | 28.38 | 34.03 | 5.05 | 0.35 | 50 | 19.37 | 34.53 | 1.45 | 24.59 | 336 | 0.25 |
| 24 | 25.61 | 34.13 | 5.92 | 0.40 | 75 | 16.32 | 34.72 | 0.88 | 25.48 | 251 | 0.33 |
| 32 | 22.81 | 34.31 | 3.44 | 1.13a) | 100 | 14.86 | 34.82 | | 25.89 | 212 | 0.39 |
| 59 | 18.00 | 34.62 | 1.02 | 2.00 | | | | | | | |
| 77 | 16.08 | 34.74 | 0.88 | 2.38 | | | | | | | |
| 96 | 14.86 | 34.78 | 0.61 | 2.20a) | | | | | | | |
| 115 | 14.02 | 34.85 | - | 2.53a) | | | | | | | |

83

SPENCER F. BAIRD; May 29, 1958; 2032 GCT; 15°20'N, 94°55'W; sounding, 400 fm; wind, 020°, force 2; weather, partly cloudy; sea, moderate; wire angle, 40°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.94 | 34.14 | 4.60 | 0.32 | 0 | 27.94 | 34.14 | 4.60 | 21.79 | 603 | 0.00 |
| 4 | 27.92 | 34.14 | 3.99 | 0.32 | 10 | 27.80 | 34.12 | 4.06 | 21.82 | 600 | 0.06 |
| 8 | 27.83 | 34.13 | 4.31 | 0.30 | 20 | 27.72 | 34.13 | 3.70 | 21.86 | 597 | 0.12 |
| 12 | 27.76 | 34.11 | 3.71 | 0.32 | 30 | 22.24 | 34.34 | 2.58 | 23.67 | 424 | 0.17 |
| 16 | 27.76 | 34.12 | 3.86 | 0.32 | 50 | 19.47 | 34.56 | 1.06 | 24.59 | 336 | 0.25 |
| 20 | 27.72 | 34.13 | 3.70 | 0.33 | 75 | 18.00 | 34.76 | 0.40 | 25.11 | 286 | 0.33 |
| 30 | 22.24 | 34.34 | 2.58 | 1.36 | 100 | 14.35 | 34.80 | 0.39 | 25.98 | 204 | 0.39 |
| 44 | 20.35 | 34.43 | 1.39 | 1.90 | 150 | 13.05 | 34.83 | 0.22 | 26.27 | 176 | 0.48 |
| 52 | 19.16 | 34.59 | 0.94 | 2.08 | 200 | 12.37 | 34.83 | 0.24 | 26.40 | 164 | 0.57 |
| 60 | 18.62 | 34.61 | 0.85 | 2.18 | 250 | 11.88 | 34.79 | 0.11 | 26.47 | 157 | 0.65 |
| 96 | 14.54 | 34.79 | 0.40 | 2.48 | 300 | 11.28 | 34.76 | 0.12 | 26.57 | 148 | 0.73 |
| 155 | 12.97 | 34.83 | 0.20 | 2.57 | 400 | 9.74 | 34.69 | 0.14 | 26.78 | 128 | 0.88 |
| 188 | 12.48 | 34.83 | 0.25 | 2.58 | 500 | 7.85 | 34.59 | 0.13 | 27.00 | 107 | 1.01 |
| 253 | 11.85 | 34.79 | 0.10 | 2.70b) | | | | | | | |
| 328 | 10.92 | 34.75 | 0.14 | 2.77 | | | | | | | |
| 525 | 7.32 | 34.57 | 0.12 | 3.46 | | | | | | | |

84

SPENCER F. BAIRD; May 30, 1958; 0110 GCT; 14°40.5'N, 94°56'W; sounding, 2400 fm; wind, 330°, force 2; weather, partly cloudy; sea, moderate; wire angle, 30°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.84 | 34.20 | 4.80 | 0.34 | 0 | 27.84 | 34.20 | 4.80 | 21.87 | 595 | 0.00 |
| 8 | 27.64 | 34.18 | 4.73 | 0.36 | 10 | 27.60 | 34.18 | 4.72 | 21.94 | 589 | 0.06 |
| 17 | 27.46 | 34.19 | 4.73 | 0.40 | 20 | 27.38 | 34.19 | 4.75 | 22.02 | 582 | 0.12 |
| 26 | 27.14 | 34.19 | 4.82 | 0.39 | 30 | 27.05 | 34.19 | 4.83 | 22.12 | 572 | 0.18 |
| 35 | 26.84 | 34.18 | 4.84 | 0.42 | 50 | 21.20 | 34.50 | 2.27 | 24.10 | 382 | 0.27 |
| 43 | 23.92 | 34.29 | 3.21 | 1.14 | 75 | 15.99 | 34.82 | 0.72 | 25.63 | 237 | 0.35 |
| 60 | 17.12 | 34.76 | 1.02 | 2.07 | 100 | 14.75 | 34.84 | 0.63 | 25.92 | 209 | 0.41 |
| 72 | 16.16 | 34.81 | 0.73 | 2.21c) | 150 | 13.50 | 34.88 | 0.40 | 26.22 | 181 | 0.50 |
| 84 | 15.52 | 34.83 | 0.73 | 2.24 | 200 | 12.64 | 34.88 | 0.24 | 26.39 | 165 | 0.59 |
| 123 | 14.04 | 34.86 | 0.49 | 2.40 | 250 | 12.09 | 34.85 | 0.15 | 26.48 | 156 | 0.68 |
| 177 | 13.00 | 34.88 | 0.31 | 2.62 | 300 | 11.42 | 34.81 | 0.14 | 26.57 | 148 | 0.76 |
| 232 | 12.28 | 34.86 | 0.17 | 2.51 | 400 | 9.59 | 34.70 | 0.07 | 26.81 | 125 | 0.90 |
| 309 | 11.30 | 34.80 | 0.14 | 2.58 | 500 | 8.10 | 34.64 | 0.07 | 27.00 | 107 | 1.02 |
| 393 | 9.72 | 34.70 | 0.08 | 2.97c) | 600 | (6.95) | (34.60) | (0.09) | (27.12) | (95) | (1.14) |
| 596 | 7.00 | 34.60 | 0.09 | 3.35c) | 700 | (6.25) | (34.58) | (0.10) | (27.21) | (87) | (1.24) |
| 940 | 4.99 | 34.55 | 0.14 | 3.61c) | 800 | (5.70) | (34.56) | (0.11) | (27.27) | (81) | (1.33) |
| | | | | | 1000 | (4.72) | (34.55) | (0.13) | (27.38) | (71) | (1.50) |

a) Duplicate values: 32 m, 1.00; 96 m, 2.20; 115 m, 2.37 µg at/L.
b) Duplicate value, 2.60 µg at/L.
c) Duplicate values: 72 m, 2.28; 393 m, 3.11; 596 m, 3.06; 940 m, 3.35 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 85 | SPENCER F. BAIRD; May 30, 1958; 0440 GCT; 14°12'N, 94°59.5'W; sounding, 2200 fm; wind, 300°, force 2; weather, missing; sea, moderate; wire angle, 13°. | | | | | | | | | | |
| 0 | 29.52 | 34.15 | 3.75 | 0.34 | 0 | 29.52 | 34.15 | 3.75 | 21.28 | 652 | 0.00 |
| 10 | 29.56 | 34.16 | 3.32 | 0.30 | 10 | 29.56 | 34.16 | 3.32 | 21.27 | 653 | 0.06 |
| 19 | 29.41 | 34.14 | 3.49 | 0.32 | 20 | 29.20 | 34.14 | 3.47 | 21.36 | 644 | 0.13 |
| 29 | 25.92 | 34.10 | 3.37 | 0.52 | 30 | 25.70 | 34.12 | 3.30 | 22.49 | 536 | 0.19 |
| 39 | 23.20 | 34.27 | 2.56 | 1.02 | 50 | 20.30 | 34.53 | 1.30 | 24.33 | 360 | 0.28 |
| 48 | 20.94 | 34.48 | 1.49 | 1.58 | 75 | 16.40 | 34.80 | 0.80 | 25.52 | 247 | 0.36 |
| 67 | 17.42 | 34.75 | 0.78 | 1.88 | 100 | 14.91 | 34.81 | 0.55 | 25.86 | 215 | 0.41 |
| 82 | 15.79 | 34.81 | 0.79 | 2.14 | 150 | 13.23 | 34.87 | 0.24 | 26.27 | 176 | 0.51 |
| 95 | 15.09 | 34.81 | 0.61 | 2.18 | 200 | 12.02 | 34.86 | 0.14 | 26.49 | 155 | 0.60 |
| 144 | 13.24 | 34.84 | 0.25 | 2.49 | 250 | 11.30 | 34.81 | 0.16 | 26.59 | 145 | 0.68 |
| 210 | 11.79 | 34.84 | 0.16 | 2.55 | 300 | 10.79 | 34.78 | 0.16 | 26.66 | 139 | 0.75 |
| 277 | 11.04 | 34.79 | 0.16 | 2.72 | 400 | 9.32 | 34.69 | 0.10 | 26.84 | 122 | 0.89 |
| 367 | 9.88 | 34.72 | 0.10 | 3.00 | 500 | 7.88 | 34.64 | 0.10 | 27.03 | 104 | 1.01 |
| 463 | 8.28 | 34.65 | 0.10 | 3.30a) | 600 | 6.85 | 34.61 | 0.10 | 27.14 | 94 | 1.12 |
| 688 | 6.14 | 34.59 | 0.14 | 3.41a) | 700 | (6.10) | (34.59) | (0.14) | (27.24) | (84) | (1.22) |
| 1055 | 4.48 | 34.57 | 0.42 | 3.61a) | 800 | (5.54) | (34.58) | (0.17) | (27.30) | (78) | (1.31) |
| | | | | | 1000 | (4.68) | (34.57) | (0.36) | (27.40) | (69) | (1.48) |
| 86 | SPENCER F. BAIRD; May 30, 1958; 1432 GCT; 14°13.5'N, 95°51'W; sounding, 2170 fm; wind, 320°, force 2; weather, cloudy; sea, slight; wire angle, 17°. | | | | | | | | | | |
| 0 | 28.99 | 33.99 | 4.60 | 0.31 | 0 | 28.99 | 33.99 | 4.60 | 21.34 | 646 | 0.00 |
| 9 | 28.98 | 33.99 | 4.60 | 0.34 | 10 | 28.98 | 33.99 | 4.60 | 21.34 | 646 | 0.06 |
| 19 | 29.01 | 34.01 | 4.62 | 0.34 | 20 | 29.01 | 34.00 | 4.61 | 21.34 | 646 | 0.13 |
| 28 | 29.00 | 33.98 | 4.57 | 0.36 | 30 | 28.98 | 33.98 | 4.57 | 21.34 | 646 | 0.19 |
| 38 | 28.31 | 34.05 | 4.58 | 0.38 | 50 | 26.00 | 34.17 | 4.58 | 22.43 | 542 | 0.31 |
| 47 | 26.74 | 34.13 | 4.75 | 0.49 | 75 | 20.10 | 34.53 | 1.93 | 24.40 | 354 | 0.42 |
| 66 | 22.36 | 34.34 | 2.97 | 1.30 | 100 | 15.50 | 34.73 | 0.26 | 25.67 | 233 | 0.50 |
| 79 | 18.90 | 34.65 | 1.41 | 2.06 | 150 | 13.46 | 34.82 | 0.18 | 26.19 | 184 | 0.60 |
| 92 | 16.60 | 34.70 | 0.41 | 2.38b) | 200 | 12.62 | 34.82 | 0.13 | 26.34 | 169 | 0.69 |
| 140 | 13.66 | 34.82 | 0.18 | 2.68b) | 250 | 11.96 | 34.79 | 0.13 | 26.45 | 159 | 0.78 |
| 203 | 12.59 | 34.82 | 0.13 | 2.56 | 300 | 10.93 | 34.74 | 0.12 | 26.60 | 144 | 0.86 |
| 266 | 11.70 | 34.78 | 0.13 | 3.21b) | 400 | 8.77 | 34.64 | 0.08 | 26.90 | 117 | 1.00 |
| 351 | 9.60 | 34.67 | 0.08 | 3.01b) | 500 | 7.40 | 34.59 | 0.10 | 27.07 | 100 | 1.11 |
| 443 | 8.04 | 34.61 | 0.09 | 3.17b) | 600 | 6.48 | 34.57 | 0.11 | 27.17 | 90 | 1.22 |
| 659 | 6.06 | 34.56 | 0.11 | 3.38b) | 700 | (5.83) | (34.56) | (0.14) | (27.25) | (83) | (1.31) |
| 1016 | 4.37 | 34.58 | 0.32 | 3.66b) | 800 | (5.35) | (34.57) | (0.19) | (27.31) | (77) | (1.40) |
| | | | | | 1000 | (4.52) | (34.58) | (0.30) | (27.42) | (67) | (1.56) |

a) Duplicate values: 463 m, 3.20; 688 m, 3.31; 1055 m, 3.53 µg at/L.

b) Duplicate values: 92 m, 2.31; 140 m, 2.47; 266 m, 3.01; 351 m, 3.13; 443 m, 3.09; 659 m, 3.29; 1016 m, 3.41 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

87

SPENCER F. BAIRD; May 30-31, 1958; 2140, 0020 GCT; 13°46.5'N, 96°08'W; sounding, 2440 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 20°, 40°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.03 | 34.14 | 4.30 | 0.34 | 0 | 30.03 | 34.14 | 4.30 | 21.12 | 670 | 0.00 |
| 9 | 29.70 | 34.13 | 4.29 | 0.33 | 10 | 29.68 | 34.13 | 4.30 | 21.20 | 660 | 0.07 |
| 18 | 29.50 | 34.15 | 4.42 | 0.32 | 20 | 29.46 | 34.16 | 4.43 | 21.30 | 650 | 0.13 |
| 28 | 29.04 | 34.16 | 4.40 | 0.34 | 30 | 28.87 | 34.17 | 4.44 | 21.49 | 631 | 0.20 |
| 37 | 28.27 | 34.23 | 4.67 | 0.40 | 50 | 22.50 | 34.42 | 2.92 | 23.65 | 425 | 0.30 |
| 46 | 24.19 | 34.34 | 3.76 | 0.94 | 75 | 16.82 | 34.69 | 0.37 | 25.34 | 264 | 0.39 |
| 64 | 18.22 | 34.60 | 0.63 | 2.33 | 100 | 14.21 | 34.79 | 0.10 | 26.00 | 202 | 0.45 |
| 78 | 16.58 | 34.70 | 0.32 | 2.60 | 150 | 12.82 | 34.81 | 0.10 | 26.29 | 174 | 0.54 |
| 91 | 14.80 | 34.76 | 0.10 | 2.24a) | 200 | 12.03 | 34.79 | 0.09 | 26.44 | 160 | 0.63 |
| 118p | 13.36 | 34.82 | 0.12 | 2.78a) | 250 | 11.20 | 34.76 | 0.06 | 26.57 | 148 | 0.71 |
| 244p | 11.24 | 34.76 | 0.07 | 2.93 | 300 | 10.39 | 34.71 | 0.04 | 26.68 | 137 | 0.78 |
| 349p | 9.52 | 34.66 | 0.08 | 3.14 | 400 | 8.72 | 34.62 | 0.08 | 26.89 | 117 | 0.91 |
| 596p | 6.46 | 34.54 | 0.07 | 3.55 | 500 | 7.30 | 34.57 | 0.07 | 27.07 | 101 | 1.03 |
| | | | | | 600 | (6.43) | (34.54) | (0.07) | (27.16) | (92) | (1.14) |
| 813 | 5.28 | 34.54 | 0.22 | 3.41a) | 700 | (5.88) | (34.54) | (0.11) | (27.22) | (86) | (1.24) |
| 1170 | 3.84 | 34.60 | 0.64 | 3.48 | 800 | (5.40) | (34.54) | (0.20) | (27.28) | (80) | (1.33) |
| 1449 | 3.10 | 34.61 | 1.09 | 3.39 | 1000 | 4.50 | 34.57 | 0.44 | 27.42 | 67 | (1.49) |
| 1825 | 2.47 | 34.63 | 1.66 | 3.18 | 1200 | 3.76 | 34.60 | 0.67 | 27.52 | 58 | (1.64) |
| 2205 | 1.99 | 34.63 | 2.15 | 3.04 | 1500 | 3.01 | 34.61 | 1.20 | 27.60 | 50 | (1.83) |
| 2590 | 1.90 | 34.65 | 2.31 | 2.94 | 2000 | 2.22 | 34.63 | 1.90 | 27.68 | 43 | (2.12) |
| 2819 | 1.88 | 34.67 | 2.58 | 2.86a) | | | | | | | |
| 3197 | 1.88 | 34.67 | 1.72u | 2.96 | | | | | | | |
| 3503 | 1.88 | 34.66 | 2.37 | 2.84 | | | | | | | |
| 3597 | 1.90 | 34.65 | 2.41 | 2.92 | | | | | | | |

88

SPENCER F. BAIRD; May 31, 1958; 1227 GCT; 15°11'N, 96°55'W; sounding, 2130 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.84 | 34.05 | 3.04 | 0.32 | 0 | 29.84 | 34.05 | 3.04 | 21.07 | 672 | 0.00 |
| 9 | 29.84 | 34.04 | 2.95 | 0.32 | 10 | 29.84 | 34.04 | 2.96 | 21.08 | 671 | 0.07 |
| 18 | 29.86 | 34.05 | 3.11 | 0.34 | 20 | 29.85 | 34.04 | 3.12 | 21.08 | 671 | 0.13 |
| 27 | 29.80 | 34.07 | 3.14 | 0.34 | 30 | 29.70 | 34.09 | 3.23 | 21.15 | 665 | 0.20 |
| 36 | 28.58 | 33.91 | 4.66 | 0.39 | 50 | 27.65 | 33.98 | 4.80 | 21.77 | 606 | 0.33 |
| 44 | 28.08 | 33.92 | 4.87 | 0.63b) | 75 | 24.80 | 34.23 | 3.66 | 22.84 | 502 | 0.47 |
| 61 | 26.50 | 34.11 | 4.32 | 0.70 | 100 | 17.50 | 34.64 | 0.62 | 25.14 | 284 | 0.57 |
| 74 | 25.27 | 34.22 | 3.87 | 0.80 | 150 | 13.55 | 34.83 | 0.20 | 26.16 | 186 | 0.68 |
| 86 | 20.47 | 34.45 | 1.47 | 1.94 | 200 | 12.38 | 34.81 | 0.16 | 26.39 | 165 | 0.77 |
| 129 | 14.39 | 34.82 | 0.23 | 2.55 | 250 | 11.66 | 34.77 | 0.12 | 26.49 | 155 | 0.85 |
| 182 | 12.70 | 34.83 | 0.17 | 2.66 | 300 | 10.88 | 34.73 | 0.09 | 26.61 | 144 | 0.93 |
| 238 | 11.82 | 34.78 | 0.13 | 2.64b) | 400 | 9.32 | 34.66 | 0.08 | 26.82 | 124 | 1.07 |
| 310 | 10.72 | 34.72 | 0.08 | 2.77b) | 500 | 7.92 | 34.62 | 0.08 | 27.02 | 105 | 1.19 |
| 389 | 9.46 | 34.67 | 0.08 | 2.98b) | 600 | (6.92) | (34.60) | (0.10) | (27.14) | (94) | (1.30) |
| 582 | 7.04 | 34.60 | 0.10 | 3.35b) | 700 | (6.21) | (34.60) | (0.13) | (27.23) | (85) | (1.40) |
| 909 | 4.88 | 34.60 | 0.20 | 3.52 | 800 | (5.56) | (34.60) | (0.17) | (27.31) | (77) | (1.49) |
| | | | | | 1000 | (4.36) | (34.60) | | (27.45) | (64) | (1.65) |

a) Duplicate values: 91 m, 2.68; 118 m, 2.77; 813 m, 3.30; 2819 m, 2.96 μg at/L.
b) Duplicate values: 44 m, 0.41; 238 m, 2.78; 310 m, 2.87; 389 m, 3.07; 582 m, 3.26 μg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 89 | SPENCER F. BAIRD; May 31, 1958; 2235 GCT; 15°12'N, 96°03.5'W; sounding, 2660 fm; wind, 220°, force 5; weather, partly cloudy; sea, moderate; wire angle, 30°. | | | | | | | | | | |
| 0 | 30.56 | 34.06 | 4.23 | 0.54 | 0 | 30.56 | 34.06 | 4.23 | 20.85 | 693 | 0.00 |
| 9 | 30.06 | 34.04 | 3.52 | 0.35 | 10 | 30.05 | 34.04 | 3.53 | 21.03 | 676 | 0.07 |
| 18 | 29.90 | 34.01 | 4.43 | 0.36 | 20 | 29.83 | 34.00 | 4.46 | 21.06 | 673 | 0.14 |
| 26 | 29.35 | 33.98 | 4.55 | 0.36 | 30 | 29.03 | 33.99 | 4.67 | 21.34 | 647 | 0.20 |
| 34 | 28.76 | 34.02 | 4.78 | 0.35 | 50 | 26.14 | 34.14 | 4.41 | 22.38 | 547 | 0.32 |
| 42 | 27.86 | 34.03 | 4.69 | 0.38 | 75 | 19.00 | 34.55 | 0.66 | 24.70 | 325 | 0.43 |
| 58 | 24.66 | 34.27 | 4.21 | 0.75 | 100 | 15.02 | 34.76 | 0.20 | 25.80 | 221 | 0.50 |
| 69 | 21.00 | 34.45 | 1.59 | 1.84 | 150 | 13.12 | 34.84 | 0.19 | 26.26 | 177 | 0.60 |
| 78 | 18.28 | 34.59 | 0.45 | 2.37 | 200 | 12.18 | 34.82 | 0.13 | 26.43 | 161 | 0.68 |
| 115 | 13.94 | 34.81 | 0.17 | 2.61 | 250 | 11.47 | 34.78 | 0.10 | 26.54 | 151 | 0.77 |
| 165 | 12.84 | 34.84 | 0.20 | 2.60 | 300 | 10.89 | 34.74 | 0.09 | 26.61 | 144 | 0.84 |
| 215 | 11.92 | 34.81 | 0.10 | 2.69 | 400 | 9.38 | 34.65 | 0.08 | 26.80 | 125 | 0.98 |
| 282 | 11.16 | 34.76 | 0.10 | 2.86 | 500 | 8.00 | 34.59 | 0.09 | 26.98 | 109 | 1.11 |
| 352 | 10.08 | 34.69 | 0.08 | 3.05 | 600 | (7.04) | (34.56) | (0.10) | (27.08) | (99) | (1.22) |
| 526 | 7.68 | 34.58 | 0.09 | 3.36 | 700 | (6.30) | (34.54) | (0.09) | (27.18) | (90) | (1.33) |
| 830 | 5.36 | 34.53 | 0.09 | 3.44 | 800 | (5.58) | (34.53) | (0.09) | (27.26) | (82) | (1.42) |
| 90 | SPENCER F. BAIRD; June 1, 1958; 0335 GCT; 15°15'N, 95°22.5'W; sounding, 1360 fm; wind, 260°, force 1; weather, partly cloudy; sea, moderate; wire angle, 12°. | | | | | | | | | | |
| 0 | 30.32 | 34.18 | 4.35 | 0.26 | 0 | 30.32 | 34.18 | 4.35 | 21.02 | 677 | 0.00 |
| 10 | 30.28 | 34.16 | 4.38 | 0.29 | 10 | 30.28 | 34.16 | 4.38 | 21.04 | 675 | 0.07 |
| 19 | 29.00 | 34.14 | 4.48 | 0.30 | 20 | 29.00 | 34.14 | 4.48 | 21.44 | 636 | 0.13 |
| 29 | 28.33 | 34.14 | 4.62 | 0.35 | 30 | 28.33 | 34.14 | 4.63 | 21.66 | 615 | 0.20 |
| 38 | 28.24 | 34.14 | 4.83 | 0.35 | 50 | 25.28 | 34.22 | 3.45 | 22.68 | 518 | 0.31 |
| 48 | 26.92 | 34.17 | 4.78 | 0.46 | 75 | 18.00 | 34.56 | 0.76 | 24.96 | 301 | 0.41 |
| 66 | 19.86 | 34.47 | 1.26 | 1.92 | 100 | 15.17 | 34.73 | 0.47 | 25.75 | 226 | 0.48 |
| 79 | 17.06 | 34.63 | 0.48 | 2.29 | 150 | 13.15 | 34.81 | 0.21 | 26.23 | 179 | 0.58 |
| 92 | 15.60 | 34.72 | 0.51 | 2.35 | 200 | 12.27 | 34.80 | 0.20 | 26.40 | 164 | 0.67 |
| 142 | 13.38 | 34.81 | 0.22 | 2.54 | 250 | 11.58 | 34.78 | 0.16 | 26.51 | 153 | 0.75 |
| 209 | 12.16 | 34.80 | 0.19 | 2.61 | 300 | 10.94 | 34.74 | 0.12 | 26.60 | 144 | 0.83 |
| 277 | 11.24 | 34.76 | 0.13 | 2.68a) | 400 | 9.42 | 34.65 | 0.09 | 26.79 | 126 | 0.97 |
| 369 | 9.88 | 34.67 | 0.09 | 2.95a) | 500 | 7.97 | 34.59 | 0.08 | 26.98 | 109 | 1.10 |
| 467 | 8.42 | 34.61 | 0.08 | 3.16a) | 600 | 6.98 | 34.55 | 0.07 | 27.09 | 98 | 1.21 |
| 695 | 6.26 | 34.53 | 0.08 | 3.48a) | 700 | (6.23) | (34.53) | (0.08) | (27.17) | (90) | (1.31) |
| 1053 | 4.44 | 34.55 | 0.31 | 3.56 | 800 | (5.67) | (34.53) | (0.14) | (27.24) | (84) | (1.41) |
| | | | | | 1000 | (4.69) | (34.55) | (0.28) | (27.38) | (71) | (1.58) |
| 91 | SPENCER F. BAIRD; June 1, 1958; 0952 GCT; 14°40.5'N, 95°20'W; sounding, 2300 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 20°. | | | | | | | | | | |
| 0 | 30.16 | 34.12 | 4.25 | 0.24 | 0 | 30.16 | 34.12 | 4.25 | 21.03 | 676 | 0.00 |
| 8 | 30.10 | 34.11 | 4.39 | 0.27 | 10 | 30.10 | 34.10 | 4.39 | 21.05 | 674 | 0.07 |
| 17 | 29.67 | 34.09 | 4.49 | 0.27 | 20 | 28.85 | 34.09 | 4.66 | 21.45 | 635 | 0.13 |
| 26 | 27.95 | 34.07 | 4.75 | 0.33 | 30 | 27.15 | 34.13 | 4.69 | 22.04 | 579 | 0.19 |
| 33 | 26.49 | 34.15 | 4.59 | 0.45 | 50 | 19.40 | 34.55 | 2.11 | 24.65 | 330 | 0.28 |
| 40 | 24.55 | 34.16 | 3.77 | 0.72 | 75 | 16.30 | 34.73 | 0.80 | 25.50 | 250 | 0.36 |
| 52 | 18.38 | 34.62 | 1.81 | 1.82 | 100 | 14.97 | 34.81 | 0.63 | 25.85 | 216 | 0.42 |
| 62 | 16.93 | 34.70 | 0.93 | 2.16 | 150 | 13.18 | 34.86 | 0.47 | 26.27 | 176 | 0.52 |
| 72 | 16.43 | 34.72 | 0.83 | 2.16 | 200 | 12.36 | 34.87 | 0.14 | 26.44 | 160 | 0.60 |
| 109 | 14.31 | 34.81 | 0.65 | 2.18 | 250 | 11.70 | 34.82 | 0.22 | 26.53 | 152 | 0.68 |
| 159 | 13.02 | 34.87 | 0.43 | 2.44 | 300 | 11.10 | 34.77 | 0.31 | 26.60 | 144 | 0.76 |
| 210 | 12.21 | 34.87 | 0.10 | 2.56 | 400 | 9.65 | 34.70 | 0.08 | 26.79 | 126 | 0.90 |
| 280 | 11.36 | 34.79 | 0.32 | 2.68 | 500 | 8.05 | 34.63 | 0.10 | 27.00 | 107 | 1.03 |
| 358 | 10.30 | 34.73 | 0.08 | 2.82b) | | | | | | | |
| 551 | 7.18 | 34.60 | 0.14 | 3.39 | | | | | | | |
| 871c) | 5.17 | 34.56 | 0.20 | 3.44 | | | | | | | |

a) Duplicate values: 277 m, 2.81; 369 m, 2.87; 467 m, 3.23; 695 m, 3.41 µg at/L.
b) Duplicate value, 2.89 µg at/L.
c) Unprotected thermometer malfunctioned; depth determined by extrapolation of wire profile curve.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

92

SPENCER F. BAIRD; June 1, 1958; 1516 GCT; 14°40'N, 96°08'W; sounding, 2070 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.07 | 34.11 | 4.54 | 0.23 | 0 | 30.07 | 34.11 | 4.54 | 21.06 | 673 | 0.00 |
| 8 | 30.01 | 34.11 | 4.88 | 0.28 | 10 | 30.00 | 34.08 | 4.88 | 21.07 | 672 | 0.07 |
| 17 | 29.97 | 34.07 | 4.89 | 0.30 | 20 | 29.50 | 34.05 | 4.75 | 21.20 | 659 | 0.13 |
| 26 | 29.25 | 34.05 | 4.64 | 0.30 | 30 | 29.18 | 34.05 | 4.60 | 21.32 | 649 | 0.20 |
| 35 | 29.08 | 34.05 | 4.57 | 0.29 | 50 | 28.45 | 34.10 | 4.62 | 21.60 | 622 | 0.33 |
| 44 | 28.68 | 34.07 | 4.76 | 0.33 | 75 | 24.70 | 34.25 | 4.30 | 22.92 | 495 | 0.47 |
| 61 | 27.83 | 34.07 | 4.96 | 0.40 | 100 | 16.39 | 34.68 | 0.58 | 25.43 | 256 | 0.56 |
| 73 | 25.50 | 34.20 | 4.75 | 0.74 | 150 | 13.50 | 34.84 | 0.24 | 26.18 | 184 | 0.67 |
| 85 | 19.98 | 34.48 | 1.39 | 1.85a) | 200 | 12.27 | 34.84 | 0.18 | 26.44 | 160 | 0.76 |
| 124 | 14.42 | 34.78 | 0.37 | 2.48a) | 250 | 11.46 | 34.79 | 0.18 | 26.55 | 150 | 0.84 |
| 174 | 12.82 | 34.87 | 0.17 | 2.53a) | 300 | 10.70 | 34.74 | 0.12 | 26.64 | 141 | 0.91 |
| 216 | 12.00 | 34.83 | 0.19 | 2.66 | 400 | 9.10 | 34.67 | 0.10 | 26.86 | 120 | 1.05 |
| 298 | 10.76 | 34.74 | 0.12 | 2.81 | 500 | 7.78 | 34.61 | 0.10 | 27.03 | 104 | 1.17 |
| 379 | 9.44 | 34.68 | 0.10 | 3.33a) | 600 | 6.65 | 34.57 | 0.12 | 27.15 | 92 | 1.28 |
| 570 | 6.92 | 34.58 | 0.12 | 3.31 | 700 | 5.96 | 34.56 | 0.11 | 27.24 | 84 | 1.38 |
| 885 | 5.01 | 34.56 | 0.08 | 3.34 | 800 | 5.44 | 34.56 | 0.10 | 27.29 | 79 | 1.47 |
| | | | | | 1000 | (4.46) | (34.56) | | (27.41) | (68) | (1.63) |

93

SPENCER F. BAIRD; June 1, 1958; 1950 GCT; 14°17.5'N, 96°21.5'W; sounding, 2100 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.86 | 33.98 | 3.99 | 0.14 | 0 | 30.86 | 33.98 | 3.99 | 20.70 | 708 | 0.00 |
| 8 | 30.25 | 33.95 | 3.56 | 0.28 | 10 | 30.25 | 33.95 | 3.53 | 20.89 | 690 | 0.07 |
| 17 | 30.20 | 33.95 | 3.51 | 0.32 | 20 | 29.30 | 34.02 | 3.92 | 21.24 | 656 | 0.14 |
| 26 | 29.10 | 34.04 | 3.88 | 0.32 | 30 | 29.00 | 34.07 | 3.88 | 21.38 | 642 | 0.20 |
| 35 | 28.88 | 34.11 | 3.91 | 0.30 | 50 | 27.92 | 34.09 | 3.79 | 21.76 | 606 | 0.33 |
| 44 | 28.11 | 34.09 | 4.05 | 0.31 | 75 | 25.20 | 34.21 | 3.60 | 22.73 | 513 | 0.47 |
| 61 | 27.03 | 34.12 | 3.37 | 0.44 | 100 | 17.20 | 34.65 | 0.90 | 25.22 | 276 | 0.57 |
| 73 | 25.62 | 34.18 | 3.77 | 0.66 | 150 | 13.65 | 34.81 | 0.17 | 26.13 | 189 | 0.68 |
| 86 | 21.56 | 34.42 | 2.24 | 1.52 | 200 | 12.55 | 34.83 | 0.19 | 26.38 | 166 | 0.77 |
| 128 | 14.50 | 34.78 | 0.18 | 2.53 | 250 | 11.67 | 34.77 | 0.15 | 26.49 | 155 | 0.85 |
| 176 | 13.00 | 34.83 | 0.20 | 2.54 | 300 | 10.84 | 34.70 | 0.13 | 26.58 | 147 | 0.93 |
| 216 | 12.26 | 34.83 | 0.17 | 2.65 | 400 | 9.02 | 34.61 | 0.13 | 26.83 | 123 | 1.08 |
| 294 | 10.97 | 34.70 | 0.14 | 2.81 | 500 | 7.70 | 34.56 | 0.13 | 26.99 | 108 | 1.20 |
| 368 | 9.58 | 34.63 | 0.13 | 3.06 | 600 | (6.75) | (34.53) | (0.13) | (27.10) | (97) | (1.31) |
| 546 | 7.18 | 34.54 | 0.16 | 3.36 | 700 | (6.08) | (34.53) | (0.11) | (27.19) | (89) | (1.41) |
| 861 | 5.10 | 34.53 | 0.08 | 3.50 | 800 | (5.47) | (34.53) | (0.09) | (27.27) | (81) | (1.51) |
| | | | | | 1000 | (4.30) | (34.53) | | (27.40) | (69) | (1.68) |

a) Duplicate values: 85 m, 1.95; 124 m, 2.34; 174 m, 2.45; 379 m, 3.02 μg at/L.

94

SPENCER F. BAIRD; June 1-2, 1958; 2340, 0130 GCT; 13°56.5'N, 96°49'W; sounding, 2200 fm; wind, direction missing, force 1; weather, partly cloudy; sea, slight; wire angle, 05°, 10°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 0 | 30.00 | 34.01 | 4.45 | 0.26 | 0 | 30.00 | 34.01 | 4.45 | 21.00 | 678 | 0.00 |
| 10 | 29.50 | 34.03 | 4.34 | 0.27 | 10 | 29.50 | 34.03 | 4.34 | 21.20 | 660 | 0.07 |
| 20 | 29.42 | 34.04 | 4.28 | 0.26 | 20 | 29.42 | 34.04 | 4.28 | 21.23 | 658 | 0.13 |
| 30 | 29.23 | 34.01 | 4.29 | 0.28 | 30 | 29.23 | 34.01 | 4.29 | 21.26 | 654 | 0.20 |
| 39 | 29.10 | 33.96 | 4.30 | 0.28 | 50 | 28.60 | 34.08 | 4.43 | 21.54 | 628 | 0.33 |
| 49 | 28.72 | 34.07 | 4.42 | 0.32 | 75 | 21.40 | 34.36 | 2.38 | 23.92 | 400 | 0.46 |
| 68 | 23.33 | 34.22 | 3.66 | 0.90 | 100 | 16.20 | 34.66 | 0.20 | 25.46 | 254 | 0.54 |
| 81 | 19.76 | 34.47 | 0.98 | 2.00 | 150 | 12.97 | 34.80 | 0.10 | 26.26 | 177 | 0.64 |
| 95 | 17.66 | 34.59 | 0.31 | 2.30a) | 200 | 12.04 | 34.77 | 0.08 | 26.42 | 162 | 0.73 |
| 146 | 13.08 | 34.80 | 0.10 | 2.58 | 250 | 11.30 | 34.73 | 0.08 | 26.52 | 152 | 0.81 |
| 213 | 11.84 | 34.76 | 0.08 | 2.69 | 300 | 10.66 | 34.68 | 0.08 | 26.61 | 144 | 0.89 |
| 283 | 10.85 | 34.70 | 0.08 | 2.88 | 400 | 9.10 | 34.61 | 0.08 | 26.82 | 124 | 1.03 |
| 375 | 9.54 | 34.63 | 0.08 | 2.94a) | 500 | 7.59 | 34.57 | 0.09 | 27.03 | 104 | 1.15 |
| 473 | 7.96 | 34.58 | 0.08 | 3.22 | 600 | 6.65 | 34.54 | 0.10 | 27.12 | 95 | 1.26 |
| 700 | 5.86 | 34.52 | 0.14 | 3.36 | 700 | 5.86 | 34.52 | 0.14 | 27.21 | 87 | 1.36 |
| 1061 | 4.16 | 34.52u | 0.42 | 3.58a) | 800 | 5.29 | 34.52 | 0.20 | 27.28 | 80 | 1.45 |
| | | | | | 1000 | 4.40 | 34.52 | 0.32 | 27.38 | 71 | 1.62 |
| 1004 | 4.40 | 34.54u | 0.32 | 3.32 | 1200 | 3.71 | 34.56 | 0.72 | 27.48 | 61 | 1.77 |
| 1401 | 3.18 | 34.59 | 1.21 | 3.20a) | 1500 | 2.98 | 34.59 | 1.36 | 27.59 | 51 | 1.97 |
| 1706 | 2.59 | 34.68u | 1.59 | 3.02a) | 2000 | 2.12 | 34.65 | 2.13 | 27.70 | 41 | 2.26 |
| 2097 | 2.01 | 34.63 | 2.19 | 2.92a) | | | | | | | |
| 2490 | 1.84 | 34.65 | 2.46 | 2.82a) | | | | | | | |
| 2894 | 1.88 | 34.63 | 2.67 | 2.88 | | | | | | | |
| 3066p | 1.90 | 34.65 | 2.58 | 2.71 | | | | | | | |
| 3773p | 1.92 | 34.64 | 1.39u | 2.74a) | | | | | | | |
| 3993p | 1.94 | 34.65 | 2.58 | - | | | | | | | |

95

SPENCER F. BAIRD; June 2, 1958; 1950 GCT; 15°36'N, 98°43'W; sounding, 2280 fm; wind, 320°, force 2; weather, partly cloudy; sea, slight; wire angle, 10°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.90 | 34.28 | 0 | 29.90 | 34.28 | 21.24 | 656 | 0.00 |
| 10 | 29.63 | 34.29 | 10 | 29.63 | 34.29 | 21.33 | 647 | 0.06 |
| 20 | 29.48 | 34.29 | 20 | 29.48 | 34.29 | 21.38 | 642 | 0.13 |
| 30 | 29.26 | 34.29 | 30 | 29.26 | 34.29 | 21.46 | 635 | 0.19 |
| 39 | 27.36 | 34.16 | 50 | 25.92 | 34.26 | 22.53 | 532 | 0.31 |
| 49 | 25.98 | 34.25 | 75 | 19.20 | 34.62 | 24.70 | 325 | 0.42 |
| 67 | 20.10 | 34.49 | 100 | 15.98 | 34.74 | 25.58 | 242 | 0.49 |
| 80 | 18.00 | 34.61 | 150 | 13.22 | 34.85 | 26.25 | 178 | 0.59 |
| 94 | 16.26 | 34.71 | 200 | 12.24 | 34.85 | 26.45 | 159 | 0.68 |
| 142 | 13.54 | 34.85 | 250 | 11.46 | 34.77 | 26.54 | 151 | 0.76 |
| 209 | 12.12 | 34.85 | 300 | 10.69 | 34.72 | 26.64 | 141 | 0.84 |
| 250p | 11.42 | 34.77 | 400 | 8.99 | 34.64 | 26.86 | 120 | 0.98 |
| 368 | 9.57 | 34.67 | 500 | 7.45 | 34.58 | 27.04 | 103 | 1.09 |
| 464 | 7.78 | 34.59 | 600 | 6.76 | 34.56 | 27.12 | 95 | 1.20 |
| 687 | 6.24 | 34.55 | 700 | (6.17) | (34.55) | (27.20) | (88) | (1.30) |
| 1052 | 4.36 | 34.56 | 800 | (5.53) | (34.55) | (27.26) | (82) | (1.40) |
| | | | 1000 | (4.62) | (34.56) | (27.39) | (70) | (1.57) |

a) Duplicate values: 95 m, 2.46; 375 m, 3.01; 1061 m, 3.34; 1401 m, 3.33; 1706 m, 2.95; 2097 m, 2.73; 2490 m, 2.89; 3773 m, 2.84 µg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; June 6, 1958; 1330 GCT; 16°04'N, 100°44'W; sounding, 2030 fm; wind, 200°, force 1; weather, thunderstorm; sea, smooth; wire angle, 10°. 100

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.04 | 34.19 | 3.66 | 0.30 | 0 | 30.04 | 34.19 | 3.66 | 21.12 | 667 | 0.00 |
| 10 | 30.06 | 34.22 | 3.78 | 0.30 | 10 | 30.06 | 34.22 | 3.78 | 21.14 | 666 | 0.07 |
| 20 | 29.88 | 34.20 | 3.62 | 0.30 | 20 | 29.88 | 34.20 | 3.62 | 21.19 | 661 | 0.13 |
| 29 | 28.80 | 34.14 | 3.92 | 0.32 | 30 | 28.60 | 34.14 | 3.98 | 21.57 | 624 | 0.20 |
| 39 | 27.06 | 34.22 | 4.58 | 0.42a) | 50 | 25.10 | 34.37 | 4.34 | 22.86 | 501 | 0.31 |
| 49 | 25.74 | 34.33 | 4.62 | 0.47 | 75 | 18.91 | 34.57 | 0.73 | 24.74 | 322 | 0.41 |
| 68 | 20.19 | 34.52 | 1.30 | 1.88 | 100 | 16.76 | 34.65 | 0.20 | 25.32 | 267 | 0.49 |
| 83 | 18.00 | 34.60 | 0.42 | 2.34a) | 150 | 13.08 | 34.83 | 0.07 | 26.26 | 177 | 0.60 |
| 97 | 17.00 | 34.64 | 0.22 | 2.51 | 200 | 12.13 | 34.78 | 0.07 | 26.42 | 162 | 0.68 |
| 148 | 13.15 | 34.83 | 0.07 | 2.65 | 250 | 11.39 | 34.74 | 0.07 | 26.52 | 152 | 0.76 |
| 218 | 11.85 | 34.77 | 0.07 | 2.76 | 300 | 10.77 | 34.71 | 0.07 | 26.61 | 144 | 0.84 |
| 287 | 10.93 | 34.72 | 0.07 | 2.90 | 400 | 9.30 | 34.63 | 0.08 | 26.80 | 126 | 0.98 |
| 380 | 9.61 | 34.64 | 0.08 | 3.12 | 500 | (8.00) | (34.59) | (0.07) | (26.98) | (109) | (1.11) |
| 480 | 8.22 | 34.60 | 0.07 | 3.15 | 600 | (6.99) | (34.56) | (0.07) | (27.10) | (97) | (1.22) |
| 706 | 5.93 | 34.53 | 0.08 | 3.39a) | 700 | (5.98) | (34.53) | (0.08) | (27.21) | (87) | (1.32) |
| 1070 | 4.12 | 34.53 | 0.41 | 3.40a) | 800 | 5.32 | 34.53 | 0.15 | 27.28 | 80 | (1.42) |
| | | | | | 1000 | 4.38 | 34.53 | 0.34 | 27.40 | 69 | (1.58) |

SPENCER F. BAIRD; June 7, 1958; 2027 GCT; 17°03'N, 101°26'W; sounding, 580 fm; wind, direction missing, force 1; weather, cloudy; sea, high; wire angle, 30°. 104

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.84 | 34.49 | 3.84 | 0.32 | 0 | 29.84 | 34.49 | 3.84 | 21.42 | 638 | 0.00 |
| 8 | 29.45 | 34.45 | 4.00 | 0.34 | 10 | 29.31 | 34.44 | 4.03 | 21.53 | 628 | 0.06 |
| 17 | 28.36 | 34.37 | 4.16 | 0.34 | 20 | 25.94 | 34.30 | 4.16 | 22.54 | 531 | 0.12 |
| 26 | 25.16 | 34.30 | 4.12 | 0.48 | 30 | 24.47 | 34.30 | 3.93 | 22.99 | 488 | 0.17 |
| 34 | 22.22 | 34.39 | 2.19 | 1.30 | 50 | 19.49 | 34.53 | 0.83 | 24.57 | 338 | 0.25 |
| 42 | 20.36 | 34.47 | 1.14 | 1.84b) | 75 | 17.92 | 34.60 | 0.46 | 25.00 | 297 | 0.34 |
| 58 | 18.78 | 34.56 | 0.65 | 2.10 | 100 | 15.61 | 34.71 | 0.27 | 25.63 | 236 | 0.40 |
| 69 | 18.28 | 34.58 | 0.56 | 2.23 | 150 | 13.88 | 34.83 | 0.13 | 26.10 | 192 | 0.51 |
| 79 | 17.32 | 34.62 | 0.39 | 2.29b) | 200 | 12.80 | 34.84 | 0.05 | 26.32 | 171 | 0.60 |
| 119 | 14.62 | 34.78 | 0.22 | 2.50 | 250 | 11.80 | 34.80 | 0.06 | 26.49 | 155 | 0.69 |
| 175 | 13.36 | 34.85 | 0.05 | 2.64b) | 300 | 10.97 | 34.73 | 0.10 | 26.59 | 146 | 0.77 |
| 230 | 12.16 | 34.82 | 0.05 | 2.72 | 400 | 9.56 | 34.65 | 0.12 | 26.78 | 128 | 0.91 |
| 306 | 10.86 | 34.72 | 0.11 | 2.84 | 500 | 8.29 | 34.60 | 0.10 | 26.94 | 113 | 1.04 |
| 388 | 9.72 | 34.66 | 0.13 | 3.04 | 600 | (7.20) | (34.57) | (0.10) | (27.07) | (100) | (1.15) |
| 580 | 7.37 | 34.57 | 0.10 | 3.30 | 700 | (6.43) | (34.55) | (0.11) | (27.16) | (92) | (1.26) |
| 901 | 5.05 | 34.52 | 0.16 | 3.48 | 800 | (5.75) | (34.53) | (0.13) | (27.24) | (84) | (1.36) |
| | | | | | 1000 | (4.46) | (34.51) | | (27.38) | (71) | (1.53) |

SPENCER F. BAIRD; June 8, 1958; 2013 GCT; 17°56'N, 102°48'W; sounding, 100 fm; wind, 090°, force 3; weather, missing; sea, high; wire angle, 20°. 109

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.54 | 34.47 | | 0.30 | 0 | 28.54 | 34.47 | | 21.84 | 598 | 0.00 |
| 10 | 28.09 | 34.47 | | 0.34 | 10 | 28.09 | 34.47 | | 21.99 | 584 | 0.06 |
| 28 | 25.66 | 34.40 | | 0.50 | 20 | 27.13 | 34.45 | | 22.29 | 555 | 0.12 |
| 47 | 24.78 | 34.42 | | 0.59 | 30 | 25.28 | 34.41 | | 22.83 | 503 | 0.17 |
| 70 | 20.67 | 34.51 | | 1.76 | 50 | 23.78 | 34.44 | | 23.30 | 458 | 0.26 |
| 94 | 16.74 | 34.70 | | 2.40 | 75 | 19.80 | 34.54 | | 24.49 | 346 | 0.37 |
| 116 | 15.76 | 34.74 | | 2.47 | 100 | 16.39 | 34.71 | | 25.45 | 254 | 0.44 |
| 146 | 14.04 | 34.78 | | 2.44 | 150 | (13.88) | (34.77) | | (26.05) | (197) | (0.56) |

a) Duplicate values: 39 m, 0.73; 83 m, 2.22; 706 m, 3.28; 1070 m, 3.49 μg at/L.
b) Duplicate values: 42 m, 1.91; 79 m, 2.37; 175 m, 2.71 μg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 122 | SPENCER F. BAIRD; June 12, 1958; 2149 GCT; 17°51'N, 105°08.5'W; sounding, 1600 fm; wind, 240°, force 2; weather, partly cloudy; sea, very rough; wire angle, 33°. | | | | | | | | | | |
| 0 | 28.62 | 34.52 | 3.92 | 0.30 | 0 | 28.62 | 34.52 | 3.92 | 21.85 | 597 | 0.00 |
| 8 | 28.11 | 34.52 | 3.96 | 0.34 | 10 | 28.10 | 34.52 | 3.95 | 22.03 | 580 | 0.06 |
| 17 | 28.08 | 34.52 | 3.82 | 0.31 | 20 | 28.05 | 34.52 | 3.85 | 22.04 | 579 | 0.12 |
| 38 | 27.92 | 34.54 | 3.92 | 0.32 | 30 | 27.98 | 34.53 | 3.89 | 22.06 | 577 | 0.17 |
| 54 | 24.27 | 34.61 | 3.95 | 0.55 | 50 | 25.92 | 34.59 | 3.95 | 22.77 | 509 | 0.28 |
| 69 | 20.75 | 34.66 | 1.79 | 1.60 | 75 | 19.46 | 34.64 | 1.26 | 24.64 | 331 | 0.39 |
| 84 | 17.59 | 34.63 | 0.33 | 2.37 | 100 | 15.11 | 34.71 | 0.23 | 25.74 | 226 | 0.46 |
| 111 | 14.66 | 34.75 | 0.03 | 2.56a) | 150 | 12.73 | 34.84 | 0.08 | 26.34 | 169 | 0.56 |
| 131 | 13.55 | 34.78 | 0.07 | 2.74 | 200 | 11.98 | 34.80 | 0.11 | 26.46 | 158 | 0.64 |
| 161 | 12.56 | 34.85 | 0.09 | 2.64 | 250 | 11.40 | 34.77 | 0.10 | 26.54 | 151 | 0.72 |
| 209 | 11.82 | 34.79 | 0.13 | 2.78 | 300 | 10.90 | 34.75 | 0.09 | 26.62 | 143 | 0.80 |
| 292 | 11.02 | 34.75 | 0.09 | 2.76a) | 400 | 9.39 | 34.67 | 0.10 | 26.82 | 124 | 0.94 |
| 399 | 9.40 | 34.67 | 0.10 | 3.06a) | 500 | 7.98 | 34.61 | 0.12 | 27.00 | 107 | 1.07 |
| 511 | 7.80 | 34.60 | 0.13 | 3.20 | 600 | 6.92 | 34.59 | 0.14 | 27.12 | 95 | 1.18 |
| 673 | 6.24 | 34.58 | 0.16 | 3.36a) | 700 | 6.07 | 34.58 | 0.16 | 27.24 | 84 | 1.28 |
| 934 | 4.90 | 34.59 | 0.17 | 3.51a) | 800 | 5.51 | 34.59 | 0.17 | 27.31 | 77 | 1.37 |
| | | | | | 1000 | (4.64) | (34.59) | | (27.41) | (67) | (1.53) |
| 127 | SPENCER F. BAIRD; June 13, 1958; 1801 GCT; 19°01'N, 105°34.5'W; sounding, 2580 fm; wind, direction missing, force 1; weather, partly cloudy; sea, moderate; wire angle, 07°. | | | | | | | | | | |
| 0 | 28.36 | 34.52 | 4.28 | 0.30 | 0 | 28.36 | 34.52 | 4.28 | 21.94 | 588 | 0.00 |
| 10 | 28.08 | 34.53 | 4.25 | 0.32 | 10 | 28.08 | 34.53 | 4.25 | 22.04 | 579 | 0.06 |
| 20 | 28.07 | 34.52 | 4.27 | 0.30 | 20 | 28.07 | 34.52 | 4.27 | 22.04 | 579 | 0.12 |
| 45 | 23.83 | 34.56 | 4.53 | 0.46 | 30 | 27.40 | 34.53 | 4.33 | 22.25 | 559 | 0.17 |
| 64 | 20.94 | 34.58 | 3.37 | 1.04 | 50 | 23.32 | 34.56 | 4.48 | 23.52 | 437 | 0.27 |
| 83 | 17.77 | 34.50 | 1.15 | 2.14 | 75 | 18.48 | 34.52 | 1.67 | 24.81 | 315 | 0.37 |
| 102 | 15.28 | 34.58 | 0.39 | 2.46 | 100 | 15.52 | 34.57 | 0.45 | 25.55 | 244 | 0.44 |
| 139 | 13.68 | 34.70 | 0.05 | 2.66 | 150 | 13.06 | 34.75 | 0.06 | 26.20 | 182 | 0.54 |
| 166 | 12.75 | 34.78 | 0.06 | 2.72b) | 200 | 12.13 | 34.79 | 0.07 | 26.42 | 162 | 0.63 |
| 207 | 12.00 | 34.78 | 0.07 | 2.79b) | 250 | 11.34 | 34.75 | 0.07 | 26.54 | 151 | 0.71 |
| 270 | 11.06 | 34.73 | 0.07 | 2.93 | 300 | 10.63 | 34.70 | 0.06 | 26.63 | 142 | 0.79 |
| 380 | 9.44 | 34.61 | 0.05 | 3.09 | 400 | 9.18 | 34.60 | 0.05 | 26.79 | 126 | 0.93 |
| 513 | 7.64 | 34.53 | 0.08 | 3.17 | 500 | 7.86 | 34.54 | 0.07 | 26.96 | 111 | 1.06 |
| 648 | 6.22 | 34.49 | 0.07 | 3.28 | 600 | 6.72 | 34.50 | 0.07 | 27.09 | 98 | 1.17 |
| 838 | 5.12 | 34.50 | 0.11 | 3.40b) | 700 | 5.84 | 34.49 | 0.08 | 27.19 | 89 | 1.28 |
| 1130 | 3.94 | 34.56 | 0.45 | 3.31 | 800 | 5.30 | 34.50 | 0.10 | 27.26 | 82 | 1.37 |
| | | | | | 1000 | 4.42 | 34.54 | 0.30 | 27.40 | 69 | 1.54 |
| 133 | SPENCER F. BAIRD; June 14, 1958; 2122 GCT; 19°37'N, 107°37'W; sounding, 1440 fm; wind, 140°, force 3; weather, partly cloudy; sea, rough; wire angle, 17°. | | | | | | | | | | |
| 0 | 27.88 | 34.67 | 4.39 | 0.32c) | 0 | 27.88 | 34.67 | 4.39 | 22.20 | 564 | 0.00 |
| 10 | 27.82 | 34.68 | 4.43 | 0.32 | 10 | 27.82 | 34.68 | 4.43 | 22.24 | 560 | 0.06 |
| 19 | 27.66 | 34.67 | 4.37 | 0.28 | 20 | 27.64 | 34.67 | 4.37 | 22.29 | 555 | 0.11 |
| 43 | 24.79 | 34.63 | 4.80 | 0.36 | 30 | 27.48 | 34.66 | 4.38 | 22.34 | 551 | 0.17 |
| 62 | 22.29 | 34.62 | 4.91 | 0.45 | 50 | 23.66 | 34.63 | 4.95 | 23.48 | 442 | 0.27 |
| 81 | 19.98 | 34.59 | 3.01 | 1.16 | 75 | 20.65 | 34.60 | 3.54 | 24.30 | 363 | 0.37 |
| 100 | 16.98 | 34.54 | 1.48 | 2.14 | 100 | 16.98 | 34.54 | 1.48 | 25.18 | 279 | 0.45 |
| 136 | 14.10 | 34.61 | 0.48 | 2.51c) | 150 | 13.67 | 34.67 | 0.39 | 26.02 | 199 | 0.57 |
| 162 | 13.22 | 34.79 | 0.31 | 2.78 | 200 | 12.04 | 34.76 | 0.08 | 26.42 | 162 | 0.66 |
| 199 | 12.05 | 34.76 | 0.08 | 2.83c) | 250 | 11.44 | 34.74 | 0.17 | 26.51 | 153 | 0.74 |
| 260 | 11.33 | 34.74 | 0.19 | 3.08c) | 300 | 10.90 | 34.70 | 0.16 | 26.58 | 146 | 0.82 |
| 365 | 10.02 | 34.61 | 0.08 | 3.03 | 400 | 9.48 | 34.58 | 0.08 | 26.73 | 133 | 0.97 |
| 494 | 7.80 | 34.52 | 0.10 | 3.18c) | 500 | 7.74 | 34.52 | 0.09 | 26.96 | 110 | 1.10 |
| 628 | 6.48 | 34.49 | 0.07 | 3.33c) | 600 | 6.72 | 34.50 | 0.07 | 27.08 | 99 | 1.21 |
| 816 | 5.20 | 34.47 | 0.12 | 3.31c) | 700 | 5.94 | 34.48 | 0.08 | 27.17 | 90 | 1.31 |
| 1108 | 3.98 | 34.52 | 0.42 | 3.32c) | 800 | 5.29 | 34.47 | 0.11 | 27.24 | 84 | 1.41 |
| | | | | | 1000 | 4.41 | 34.49 | 0.31 | 27.36 | 72 | 1.58 |

a) Duplicate values: 111 m, 2.64; 292 m, 2.84; 399 m, 2.99; 673 m, 3.27; 934 m, 3.39 μg at/L.
b) Duplicate values: 166 m, 2.80; 207 m, 2.72; 838 m, 3.33 μg at/L.
c) Duplicate values: 0 m, 0.25; 136 m, 2.66; 199 m, 2.14; 260 m, 3.01; 494 m, 3.04; 628 m, 3.25; 816 m, 3.38; 1108 m, 3.25 μg at/L.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

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SPENCER F. BAIRD; June 15, 1958; 1808 GCT; 21°05'N, 106°16'W; sounding, 1750 fm; wind, 240°, force 2; weather, cloudy; sea, moderate; wire angle, 10°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.72 | 34.95 | 4.44 | 0.30 | 0 | 28.72 | 34.95 | 4.44 | 22.14 | 569 | 0.00 |
| 10 | 28.63 | 34.94 | 4.45 | 0.31 | 10 | 28.63 | 34.94 | 4.45 | 22.16 | 567 | 0.06 |
| 20 | 28.52 | 34.93 | 4.45 | 0.30 | 20 | 28.52 | 34.93 | 4.45 | 22.20 | 564 | 0.11 |
| 44 | 23.48 | 34.64 | 4.40 | 0.58 | 30 | 26.20 | 34.76 | 4.57 | 22.81 | 506 | 0.17 |
| 64 | 19.27 | 34.62 | 1.10 | 1.98 | 50 | 23.00 | 34.67 | 4.01 | 23.71 | 420 | 0.26 |
| 83 | 17.43 | 34.65 | 0.36 | 2.34 | 75 | 18.08 | 34.64 | 0.54 | 25.00 | 297 | 0.35 |
| 103 | 15.90 | 34.69 | 0.19 | 2.47 | 100 | 16.12 | 34.68 | 0.20 | 25.49 | 250 | 0.42 |
| 140 | 14.30 | 34.76 | 0.07 | 2.58 | 150 | 14.24 | 34.79 | 0.05 | 26.00 | 202 | 0.53 |
| 166 | 13.33 | 34.78 | 0.06 | 2.66 | 200 | 12.69 | 34.81 | 0.06 | 26.32 | 171 | 0.63 |
| 206 | 12.60 | 34.81 | 0.06 | 2.70a) | 250 | 11.96 | 34.79 | 0.06 | 26.46 | 158 | 0.71 |
| 268 | 11.68 | 34.78 | 0.08 | 2.88a) | 300 | 11.25 | 34.75 | 0.07 | 26.56 | 149 | 0.79 |
| 375 | 10.29 | 34.69 | 0.08 | 2.83a) | 400 | 9.82 | 34.66 | 0.07 | 26.74 | 132 | 0.94 |
| 506 | 7.56 | 34.52 | 0.05 | 3.72a) | 500 | 7.63 | 34.53 | 0.07 | 26.98 | 109 | 1.07 |
| 639 | 6.24 | 34.49 | 0.08 | 3.36a) | 600 | 6.56 | 34.49 | 0.07 | 27.10 | 97 | 1.18 |
| 827 | 5.14 | 34.50 | 0.14 | 3.32a) | 700 | 5.82 | 34.49 | 0.08 | 27.19 | 89 | 1.28 |
| 1118 | 3.94 | 34.54 | 0.44 | 3.28 | 800 | 5.28 | 34.50 | 0.10 | 27.27 | 81 | 1.38 |
| | | | | | 1000 | 4.40 | 34.52 | 0.31 | 27.39 | 70 | 1.55 |

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SPENCER F. BAIRD; June 16, 1958; 1803 GCT; 22°18'N, 108°32'W; sounding, 2000 fm; wind, 260°, force 3; weather, partly cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.64 | 35.04 | 4.42 | 0.40 | 0 | 27.64 | 35.04 | 4.42 | 22.56 | 529 | 0.00 |
| 10 | 27.58 | 35.03 | 4.44 | 0.42 | 10 | 27.58 | 35.03 | 4.44 | 22.58 | 528 | 0.05 |
| 19 | 27.56 | 35.04 | 4.41 | 0.41 | 20 | 27.56 | 35.04 | 4.41 | 22.60 | 525 | 0.10 |
| 43 | 23.34 | 34.78 | 5.02 | 0.50 | 30 | 24.42 | 34.82 | 5.03 | 23.40 | 448 | 0.15 |
| 62 | 20.28 | 34.79 | 3.35 | 1.30 | 50 | 20.81 | 34.73 | 3.87 | 24.36 | 357 | 0.23 |
| 81 | 16.96 | 34.69 | 0.37 | 2.48 | 75 | 17.19 | 34.69 | 0.60 | 25.25 | 273 | 0.32 |
| 100 | 15.27 | 34.68 | 0.10 | 2.54b) | 100 | 15.27 | 34.68 | 0.10 | 25.68 | 232 | 0.38 |
| 135 | 13.42 | 34.76 | 0.07 | 2.67 | 150 | 12.97 | 34.79 | 0.07 | 26.25 | 178 | 0.48 |
| 162 | 12.59 | 34.79 | 0.08 | 2.75 | 200 | 11.80 | 34.75 | 0.07 | 26.46 | 158 | 0.57 |
| 200 | 11.80 | 34.75 | 0.07 | 2.77 | 250 | 11.12 | 34.72 | 0.07 | 26.55 | 149 | 0.65 |
| 260 | 11.00 | 34.71 | 0.07 | 2.87b) | 300 | 10.48 | 34.67 | 0.07 | 26.63 | 142 | 0.72 |
| 364 | 9.60 | 34.60 | 0.08 | 3.09b) | 400 | 9.08 | 34.57 | 0.08 | 26.79 | 127 | 0.86 |
| 492 | 7.76 | 34.52 | 0.08 | 3.22 | 500 | 7.68 | 34.52 | 0.08 | 26.97 | 110 | 0.99 |
| 621 | 6.37 | 34.53 | 0.12 | 3.24 | 600 | 6.55 | 34.52 | 0.11 | 27.12 | 95 | 1.10 |
| 801 | 5.24 | 34.50 | 0.16 | 3.35b) | 700 | 5.84 | 34.52 | 0.14 | 27.22 | 86 | 1.20 |
| 1081 | 4.17 | 34.54 | 0.31 | 3.48b) | 800 | 5.25 | 34.50 | 0.16 | 27.27 | 81 | 1.29 |
| | | | | | 1000 | 4.44 | 34.53 | 0.27 | 27.39 | 70 | 1.46 |

145

SPENCER F. BAIRD; June 17, 1958; 1750 GCT; 23°52'N, 111°30'W; sounding, 150 fm; wind, 320°, force 2; weather, partly cloudy; sea, moderate; wire angle, 03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.31 | 34.38 | 5.10 | 0.45 | 0 | 22.31 | 34.38 | 5.10 | 23.68 | 422 | 0.00 |
| 10 | 22.16 | 34.36 | 5.09 | 0.48 | 10 | 22.16 | 34.36 | 5.09 | 23.71 | 420 | 0.04 |
| 30 | 18.52 | 34.25 | 4.97 | 0.76 | 20 | 19.66 | 34.20 | 5.24 | 24.26 | 367 | 0.08 |
| 50 | 15.86 | 34.20 | 2.85 | 1.54 | 30 | 18.52 | 34.25 | 4.97 | 24.59 | 336 | 0.12 |
| 74 | 14.18 | 34.17 | 1.97 | 1.92 | 50 | 15.86 | 34.20 | 2.85 | 25.18 | 279 | 0.18 |
| 98 | 13.66 | 34.34 | 1.28 | 2.28c) | 75 | 14.14 | 34.18 | 1.86 | 25.54 | 245 | 0.24 |
| 120 | 13.35 | 34.61 | 0.57 | 2.65 | 100 | 13.65 | 34.36 | 1.27 | 25.79 | 222 | 0.30 |
| 157 | 12.47 | 34.60 | 0.40 | 2.84c) | 150 | 12.66 | 34.60 | 0.43 | 26.18 | 185 | 0.40 |
| 193 | 11.88 | 34.63 | 0.23 | 2.77c) | 200 | 11.80 | 34.63 | 0.21 | 26.36 | 167 | 0.50 |
| 238 | 11.22 | 34.63 | 0.20 | 2.86 | | | | | | | |

a) Duplicate values: 206 m, 2.60; 268 m, 2.43; 375 m, 3.00; 506 m, 3.08; 639 m, 3.17; 827 m, 3.40 μg at/L.
b) Duplicate values: 100 m, 2.63; 260 m, 2.97; 364 m, 2.97; 801 m, 3.46; 1081 m, 3.37 μg at/L.
c) Duplicate values: 98 m, 2.36; 157 m, 2.94; 193 m, 2.93 μg at/L.

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147

SPENCER F. BAIRD; June 18, 1958; 1750 GCT; 26°38'N, 114°10'W; sounding, 1150 fm; wind, 310°, force 2; weather, cloudy; sea, slight; wire angle, 00°.

| OBSERVED | | | | | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta_T$ cl/ton | ΔD dyn m |
| 0 | 16.76 | 33.86 | 5.96 | 0.78 | 0 | 16.76 | 33.86 | 5.96 | 24.72 | 324 | 0.00 |
| 10 | 15.55 | 33.74 | 5.39 | 0.84 | 10 | 15.55 | 33.74 | 5.39 | 24.90 | 306 | 0.03 |
| 20 | 14.14 | 33.69 | 4.58 | 1.00 | 20 | 14.14 | 33.69 | 4.58 | 25.17 | 281 | 0.06 |
| 45 | 12.14 | 33.82 | 3.01 | 1.62 | 30 | 13.20 | 33.75 | 3.85 | 25.40 | 258 | 0.09 |
| 65 | 12.16 | 33.97 | 2.41 | 1.86 | 50 | 12.12 | 33.88 | 2.85 | 25.71 | 229 | 0.14 |
| 84 | 12.32 | 34.21 | 1.44 | 2.18 | 75 | 12.34 | 34.16 | 1.50 | 25.88 | 212 | 0.19 |
| 103 | 11.61 | 34.29 | 1.21 | 2.26a) | 100 | 11.77 | 34.27 | 1.25 | 26.09 | 193 | 0.24 |
| 142 | 11.77 | 34.46 | 0.63 | 2.56 | 150 | 11.76 | 34.50 | 0.62 | 26.27 | 176 | 0.34 |
| 170 | 11.65 | 34.51 | 0.48 | 2.72 | 200 | 11.52 | 34.54 | 0.34 | 26.34 | 169 | 0.43 |
| 211 | 11.44 | 34.56 | 0.30 | 2.72 | 250 | 10.88 | 34.54 | 0.28 | 26.46 | 158 | 0.51 |
| 274 | 10.49 | 34.52 | 0.29 | 2.80 | 300 | 10.08 | 34.50 | 0.30 | 26.57 | 148 | 0.59 |
| 384 | 8.90 | 34.45 | 0.29 | 3.05 | 400 | 8.69 | 34.44 | 0.28 | 26.75 | 130 | 0.74 |
| 519 | 6.90 | 34.34 | 0.26 | 3.20a) | 500 | 7.07 | 34.35 | 0.27 | 26.90 | 116 | 0.87 |
| 655 | 5.99 | 34.37 | 0.20 | 3.78 | 600 | 6.37 | 34.36 | 0.22 | 27.02 | 104 | 0.99 |
| 845 | 4.78 | 34.42 | 0.31 | 3.45a) | 700 | 5.69 | 34.38 | 0.22 | 27.12 | 95 | 1.09 |
| 1136 | 3.74 | 34.49 | 0.63 | 3.40 | 800 | 5.05 | 34.41 | 0.28 | 27.22 | 86 | 1.19 |
| | | | | | 1000 | 4.14 | 34.47 | 0.51 | 27.36 | 72 | 1.37 |

a) Duplicate values: 103 m, 2.44; 519 m, 3.00; 845 m, 3.13 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

2

SPENCER F. BAIRD; November 22, 1958; 1650 GCT; 13°37'N, 92°57'W; sounding, 2800 fm; wind, 270°, force 2; weather, clear; sea, moderate; wire angle, 08°.[a]

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.89 | 33.04 | - | 0.21 | 712 | 0 | 28.89 | 33.04 | | 20.66 | 712 | 0.00 |
| 9 | 28.76 | 33.02 | - | 0.15 | 709 | 10 | 28.75 | 33.02 | | 20.69 | 708 | 0.07 |
| 19 | 28.47 | 33.06 | 0.88r | 0.46 | 697 | 20 | 28.45 | 33.06 | | 20.82 | 697 | 0.14 |
| 28 | 26.63 | 34.14 | 5.63 | 0.64 | 563 | 30 | 25.70 | 34.23 | 4.98 | 22.57 | 528 | 0.20 |
| 38 | 20.28 | 34.67 | 1.85 | 1.5 | 348 | 50 | 17.35 | 34.70 | 1.13 | 25.22 | 276 | 0.28 |
| 48 | 17.73 | 34.70 | 1.16 | 1.9 | 284 | 75 | 14.95 | 34.84 | 0.48 | 25.87 | 214 | 0.34 |
| 58 | 16.01 | 34.72 | 0.96 | 2.01b) | 244 | 100 | 14.13 | 34.85 | 0.53 | 26.06 | 196 | 0.40 |
| 77 | 14.82 | 34.84 | 0.46 | 2.4 | 210 | 150 | 13.06 | 34.85 | 0.39 | 26.28 | 175 | 0.49 |
| 96 | 14.23 | 34.85 | 0.54 | 2.4 | 198 | 200 | 12.45 | 34.86 | 0.28 | 26.41 | 163 | 0.58 |
| 149 | 13.06 | 34.85 | 0.38 | 2.4 | 174 | 250 | 11.86 | 34.82 | 0.20 | 26.50 | 154 | 0.66 |
| 196 | 12.50 | 34.86 | 0.29 | 2.5 b) | 163 | 300 | 11.22 | 34.78 | 0.13 | 26.58 | 147 | 0.74 |
| 293 | 11.30 | 34.78 | 0.13 | 2.6 b) | 148 | 400 | 9.89 | 34.69 | 0.00 | 26.75 | 131 | 0.88 |
| 386 | 10.10 | 34.70 | 0.00 | 3.00 | 133 | 500 | 8.22 | 34.62 | 0.00 | 26.96 | 111 | 1.01 |
| 479 | 8.57 | 34.63 | 0.00 | 3.3 | 114 | 600 | 7.03 | 34.60 | 0.01 | 27.12 | 96 | 1.12 |
| 578 | 7.25 | 34.60 | 0.00 | 3.4 | 98 | 700 | 6.22 | 34.58 | 0.07 | 27.22 | 86 | 1.23 |
| 774 | 5.72 | 34.57 | 0.11 | 3.3 c) | 81 | 800 | 5.57 | 34.57 | 0.13 | 27.29 | 79 | 1.32 |
| 971 | 4.74 | 34.59 | 0.18 | 3.6 b) | 68 | 1000 | (4.63) | (34.60) | | (27.42) | (67) | (1.48) |

3

SPENCER F. BAIRD; November 23, 1958; 0045 GCT; 14°22'N, 93°07'W; sounding, 280 fm; wind, 310°, force 2; weather, partly cloudy; sea, moderate; wire angle, 04°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.31 | 32.83 | 4.39 | 0.087 | 740 | 0 | 29.31 | 32.84 | 4.39 | 20.37 | 740 | 0.00 |
| 9 | 28.88 | 32.75 | 4.38 | 0.089 | 733 | 10 | 28.88 | 32.77 | 4.41 | 20.46 | 730 | 0.07 |
| 19 | 29.50 | 33.44 | 4.57 | 0.20 | 703 | 20 | 29.50 | 33.44 | 4.58 | 20.76 | 702 | 0.15 |
| 29 | 29.08 | 33.58 | 4.63 | 0.24 | 680 | 30 | 28.90 | 33.62 | 4.62 | 21.07 | 672 | 0.21 |
| 39 | 24.70 | 34.52 | 4.60 | 0.49 | 478 | 50 | 19.25 | 34.68 | 1.84 | 24.73 | 323 | 0.31 |
| 59 | 17.61 | 34.72 | 1.16 | 2.1 | 280 | 75 | 16.12 | 34.78 | 0.66 | 25.57 | 243 | 0.38 |
| 78 | 15.85 | 34.79 | 0.59 | 2.2 d) | 236 | 100 | 14.60 | 34.85 | 0.49 | 25.96 | 206 | 0.44 |
| 97 | 14.74 | 34.85 | 0.50 | 2.3 d) | 208 | 150 | 13.20 | 34.83 | 0.38 | 26.24 | 179 | 0.54 |
| 149 | 13.21 | 34.83 | 0.35 | 2.5 | 179 | 200 | 12.60 | 34.83 | 0.43 | 26.36 | 168 | 0.63 |
| 196 | 12.64 | 34.83 | 0.43 | 2.5 d) | 168 | 250 | 11.91 | 34.81 | 0.32 | 26.48 | 156 | 0.71 |
| 294 | 11.32 | 34.78 | 0.13 | 2.7 | 148 | 300 | 11.25 | 34.78 | 0.13 | 26.57 | 147 | 0.79 |
| 389 | 10.21 | 34.70 | 0.00 | 2.9 | 135 | 400 | 10.06 | 34.70 | 0.00 | 26.72 | 133 | 0.94 |
| 489 | 8.46 | 34.65 | 0.00 | 3.3 | 112 | 500 | (8.29) | (34.65) | | (26.97) | (110) | (1.07) |

4

SPENCER F. BAIRD; November 23, 1958; 0720 GCT; 14°56.5'N, 93°06.5'W; sounding, 18 fm; wind, 080°, force 3; weather, partly cloudy; sea, moderate; wire angle, 00°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 30.10 | 32.68 | 4.16 | 0.075 | 777 | 0 | 30.10 | 32.68 | 4.19 | 19.98 | 777 | 0.00 |
| 5 | 30.06 | 32.66 | 4.20 | 0.042 | 777 | 10 | 30.10 | 32.67 | 4.19 | 19.97 | 778 | 0.08 |
| 9 | 30.10 | 32.66 | 4.16 | 0.075 | 778 | 20 | 29.40 | 33.51 | 4.29 | 20.84 | 694 | 0.15 |
| 14 | 30.14 | 33.02 | 4.30 | 0.10 | 754 | | | | | | | |
| 19 | 29.52 | 33.48 | 4.30 | 0.22e) | 700 | | | | | | | |
| 24 | 28.68 | 33.62 | 4.14 | 0.334 | 665 | | | | | | | |

5

SPENCER F. BAIRD; November 23, 1958; 1340 GCT; 15°39'N, 93°59.5'W; sounding, 30 fm; wind, 360°, force 4; weather, partly cloudy; sea, rough; wire angle, 16°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.27 | 33.48 | 3.34 | 0.34 | 660 | 0 | 28.27 | 33.48 | 3.34 | 21.19 | 660 | 0.00 |
| 19 | 26.34f) | 33.96 | 3.57 | 0.79 | 566 | 10 | 28.08 | 33.53 | 3.36 | 21.28 | 652 | 0.07 |
| 24 | 23.60 | 34.39 | 1.99 | 1.2 | 457 | 20 | 26.00 | 33.97 | 3.53 | 22.28 | 556 | 0.13 |
| 28 | 22.29 | 34.58 | 2.00 | 1.3 c) | 407 | 30 | 22.00 | 34.60 | 1.94 | 23.94 | 398 | 0.17 |
| 38 | 19.98 | 34.69 | 1.32 | 1.7 | 340 | | | | | | | |
| 47 | 17.99 | 34.75 | 0.88 | 2.0 | 287 | | | | | | | |

a) The hydrographic and biological data collected by Tuna Oceanography Research (STOR) of Scripps Institution on Cruise TO-58-2 have been published in U. S. Fish and Wildlife Service Special Scientific Report--Fisheries No. 420.
b) Duplicate values: 58 m, 2.08; 196 m, 2.6; 293 m, 2.08; 971 m, 3.9 µg at/L.
c) Single determination.
d) Duplicate values: 78 m, 2.3; 97 m, 2.4; 196 m, 2.2 µg at/L.
e) Duplicate value, 0.29 µg at/L.
f) Alternate value, 26.12°C, not used in interpolation.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 6 | SPENCER F. BAIRD; November 23, 1958; 2057 GCT; 14°59.5'N, 94°01.5'W; sounding, 140 fm; wind, 330°, force 3; weather, clear; sea, rough; wire angle, 08°. | | | | | | | | | | | |
| 0 | 27.94 | 33.33 | 4.42 | 0.39 | 661 | 0 | 27.94 | 33.33 | 4.42 | 21.18 | 661 | 0.00 |
| 9 | 27.84 | 33.35 | 4.47 | 0.38 | 657 | 10 | 27.81 | 33.36 | 4.48 | 21.25 | 655 | 0.07 |
| 14 | 25.42a) | 33.95 | 3.91 | 0.83b) | 540 | 20 | 18.20 | 34.70 | 1.78 | 25.01 | 296 | 0.11 |
| 19 | 18.39 | 34.69 | 1.89 | 1.7 b) | 300 | 30 | 16.77 | 34.77 | 0.84 | 25.41 | 258 | 0.14 |
| 24 | 17.52 | 34.71 | 1.32 | 1.9 | 278 | 50 | 15.42 | 34.85 | 0.39 | 25.78 | 222 | 0.19 |
| 33 | 16.35 | 34.81 | 0.63 | 2.2 | 245 | 75 | 14.97 | 34.85 | 0.38 | 25.88 | 213 | 0.24 |
| 48 | 15.47 | 34.85 | 0.37 | 2.5 | 224 | 100 | 14.48 | 34.84 | 0.40 | 25.98 | 204 | 0.30 |
| 100 | 14.48 | 34.84 | 0.40 | 2.5 | 204 | 150 | 13.21 | 34.83 | 0.40 | 26.24 | 179 | 0.39 |
| 147 | 13.22 | 34.83 | 0.41 | 2.4 | 179 | 200 | (12.34) | (34.83) | (0.16) | (26.41) | (163) | (0.48) |
| 199 | 12.38 | 34.83 | 0.15 | 2.8 b) | 164 | | | | | | | |
| 7 | SPENCER F. BAIRD; November 24, 1958; 0305 GCT; 14°21.5'N, 94°02'W; sounding, 2100 fm; wind, 040°, force 2; weather, clear; sea, moderate; wire angle, 14°. | | | | | | | | | | | |
| 0 | 28.90 | 33.39 | 4.38 | 0.33 | 687 | 0 | 28.90 | 33.39 | 4.38 | 20.92 | 687 | 0.00 |
| 9 | 28.90 | 33.43 | 4.34 | 0.33 | 684 | 10 | 28.89 | 33.43 | 4.34 | 20.95 | 683 | 0.07 |
| 14 | 27.80 | 33.69 | 4.31 | 0.52 | 631 | 20 | 20.30 | 34.65 | 2.50 | 24.44 | 350 | 0.12 |
| 19 | 20.91 | 34.63 | 2.65 | 1.4 | 367 | 30 | 17.64 | 34.70 | 1.58 | 25.14 | 283 | 0.15 |
| 28 | 17.95 | 34.70 | 1.72 | 1.9 | 290 | 50 | 15.22 | 34.72 | 0.79 | 25.72 | 228 | 0.20 |
| 38 | 16.33 | 34.67 | 1.05 | 2.1 c) | 255 | 75 | 14.41 | 34.83 | 0.46 | 25.98 | 203 | 0.26 |
| 46 | 15.39 | 34.70 | 0.83 | 2.2 c) | 232 | 100 | 13.65 | 34.82 | 0.32 | 26.14 | 188 | 0.31 |
| 70 | 14.59 | 34.83 | 0.50 | 2.4 | 206 | 150 | 12.71 | 34.86 | 0.16 | 26.36 | 167 | 0.40 |
| 98 | 13.68 | 34.82 | 0.33 | 2.50 | 189 | 200 | 12.01 | 34.80 | 0.23 | 26.45 | 159 | 0.48 |
| 143 | 12.84 | 34.87 | 0.13 | 2.4 c) | 169 | 250 | 11.52 | 34.79 | 0.20 | 26.54 | 150 | 0.56 |
| 193 | 12.11 | 34.81 | 0.23 | 2.7 | 160 | 300 | 10.98 | 34.76 | 0.13 | 26.62 | 144 | 0.64 |
| 286 | 11.17 | 34.78 | 0.14 | 2.8 | 145 | 400 | 9.60 | 34.63 | 0.10 | 26.75 | 130 | 0.78 |
| 382 | 9.90 | 34.69 | 0.10 | 3.1 | 134 | 500 | 8.08 | 34.60 | 0.10 | 26.97 | 110 | 0.91 |
| 478 | 8.34 | 34.61 | 0.10 | 3.4 | 113 | 600 | 7.09 | 34.58 | 0.14 | 27.10 | 97 | 1.02 |
| 576 | 7.28 | 34.59 | 0.10 | 3.5 | 100 | 700 | 6.37 | 34.57 | 0.28 | 27.19 | 89 | 1.13 |
| 774 | 5.90 | 34.56 | 0.35 | - d) | 84 | 800 | 5.74 | 34.56 | 0.35 | 27.26 | 82 | 1.22 |
| 976 | 4.70 | 34.55 | 0.22 | 3.8 c) | 71 | 1000 | (4.59) | (34.55) | (0.22) | (27.39) | (70) | (1.40) |
| 8 | SPENCER F. BAIRD; November 24, 1958; 0903 GCT; 13°41.5'N, 94°04'W; sounding, 2250 fm; wind, 280°, force 3; weather, missing; sea, rough; wire angle, 08°. | | | | | | | | | | | |
| 0 | 28.19 | 33.47 | 4.42 | 0.36 | 659 | 0 | 28.19 | 33.47 | 4.42 | 21.21 | 659 | 0.00 |
| 14 | 23.88 | 34.51 | 5.50 | 0.72 | 456 | 10 | 28.19 | 33.47 | 4.42 | 21.21 | 659 | 0.07 |
| 19 | 21.36 | 34.65 | 2.73 | 1.5 e) | 378 | 20 | 20.60 | 34.67 | 2.48 | 24.37 | 356 | 0.12 |
| 23 | 18.52 | 34.70 | 1.88 | 1.8 | 303 | 30 | 17.17 | 34.70 | 1.17 | 25.26 | 272 | 0.15 |
| 28 | 17.36 | 34.70 | 1.25 | 2.1 | 276 | 50 | 15.46 | 34.74 | 0.90 | 25.69 | 231 | 0.20 |
| 38 | 16.28 | 34.70 | 0.86 | 2.4 e) | 252 | 75 | 14.40 | 34.82 | 0.55 | 25.98 | 203 | 0.25 |
| 48 | 15.54 | 34.73 | 0.91 | 2.3 | 234 | 100 | 13.68 | 34.83 | 0.62 | 26.14 | 188 | 0.30 |
| 71 | 14.58 | 34.81 | 0.53 | 2.5 | 208 | 150 | 12.85 | 34.83 | 0.48 | 26.31 | 172 | 0.40 |
| 100 | 13.68 | 34.83 | 0.62 | 2.5 e) | 188 | 200 | 12.25 | 34.81 | 0.47 | 26.42 | 162 | 0.48 |
| 147 | 12.89 | 34.83 | 0.48 | 2.5 | 172 | 250 | 11.73 | 34.78 | 0.33 | 26.49 | 155 | 0.56 |
| 197 | 12.28 | 34.81 | 0.47 | 2.7 | 163 | 300 | 11.18 | 34.75 | 0.18 | 26.58 | 147 | 0.64 |
| 293 | 11.23 | 34.76 | 0.20 | 2.9 | 148 | 400 | 9.65 | 34.67 | 0.06 | 26.77 | 128 | 0.79 |
| 388 | 9.84 | 34.68 | 0.05 | 3.1 e) | 130 | 500 | 7.83 | 34.62 | 0.09 | 27.02 | 105 | 0.91 |
| 485 | 8.02 | 34.63 | 0.08 | 3.6 e) | 106 | 600 | 6.91 | (34.57) | 0.12 | (27.11) | (96) | (1.02) |
| 584 | 7.04 | 34.57 | 0.11 | 3.5 | 98 | 700 | 6.15 | | 0.16 | | | |
| 782 | 5.58 | - | 0.18 | - | | 800 | 5.47 | | 0.19 | | | |
| 980 | 4.58 | 34.56 | 0.23 | 3.8 | 69 | 1000 | (4.53) | | (0.23) | | | |

a) Mean value of 25.35 and 25.48°C.
b) Duplicate values: 14 m, 0.76; 19 m, 1.6; 199 m, 2.7 µg at/L.
c) Duplicate values: 38 m, 2.2; 46 m, 2.3; 143 m, 2.6; 976 m, 3.9 µg at/L.
d) Sample lost.
e) Duplicate values: 19 m, 1.3; 38 m, 2.1; 100 m, 2.7; 388 m, 3.2; 485 m, 3.4 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; November 24, 1958; 1903 GCT; 13°39'N, 94°52'W; sounding, 2160 fm; wind, 020°, force 3; weather, clear; sea, rough; wire angle, 02°. 9

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.59 | 33.32 | 4.48 | 0.29 | 651 | 0 | 27.59 | 33.32 | 4.48 | 21.29 | 651 | 0.00 |
| 9 | 27.56 | 33.33 | 4.43 | 0.29 | 649 | 10 | 27.55 | 33.32 | 4.42 | 21.31 | 649 | 0.07 |
| 14 | 27.53 | 33.32 | 4.38 | 0.29 | 649 | 20 | 27.45 | 33.33 | 4.37 | 21.32 | 648 | 0.13 |
| 24 | 24.33 | 33.89 | 3.36 | 0.92 | 514 | 30 | 18.14 | 34.68 | 0.58 | 25.01 | 296 | 0.18 |
| 29 | 18.20 | 34.67 | 0.60 | 2.2 | 298 | 50 | 15.42 | 34.77 | 0.40 | 25.71 | 229 | 0.23 |
| 38 | 16.89 | 34.71 | 0.30 | 2.5 | 265 | 75 | 14.18 | 34.80 | 0.18 | 26.02 | 200 | 0.28 |
| 48 | 15.59 | 34.76 | 0.39 | 2.4 | 232 | 100 | 13.39 | 34.83 | 0.12 | 26.20 | 182 | 0.33 |
| 73 | 14.22 | 34.80 | 0.18 | 2.6 | 201 | 150 | 12.40 | 34.85 | 0.10 | 26.42 | 162 | 0.42 |
| 101 | 13.38 | 34.83 | 0.11 | 2.7 | 182 | 200 | 11.70 | 34.79 | 0.09 | 26.50 | 154 | 0.50 |
| 148 | 12.42 | 34.85 | 0.10 | 2.7 a) | 163 | 250 | 11.11 | 34.74 | 0.08 | 26.57 | 147 | 0.58 |
| 199 | 11.73 | 34.79 | 0.09 | 2.8 | 154 | 300 | 10.50 | 34.70 | 0.05 | 26.65 | 140 | 0.66 |
| 297 | 10.53 | 34.70 | 0.05 | 3.0 | 140 | 400 | 8.67 | 34.65 | 0.09 | 26.91 | 115 | 0.79 |
| 396 | 8.75 | 34.65 | 0.08 | 3.4 a) | 116 | 500 | 7.50 | 34.58 | 0.11 | 27.04 | 104 | 0.91 |
| 495 | 7.56 | 34.58 | 0.12 | 3.7 a) | 104 | 600 | 6.60 | 34.57 | 0.08 | 27.16 | 92 | 1.01 |
| 595 | 6.64 | 34.57 | 0.08 | 3.5 | 92 | 700 | 5.93 | 34.56 | 0.09 | 27.24 | 84 | 1.11 |
| 795 | 5.40 | 34.56 | 0.13 | 3.7 a) | 78 | 800 | 5.38 | 34.56 | 0.15 | 27.30 | 78 | 1.20 |
| 995 | 4.52 | 34.56 | 0.28 | 3.8 | 68 | 1000 | (4.49) | (34.56) | (0.28) | (27.41) | (68) | (1.37) |

SPENCER F. BAIRD; November 25, 1958; 0752 GCT; 14°18'N, 95°03'W; sounding, 2200 fm; wind, 020°, force 6; weather, clear; sea, rough; wire angle, 22°. 10

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.14 | 33.78 | 4.45 | 0.40 | 604 | 0 | 27.14 | 33.78 | 4.45 | 21.78 | 604 | 0.00 |
| 19 | 27.14 | 33.77 | 4.40 | 0.44 | 604 | 10 | 27.14 | 33.78 | 4.43 | 21.78 | 604 | 0.06 |
| 23 | 25.39 | 33.93 | 3.65 | 0.77b) | 541 | 20 | 27.11 | 33.78 | 4.39 | 21.79 | 603 | 0.12 |
| 29 | 18.90 | 34.64 | 1.15 | 2.1 | 316 | 30 | 18.62 | 34.66 | 1.03 | 24.87 | 309 | 0.17 |
| 38 | 17.24 | 34.73 | 0.40 | 2.2 b) | 271 | 50 | 15.92 | 34.78 | 0.32 | 25.62 | 238 | 0.22 |
| 47 | 16.16 | 34.78 | 0.33 | 2.4 | 243 | 75 | 14.41 | 34.78 | 0.20 | 25.95 | 206 | 0.28 |
| 61 | 15.18 | 34.77 | 0.29 | 2.5 | 223 | 100 | 13.42 | 34.82 | 0.17 | 26.18 | 184 | 0.33 |
| 79 | 14.22 | 34.79 | 0.18 | 2.6 | 202 | 150 | 12.60 | 34.81 | 0.09 | 26.35 | 169 | 0.42 |
| 103 | 13.35 | 34.82 | 0.15 | 2.6 | 182 | 200 | 11.99 | 34.76 | 0.05 | 26.43 | 161 | 0.50 |
| 151 | 12.60 | 34.81 | 0.08 | 2.6 | 169 | 250 | 11.38 | 34.75 | 0.08 | 26.54 | 151 | 0.58 |
| 198 | 12.00 | 34.76 | 0.05 | 2.7 | 161 | 300 | 10.63 | 34.74 | 0.08 | 26.66 | 140 | 0.66 |
| 291 | 10.80 | 34.75 | 0.08 | 2.9 | 141 | 400 | 8.89 | 34.63 | 0.07 | 26.86 | 120 | 0.80 |
| 383 | 9.20 | 34.64 | 0.05 | 3.2 | 124 | 500 | 7.58 | 34.60 | 0.10 | 27.04 | 103 | 0.91 |
| 478 | 7.80 | 34.60 | 0.10 | 3.5 | 106 | 600 | 6.67 | 34.60 | 0.05 | 27.17 | 90 | 1.02 |
| 572 | 6.89 | 34.60 | 0.05 | 3.5 | 93 | 700 | 5.92 | 34.60 | 0.08 | 27.27 | 81 | 1.11 |
| 764 | 5.50 | 34.60 | 0.11 | 3.6 b) | 76 | 800 | 5.33 | 34.60 | 0.13 | 27.34 | 74 | 1.20 |
| 967 | 4.64 | 34.58 | 0.20 | 4.0 b) | 68 | 1000 | (4.50) | (34.58) | (0.21) | (27.42) | (67) | (1.36) |

SPENCER F. BAIRD; November 26, 1958; 0016 GCT; 15°02'N, 95°07.5'W; sounding, 2000 fm; wind, 010°, force 2; weather, clear; sea, slight; wire angle, 03°. 11

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.25 | 33.97 | 4.87 | 0.67 | 534 | 0 | 25.25 | 33.97 | 4.87 | 22.51 | 534 | 0.00 |
| 10 | 25.10 | 33.98 | 4.54 | 0.72 | 529 | 10 | 25.10 | 33.98 | 4.54 | 22.56 | 529 | 0.05 |
| 19 | 24.87 | 33.98 | 4.12 | 0.84 | 522 | 20 | 24.86 | 33.98 | 4.10 | 22.64 | 522 | 0.11 |
| 29 | 23.76 | 34.13 | 3.50 | 1.1 | 480 | 30 | 23.60 | 34.16 | 3.42 | 23.14 | 474 | 0.16 |
| 39 | 22.16 | 34.38 | 2.59 | 1.5 | 418 | 50 | 19.41 | 34.63 | 1.65 | 24.65 | 330 | 0.24 |
| 48 | 19.77 | 34.61 | 1.77 | 1.9 | 340 | 75 | 15.70 | 34.78 | 0.49 | 25.66 | 234 | 0.31 |
| 58 | 18.14 | 34.69 | 1.23 | 2.1 | 295 | 100 | 14.45 | 34.84 | 0.45 | 26.00 | 202 | 0.36 |
| 76 | 15.64 | 34.78 | 0.48 | 2.6 c) | 232 | 150 | 13.18 | 34.85 | 0.32 | 26.26 | 177 | 0.36 |
| 99 | 14.53 | 34.84 | 0.45 | 2.5 | 204 | 200 | 12.40 | 34.85 | 0.32 | 26.41 | 163 | 0.55 |
| 144 | 13.26 | 34.85 | 0.32 | 2.7 | 179 | 250 | 11.79 | 34.81 | 0.23 | 26.50 | 154 | 0.63 |
| 187 | 12.60 | 34.85 | 0.33 | 2.6 | 166 | 300 | 10.90 | 34.75 | 0.10 | 26.62 | 143 | 0.70 |
| 278 | 11.33 | 34.78 | 0.13 | 3.0 c) | 148 | 400 | 8.90 | 34.64 | 0.09 | 26.87 | 119 | 0.84 |
| 365 | 9.51 | 34.67 | 0.08 | 3.3 | 126 | 500 | 7.67 | 34.60 | 0.10 | 27.02 | 105 | 0.96 |
| 458 | 8.13 | 34.60 | 0.10 | 3.6 c) | 110 | 600 | 6.93 | 34.58 | 0.08 | 27.12 | 96 | 1.07 |
| 547 | 7.28 | 34.59 | 0.08 | 3.6 | 100 | 700 | 6.32 | 34.56 | 0.08 | 27.19 | 88 | 1.17 |
| 736 | 6.10 | 34.56 | 0.08 | 3.8 c) | 86 | 800 | 5.75 | 34.56 | 0.11 | 27.26 | 82 | 1.27 |
| 929 | 5.06 | 34.56 | 0.14 | 3.8 | 74 | 1000 | (4.72) | (34.56) | | (27.38) | (71) | (1.44) |

a) Duplicate values: 148 m, 2.6; 396 m, 3.3; 495 m, 3.4; 795 m, 3.6 µg at/L.
b) Duplicate values: 23 m, 8.4; 38 m, 2.3; 764 m, 3.7; 967 m, 3.8 µg at/L.
c) Duplicate values: 76 m, 2.5; 278 m, 2.9; 458 m, 3.5; 736 m, 3.7 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

12 SPENCER F. BAIRD; November 26, 1958; 0739 GCT; 15°36'N, 94°55'W; sounding, 150 fm; wind, 360°, force 5; weather, partly cloudy; sea, rough; wire angle, 35°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.86 | 33.77 | 4.36 | 0.47a) | 566 | 0 | 25.86 | 33.77 | 4.36 | 22.17 | 566 | 0.00 |
| 8 | 25.88 | 33.78 | 4.28 | 0.54 | 567 | 10 | 25.87 | 33.78 | 4.27 | 22.17 | 566 | 0.06 |
| 16 | 25.84 | 33.78 | 4.25 | 0.54 | 565 | 20 | 25.53 | 33.84 | 4.11 | 22.34 | 551 | 0.11 |
| 20 | 25.53 | 33.84 | 4.11 | 0.62 | 551 | 30 | 19.25 | 34.62 | 1.54 | 24.69 | 326 | 0.16 |
| 32 | 18.72 | 34.66 | 1.34 | 2.0 | 312 | 50 | 15.82 | 34.79 | 0.50 | 25.64 | 236 | 0.21 |
| 40 | 16.80 | 34.78 | 0.65 | 2.2 a) | 258 | 75 | 14.79 | 34.78 | 0.48 | 25.86 | 214 | 0.27 |
| 58 | 15.29 | 34.79 | 0.48 | 2.4 | 224 | 100 | 14.18 | 34.85 | 0.37 | 26.06 | 196 | 0.32 |
| 77 | 14.74 | 34.78 | 0.49 | 2.5 a) | 214 | 150 | 13.11 | 34.85 | 0.20 | 26.28 | 176 | 0.42 |
| 119 | 13.52 | 34.85 | 0.18 | 2.7 | 183 | 200 | 12.45 | 34.84 | 0.13 | 26.40 | 164 | 0.50 |
| 161 | 12.98 | 34.85 | 0.20 | 2.6 | 173 | | | | | | | |
| 211 | 12.32 | 34.83 | 0.10 | 2.7 | 162 | | | | | | | |

13 SPENCER F. BAIRD; November 26, 1958; 1206 GCT; 15°42.5'N, 94°56'W; sounding, 100 fm; wind, 360°, force 5; weather, clear; sea, rough; wire angle, 30°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.46 | 33.66 | 4.14 | 0.45 | 592 | 0 | 26.46 | 33.66 | 4.14 | 21.90 | 592 | 0.00 |
| 13 | 26.47 | 33.68 | 4.44 | 0.43 | 591 | 10 | 26.47 | 33.68 | 4.38 | 21.92 | 591 | 0.06 |
| 17 | 26.46 | 33.69 | 4.05 | 0.43 | 590 | 20 | 25.80 | 33.74 | 3.82 | 22.17 | 567 | 0.12 |
| 21 | 25.26 | 33.77 | 3.69 | 0.64 | 548 | 30 | 17.65 | 34.72 | 0.91 | 25.17 | 281 | 0.16 |
| 40 | 16.74 | 34.79 | 0.73 | 2.3 | 256 | 50 | 16.19 | 34.79 | 0.65 | 25.56 | 244 | 0.21 |
| 77 | 15.01 | 34.78 | 0.46 | 2.4 | 219 | 75 | 15.05 | 34.78 | 0.47 | 25.80 | 220 | 0.27 |
| 115 | 13.72 | 34.83 | 0.13 | 3.6 b) | 189 | 100 | 14.21 | 34.81 | 0.28 | 26.02 | 200 | 0.32 |

14 SPENCER F. BAIRD; November 28, 1958; 1242 GCT; 15°39.5'N, 96°02'W; sounding, 180 fm; wind, 360°, force 1; weather, clear; sea, moderate; wire angle, 35°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.85 | 33.84 | 4.79 | 0.34 | 561 | 0 | 25.85 | 33.84 | 4.79 | 22.22 | 562 | 0.00 |
| 8 | 25.51 | 33.95 | 5.64 | 0.30 | 543 | 10 | 25.40 | 33.96 | 5.42 | 22.45 | 540 | 0.06 |
| 16 | 25.13 | 33.96 | 4.55 | 0.55 | 532 | 20 | 25.08 | 33.96 | 4.42 | 25.55 | 530 | 0.11 |
| 24 | 25.05 | 33.96 | 4.39 | 0.81c) | 529 | 30 | 24.80 | 33.98 | 3.99 | 22.65 | 520 | 0.16 |
| 31 | 24.76 | 33.98 | 3.95 | 0.73 | 520 | 50 | 20.15 | 34.45 | 2.10 | 24.32 | 362 | 0.25 |
| 38 | 24.15 | 34.05 | 3.54 | 0.90 | 497 | 75 | 14.82 | 34.82 | 0.36 | 25.89 | 212 | 0.32 |
| 44 | 21.55 | 34.32 | 2.72 | 1.4 | 407 | 100 | 14.25 | 34.82 | 0.31 | 26.02 | 200 | 0.38 |
| 50 | 20.15 | 34.45 | 2.10 | 1.7 | 362 | 150 | 13.18 | 34.85 | 0.33 | 26.26 | 177 | 0.47 |
| 55 | 19.58 | 34.49 | 1.83 | 1.7 | 344 | 200 | 12.62 | 34.84 | 0.30 | 26.36 | 168 | 0.56 |
| 68 | 15.40 | 34.78 | 0.40 | 2.3 | 227 | | | | | | | |
| 81 | 14.64 | 34.83 | 0.35 | 2.4 | 207 | | | | | | | |
| 96 | 14.36 | 34.82 | 0.31 | 2.4 | 202 | | | | | | | |
| 133 | 13.45 | 34.85 | 0.32 | 2.5 | 182 | | | | | | | |
| 172 | 12.91 | 34.85 | 0.35 | 2.6 | 172 | | | | | | | |
| 215 | 12.50 | 34.83 | 0.27 | 2.6 | 166 | | | | | | | |

15 SPENCER F. BAIRD; November 28, 1958; 2009 GCT; 14°55'N, 95°59'W; sounding, 2243 fm; wind, calm; weather, clear; sea, moderate; wire angle, 05°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.86 | 33.84 | 5.55 | 0.18 | 592 | 0 | 26.86 | 33.84 | 5.55 | 21.91 | 592 | 0.00 |
| 19 | 25.72 | 33.87 | 4.90 | 0.31 | 555 | 10 | 26.43 | 33.85 | 5.34 | 22.06 | 578 | 0.06 |
| 38 | 24.38 | 34.07 | 3.54 | 0.88 | 502 | 20 | 25.71 | 33.87 | 4.87 | 22.30 | 554 | 0.12 |
| 57 | 23.43 | 34.18 | 3.32 | 1.10 | 468 | 30 | 24.90 | 33.97 | 4.03 | 22.62 | 524 | 0.17 |
| 66 | 22.59 | 34.29 | 2.78 | 1.20 | 436 | 50 | 23.83 | 34.13 | 3.40 | 23.06 | 482 | 0.27 |
| 75 | 19.37 | 34.54 | 1.67 | 1.8 d) | 336 | 75 | 19.37 | 34.54 | 1.67 | 24.60 | 336 | 0.37 |
| 84 | 18.72 | 34.63 | 1.46 | 1.9 | 312 | 100 | 15.20 | 34.80 | 0.41 | 25.78 | 222 | 0.44 |
| 106 | 14.78 | 34.81 | 0.37 | 2.4 | 212 | 150 | 13.60 | 34.82 | 0.38 | 26.15 | 188 | 0.54 |
| 142 | 13.78 | 34.82 | 0.40 | 2.4 | 190 | 200 | 12.65 | 34.81 | 0.16 | 26.34 | 170 | 0.64 |
| 195 | 12.74 | 34.82 | 0.18 | 2.6 | 172 | 250 | 11.90 | 34.79 | 0.11 | 26.46 | 158 | 0.72 |
| 294 | 11.28 | 34.77 | 0.10 | 2.8 d) | 148 | 300 | 11.19 | 34.76 | 0.10 | 26.58 | 146 | 0.80 |
| 390 | 9.88 | 34.69 | 0.09 | 3.2 | 130 | 400 | 9.69 | 34.68 | 0.09 | 26.78 | 128 | 0.95 |
| 487 | 7.90 | 34.61 | 0.00 | 3.4 | 106 | 500 | 7.75 | 34.61 | 0.01 | 27.02 | 104 | 1.05 |
| 584 | 6.91 | 34.58 | 0.07 | 3.5 | 95 | 600 | 6.78 | 34.58 | 0.07 | 27.14 | 94 | 1.18 |
| 682 | 6.21 | 34.56 | 0.07 | 3.6 | 88 | 700 | 6.09 | 34.56 | 0.08 | 27.21 | 86 | 1.28 |
| 782 | 5.60 | 34.54 | 0.11 | 3.6 | 82 | 800 | 5.50 | 34.54 | 0.12 | 27.27 | 81 | 1.37 |
| 984 | 4.58 | 34.55 | 0.23 | 4.0 | 70 | 1000 | (4.52) | (34.55) | (0.23) | (27.40) | (69) | (1.54) |

a) Duplicate values: 0 m, 0.36; 40 m, 2.4; 77 m, 2.0 µg at/L.
b) Duplicate value, 3.2 µg at/L.
c) Duplicate value, 0.60 µg at/L.
d) Duplicate values: 75 m, 1.7; 294 m, 2.7 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

16

SPENCER F. BAIRD; November 29, 1958; 1120 GCT; 14°18'N, 96°03.5'W; sounding, 1840 fm; wind, 180°, force 1; weather, clear; sea, slight; wire angle, 44°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.21 | 33.83 | 5.27 | 572 | 0 | 26.21 | 33.83 | 5.27 | 22.11 | 572 | 0.00 |
| 9 | 26.33r | 33.82 | 5.29 | 568 | 10 | 26.00 | 33.82 | 5.28 | 22.17 | 566 | 0.06 |
| 17 | 25.72 | 33.90 | 4.90 | 552 | 20 | 25.59 | 33.92 | 4.79 | 22.36 | 548 | 0.11 |
| 25 | 25.34 | 33.93 | 4.55 | 540 | 30 | 25.05 | 33.97 | 4.23 | 22.56 | 529 | 0.17 |
| 33 | 24.86 | 34.00 | 4.00 | 521 | 50 | 19.04 | 34.59 | 0.97 | 24.72 | 324 | 0.25 |
| 41 | 22.00a) | 34.37 | 2.38 | 415 | 75 | 15.20 | 34.78 | 0.35 | 25.78 | 223 | 0.32 |
| 47 | 20.31 | 34.49 | 1.77 | 362 | 100 | 14.00 | 34.81 | 0.22 | 26.06 | 196 | 0.37 |
| 54 | 17.65 | 34.70 | 0.30 | 282 | 150 | 12.78 | 34.84 | 0.24 | 26.33 | 170 | 0.47 |
| 61 | 16.40 | 34.74 | 0.12 | 252 | | | | | | | |
| 74 | 15.27 | 34.78 | 0.36 | 224 | | | | | | | |
| 94 | 14.24 | 34.79 | 0.18 | 202 | | | | | | | |
| 113 | 13.58 | 34.84 | 0.32 | 185 | | | | | | | |
| 158 | 12.64 | 34.83 | 0.23 | 168 | | | | | | | |
| 318p | 10.56 | 34.72 | 0.13 | | | | | | | | |
| 382p | 9.14 | 34.64 | 0.08 | | | | | | | | |

18

SPENCER F. BAIRD; November 30, 1958; 0039 GCT; 13°45'N, 97°09'W; sounding, 1850 fm; wind, 020°, force 6; weather, clear; sea, very rough; wire angle, 40°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.16 | 33.28 | 4.45 | 0.055 | 704 | 0 | 29.16 | 33.28 | 4.45 | 20.74 | 704 | 0.00 |
| 8 | 29.16 | 33.27 | 4.40 | 0.090 | 704 | 10 | 29.16 | 33.27 | 4.40 | 20.74 | 704 | 0.07 |
| 17 | 29.16 | 33.25 | 4.32 | 0.062 | 705 | 20 | 29.12 | 33.25 | 4.31 | 20.74 | 704 | 0.14 |
| 25 | 28.47 | 33.35 | 4.36 | 0.11 | 676 | 30 | 24.40 | 34.04 | 3.04 | 22.82 | 505 | 0.20 |
| 33 | 23.18 | 34.22 | 2.51 | 1.1 | 458 | 50 | 19.20 | 34.65 | 0.93 | 24.72 | 323 | 0.28 |
| 44 | 20.06 | 34.60 | 1.22 | 1.8 | 348 | 75 | 15.83 | 34.78 | 0.36 | 25.64 | 236 | 0.36 |
| 52 | 17.44 | 34.72 | 0.49 | 2.2 | 276 | 100 | 14.66 | 34.79 | 0.15 | 25.90 | 211 | 0.41 |
| 64 | 16.59 | 34.78 | 0.48 | 2.3 | 252 | 150 | 12.93 | 34.82 | | 26.29 | 174 | 0.51 |
| 83 | 15.31 | 34.78 | 0.23 | 2.4 | 226 | 200 | 12.08 | 34.84 | | 26.46 | 158 | 0.60 |
| 123 | 13.84 | 34.82 | 0.10 | 2.6 | 192 | 250 | 11.38 | 34.82 | 0.09 | 26.58 | 146 | 0.67 |
| 157 | 12.76 | 34.82 | 0.73r | - | 171 | 300 | 10.61 | 34.75 | 0.08 | 26.67 | 138 | 0.75 |
| 224 | 11.77 | 34.84 | 0.10 | 2.7 | 151 | | | | | | | |
| 291 | 10.76 | 34.76 | 0.08 | 2.9 | 140 | | | | | | | |
| 359 | 9.56 | 34.67 | 0.08 | 3.1 | 126 | | | | | | | |

19

SPENCER F. BAIRD; November 30, 1958; 0714 GCT; 14°21'N, 97°00.5'W; sounding, 1080 fm; wind, 020°, force 5; weather, clear; sea, rough; wire angle, 36°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.36 | 33.53 | 4.50 | 0.11 | 659 | 0 | 28.36 | 33.53 | 4.50 | 21.20 | 659 | 0.00 |
| 8 | 28.32 | 33.53 | 4.47 | 0.10 | 658 | 10 | 28.30 | 33.53 | 4.47 | 21.21 | 658 | 0.07 |
| 16 | 27.48 | 33.68 | 4.87 | 0.05 | 622 | 20 | 27.00 | 33.65 | 4.62 | 21.72 | 610 | 0.13 |
| 24 | 26.80 | 33.64 | 4.50 | 0.22 | 604 | 30 | 26.50 | 33.65 | 4.17 | 21.88 | 594 | 0.19 |
| 31 | 26.44 | 33.65 | 4.04 | 0.28 | 593 | 50 | 26.17 | 33.68 | 4.03 | 22.00 | 582 | 0.31 |
| 42 | 26.30 | 33.67 | 3.78 | - | 587 | 75 | 16.45 | 34.76 | 0.56 | 25.48 | 251 | 0.41 |
| 51 | 26.14 | 33.68 | 4.07 | 0.42 | 582 | 100 | 14.64 | 34.79 | 0.20 | 25.91 | 210 | 0.47 |
| 61 | 20.71 | 34.35 | 1.79 | 1.6 | 382 | 150 | 13.23 | 34.84 | 0.21 | 26.24 | 179 | 0.57 |
| 79 | 15.91 | 34.79 | 0.42 | 2.3 | 237 | 200 | 12.31 | 34.85 | 0.13 | 26.44 | 160 | 0.66 |
| 114 | 14.14 | 34.79 | 0.18 | 2.6 b) | 200 | 250 | 11.55 | 34.82 | 0.08 | 26.56 | 149 | 0.74 |
| 143 | 13.39 | 34.83 | 0.22 | 2.1 b) | 182 | 300 | 10.72 | 34.74 | 0.08 | 26.65 | 140 | 0.82 |
| 202 | 12.26 | 34.85 | 0.11 | 2.6 | 160 | 400 | 9.10 | 34.64 | 0.10 | 26.84 | 122 | 0.95 |
| 262 | 11.34 | 34.80 | 0.08 | 2.8 | 147 | 500 | (7.61) | (34.58) | | (27.03) | (104) | (1.07) |
| 323 | 10.32 | 34.71 | 0.08 | 2.9 | 136 | | | | | | | |
| 454 | 8.21 | 34.60 | 0.12 | 3.3 | 112 | | | | | | | |

a) Mean value of 21.91 and 22.08°C.
b) Duplicate values: 114 m, 2.5; 143 m, 2.6 µg at/L.

SIO

TO-58-2

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 20 | SPENCER F. BAIRD; November 30, 1958; 1953, 2013 GCT; 15°07'N, 96°55.5'W; sounding, 2090 fm; wind, 060°, force 3; weather, partly cloudy; sea, moderate; wire angle, 40°, 05°. | | | | | | | | | | | |
| 0 | 27.44 | 33.78 | 5.08 | 0.11 | 614 | 0 | 27.44 | 33.78 | 5.08 | 21.68 | 614 | 0.00 |
| 30 | 25.40 | 33.95 | 4.35 | 0.36a) | 540 | 10 | 26.40 | 33.88 | 4.69 | 22.08 | 575 | 0.06 |
| 45 | 25.28 | 33.95 | 4.39 | 0.48 | 537 | 20 | 25.78 | 33.93 | 4.47 | 22.32 | 553 | 0.12 |
| 52 | 25.15 | 33.99 | 4.19 | 0.50 | 530 | 30 | 25.40 | 33.95 | 4.35 | 22.45 | 540 | 0.17 |
| 60 | 25.08 | 33.98 | 4.10 | 0.56 | 529 | 50 | 25.18 | 33.99 | 4.23 | 22.54 | 531 | 0.28 |
| | | | | | | 75 | 23.55 | 34.17 | 3.36 | 23.16 | 472 | 0.40 |
| 86 | 18.50 | 34.56 | 1.18 | 1.8 | 313 | 100 | 15.48 | 34.80 | 0.30 | 25.72 | 228 | 0.49 |
| 101 | 15.44 | 34.80 | 0.29 | 2.3 | 227 | 150 | 13.66 | 34.83 | 0.09 | 26.14 | 188 | 0.60 |
| 121 | 14.38 | 34.82 | 0.13 | 2.5 | 203 | 200 | 13.02 | 34.87 | 0.10 | 26.31 | 173 | 0.69 |
| 150 | 13.66 | 34.83 | 0.09 | 2.6 | 188 | 250 | 12.55 | 34.84 | 0.08 | 26.38 | 166 | 0.78 |
| 200 | 13.02 | 34.87 | 0.10 | 2.7 a) | 173 | 300 | 11.92 | 34.80 | 0.07 | 26.47 | 157 | 0.86 |
| 292 | 12.06 | 34.81 | 0.07 | 2.7 | 159 | 400 | 9.39 | 34.68 | 0.08 | 26.83 | 123 | 1.01 |
| 385 | 9.76 | 34.70 | 0.09 | 3.0 | 127 | 500 | 7.27 | 34.60 | 0.06 | 27.09 | 98 | 1.12 |
| 478 | 7.60 | 34.61 | 0.07 | 3.4 | 102 | 600 | 6.28 | 34.60 | 0.07 | 27.22 | 86 | 1.23 |
| 574 | 6.46 | 34.60 | 0.06 | 3.5 a) | 88 | 700 | 5.82 | 34.59 | 0.08 | 27.27 | 81 | 1.32 |
| 768 | 5.59 | 34.58 | 0.10 | 3.6 | 79 | 800 | 5.48 | 34.58 | 0.11 | 27.31 | 78 | 1.41 |
| 965 | 4.68 | 34.56 | 0.20 | 3.7 | 70 | 1000 | (4.57) | (34.56) | (0.22) | (27.40) | (69) | (1.57) |
| 21 | SPENCER F. BAIRD; December 1, 1958; 0021 GCT; 15°39.5'N, 96°53'W; sounding, 110 fm; wind, 260°, force 2; weather, partly cloudy; sea, moderate; wire angle, 00°. | | | | | | | | | | | |
| 0 | 27.02 | 33.86 | 5.47 | 0.0 | 595 | 0 | 27.02 | 33.86 | 5.47 | 21.88 | 595 | 0.00 |
| 9 | 25.62 | 33.87 | 4.67 | 0.34 | 552 | 10 | 25.60 | 33.87 | 4.63 | 22.33 | 551 | 0.06 |
| 19 | 25.32 | 33.91 | 4.30 | 0.54 | 540 | 20 | 25.31 | 33.91 | 4.27 | 22.45 | 540 | 0.11 |
| 29 | 25.05 | 33.88 | 3.80 | 0.60 | 535 | 30 | 25.01 | 33.88 | 3.77 | 22.51 | 534 | 0.17 |
| 38 | 24.51 | 33.96 | 3.55 | 0.72 | 514 | 50 | 23.98 | 34.06 | 3.19 | 22.96 | 492 | 0.27 |
| 48 | 24.15 | 34.03 | 3.29 | 0.86 | 499 | 75 | 17.48 | 34.71 | 0.86 | 25.20 | 278 | 0.36 |
| 67 | 18.42 | 34.68 | 1.30 | 1.8 | 302 | 100 | 14.44 | 34.83 | 0.36 | 25.98 | 204 | 0.43 |
| 86 | 15.58 | 34.79 | 0.40 | 2.4 | 230 | 150 | 13.57 | 34.85 | 0.18 | 26.18 | 184 | 0.52 |
| 100 | 14.44 | 34.83 | 0.35 | 2.4 | 204 | | | | | | | |
| 124 | 13.98 | 34.83 | 0.27 | 2.5 b) | 193 | | | | | | | |
| 147 | 13.62 | 34.85 | 0.20 | 2.5 | 186 | | | | | | | |
| 170 | 13.13 | 34.88 | 0.17 | 2.5 | 174 | | | | | | | |
| 23 | SPENCER F. BAIRD; December 1, 1958; 1957 GCT; 15°36'N, 99°23.5'W; sounding, 1980 fm; wind, 320°, force missing; weather, partly cloudy; sea, slight; wire angle, 10°. | | | | | | | | | | | |
| 0 | 30.00 | 33.34 | 4.36 | 0.00c) | 726 | 0 | 30.00 | 33.34 | 4.36 | 20.51 | 726 | 0.00 |
| 28 | 29.35 | 33.49 | 4.42 | 0.06 | 694 | 10 | 29.89 | 33.37 | 4.37 | 20.57 | 720 | 0.07 |
| 38 | 28.58 | 33.66 | 4.39 | 0.14 | 657 | 20 | 29.66 | 33.43 | 4.40 | 20.68 | 710 | 0.14 |
| 48 | 27.63 | 34.00 | 4.20 | 0.21 | 604 | 30 | 29.20 | 33.52 | 4.42 | 20.91 | 688 | 0.21 |
| 58 | 25.67 | 34.20 | 3.76 | 0.49 | 530 | 50 | 27.40 | 34.03 | 4.14 | 21.88 | 594 | 0.34 |
| 67 | 20.54 | 34.54 | 1.15 | 1.8 | 364 | 75 | 18.45 | 34.64 | 0.39 | 24.91 | 306 | 0.46 |
| 76 | 18.26 | 34.65 | 0.35 | 2.4 | 300 | 100 | 15.60 | 34.73 | 0.09 | 25.65 | 235 | 0.52 |
| 99 | 15.67 | 34.72 | 0.09 | 2.6 | 238 | 150 | 13.19 | 34.82 | 0.08 | 26.24 | 179 | 0.63 |
| 118 | 14.46 | 34.80 | 0.08 | 2.6 | 206 | 200 | 12.27 | 34.85 | 0.12 | 26.44 | 160 | 0.71 |
| 144 | 13.37 | 34.81 | 0.08 | 2.8 | 184 | 250 | 11.73 | 34.81 | 0.09 | 26.52 | 153 | 0.79 |
| 193 | 12.34 | 34.85 | 0.12 | 2.8 | 161 | 300 | 11.02 | 34.76 | 0.07 | 26.60 | 145 | 0.87 |
| 284 | 11.32 | 34.78 | 0.08 | 2.9 | 148 | 400 | 9.38 | 34.63 | 0.08 | 26.79 | 126 | 1.02 |
| 376 | 9.72 | 34.65 | 0.06 | 3.1 | 130 | 500 | 8.08 | 34.58 | 0.08 | 26.95 | 112 | 1.14 |
| 468 | 8.43 | 34.60 | 0.08 | 3.3 | 115 | 600 | 7.11 | 34.55 | 0.09 | 27.08 | 100 | 1.26 |
| 560 | 7.44 | 34.55 | 0.08 | 3.4 | 105 | 700 | 6.32 | 34.56 | 0.09 | 27.18 | 90 | 1.36 |
| 751 | 5.94 | 34.56 | 0.09 | 3.5 | 84 | 800 | 5.63 | 34.56 | 0.09 | 27.27 | 81 | 1.46 |
| 946 | 4.86 | 34.56 | 0.13 | 3.7 c) | 72 | 1000 | (4.68) | (34.56) | | (27.39) | (70) | (1.63) |

a) Duplicate values: 30 m, 0.46; 200 m, 2.6; 574 m, 3.6 µg at/L.
b) Duplicate value, 2.4 µg at/L.
c) Duplicate values: 0 m, 0.06; 946 m, 3.6 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\delta_T$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | cl/ton | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

SPENCER F. BAIRD; December 2, 1958; 1916 GCT; 16°58.5'N, 102°28'W; sounding, 2420 fm; wind, 280°, force 1; weather, partly cloudy; sea, slight; wire angle, 08°.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 29.10 | 33.14 | 4.23 | 0.14 | 712 | 0 | 29.10 | 33.14 | 4.23 | 20.66 | 712 | 0.00 |
| 9 | 28.77 | 33.15 | 4.20 | 0.10 | 700 | 10 | 28.77 | 33.16 | 4.19 | 20.79 | 699 | 0.07 |
| 19 | 28.67 | 33.27 | 4.11 | 0.14 | 688 | 20 | 28.67 | 33.28 | 4.11 | 20.92 | 688 | 0.14 |
| 29 | 28.60 | 33.45 | 4.16 | 0.16 | 674 | 30 | 28.60 | 33.45 | 4.17 | 21.06 | 673 | 0.21 |
| 38 | 27.88 | 33.86 | 4.07 | 0.23 | 621 | 50 | 24.60 | 34.33 | 3.44 | 22.98 | 490 | 0.32 |
| 48 | 25.02 | 34.29 | 3.61 | 0.58 | 504 | 75 | 17.83 | 34.60 | 0.55 | 25.03 | 294 | 0.42 |
| 57 | 22.41 | 34.46 | 2.38 | 1.3 | 420 | 100 | 15.08 | 34.72 | 0.08 | 25.76 | 225 | 0.49 |
| 76 | 17.80 | 34.60 | 0.65 | 2.4 a) | 294 | 150 | 12.94 | (34.82) | 0.09 | (26.28) | (175) | (0.59) |
| 100 | 15.08 | 34.72 | 0.08 | 2.6 a) | 225 | 200 | 12.08 | (34.80) | 0.10 | (26.44) | (160) | (0.68) |
| 146 | 13.06 | 34.82 | 0.08 | 2.7 | 177 | 250 | 11.50 | (34.77) | 0.10 | (26.52) | (152) | (0.76) |
| 195 | 12.16 | - | 0.10 | - | | 300 | 10.87 | 34.73 | 0.10 | 26.61 | 144 | (0.83) |
| 286 | 11.07 | 34.74 | 0.09 | 3.0 a) | 146 | 400 | 9.40 | 34.64 | 0.09 | 26.80 | 126 | (0.98) |
| 382 | 9.66 | 34.65 | 0.10 | 3.2 | 130 | 500 | 8.13 | 34.63 | 0.09 | 26.98 | 108 | (1.10) |
| 474 | 8.45 | 34.61 | 0.09 | 3.3 | 112 | 600 | 7.00 | 34.57 | 0.08 | 27.10 | 97 | (1.21) |
| 666 | 6.34 | 34.54 | 0.08 | 3.5 | 90 | | | | | | | |

a) Duplicate values: 76 m, 2.3; 100 m, 2.7; 286 m, 2.9 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

8

HUGH M. SMITH; April 6, 1958; 0928, 0940 GCT; 3°57.5'N, 139°59.5'W; sounding, missing; wind, 220°, 7 kt; weather, moderate to heavy rain showers; sea, slight; wire angle, 10°, 10°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 27.90 | 34.55 | 4.42 | 0.50 | 22.11 |
| 38 | 27.62 | 34.61 | 4.46 | 0.37 | 22.25 |
| 76 | 27.60 | 35.02 | 4.31 | 0.29 | 22.56 |
| 101 | 20.75 | 34.87 | 2.91 | 0.50 | 24.48 |
| 139 | 13.77 | - | 1.50 | 1.26 | |
| 198 | 11.97 | - | 1.23 | 1.00 | |
| 303 | 10.44 | - | 1.46 | 0.83 | |
| 402 | 9.30 | - | 1.54 | 0.89 | |
| 507 | 8.40 | - | 1.17 | 0.92 | |
| 611 | 7.15 | - | 0.63 | 1.14 | |
| 710 | 6.18 | - | 1.02 | 1.32 | |
| 814 | 5.38 | 34.68 | 1.46 | 1.00 | 27.40 |
| 1015 | 4.37 | 34.57 | 1.53 | 1.14 | 27.43 |
| 1219 | 3.72 | - | 1.60 | 1.14a) | |

9

HUGH M. SMITH; April 6, 1958; 1837 GCT; 3°00.5'N, 140°01'W; sounding, missing; wind, 090°, 3 kt; weather, cloudy; sea, smooth; wire angle, 02°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 28.07 | 34.70 | 4.50 | 0.30 | 22.17 |
| 41 | 27.65 | 35.29 | 4.47 | 0.36 | 22.75 |
| 82 | 26.32 | 35.11 | 3.87 | 0.58 | 23.04 |
| 102 | 16.72 | 35.06 | 1.77 | 0.61 | 25.64 |
| 127 | 13.87 | 35.03 | 1.39 | 0.83 | 26.26 |
| 208 | 12.38 | 35.09 | 1.01 | 1.20 | 26.60 |
| 264 | 11.59 | 34.92 | 0.97 | 1.37 | 26.62 |
| 315 | 10.90 | - | 1.20 | 1.06 | |
| 415 | 9.62 | 34.86 | 1.50 | 1.18 | 26.93 |
| 521 | 8.22 | - | 0.54 | 1.22 | |
| 626 | 6.92 | - | 0.84 | 0.97 | |
| 726 | 6.05 | 34.67 | 1.42 | 1.60 | 27.31 |
| 831 | 5.18 | - | 1.83 | 0.62 | |
| 1032 | 4.20 | - | 1.62 | 1.37 | |
| 1236 | 3.58 | - | 1.88 | 0.97 | |

10

HUGH M. SMITH; April 7, 1958; 0708 GCT; 2°00'N, 140°02'W; sounding, missing; wind, 090°, 7 kt; weather, partly cloudy; sea, slight; wire angle, 27°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 28.19 | 34.80 | 4.54 | 0.30 | 22.20 |
| 30 | 27.42 | 34.90 | 4.39 | 0.36 | 22.53 |
| 56 | 27.08 | 34.96 | 4.34 | 0.56 | 22.68 |
| 93 | 20.90 | 35.01 | 2.70 | 0.55 | 24.55 |
| 115 | 15.23 | 34.94 | 1.53 | 0.74 | 25.89 |
| 152 | 13.33 | - | 1.52 | 0.96 | |
| 234 | 12.21 | 34.92 | 1.44 | 1.82 | 26.51 |
| 278 | 11.60 | 34.94 | 1.09 | 1.14 | 26.64 |
| 368 | 9.89 | 34.78 | 0.83 | 1.00 | 26.82 |
| 456 | 8.89 | - | 0.69 | 0.98 | |
| 549 | 7.60 | 34.65 | 1.10 | 0.96 | 27.08 |
| 640 | 6.78 | 34.63 | 1.52 | 1.25 | 27.18 |
| 729 | 5.98 | 34.67 | 1.63 | 2.50 | 27.32 |
| 911 | 4.96 | 34.61 | 1.84 | 1.40 | 27.39 |
| 1098 | 4.08 | 34.61 | 1.85 | 1.00 | 27.49 |

| | | | | | |
|---|---|---|---|---|---|
| 0 | 28.19 | 34.80 | 22.20 | 564 | 0.00 |
| 10 | 27.93 | 34.83 | 22.31 | 553 | 0.06 |
| 20 | 27.68 | 34.86 | 22.41 | 543 | 0.11 |
| 30 | 27.42 | 34.90 | 22.53 | 532 | 0.16 |
| 50 | 27.29 | 34.94 | 22.60 | 526 | 0.27 |
| 75 | 24.59 | 35.00 | 23.49 | 441 | 0.39 |
| 100 | 18.99 | 34.98 | 25.03 | 294 | 0.48 |
| 125 | 14.20 | 34.94 | 26.12 | 190 | 0.55 |
| 150 | 13.30 | 34.93 | 26.30 | 173 | 0.59 |
| 200 | 12.42 | 35.12 | 26.62 | 143 | 0.67 |
| 250 | 12.00 | 34.92 | 26.55 | 150 | 0.75 |
| 300 | 11.18 | 34.90 | 26.68 | 137 | 0.83 |
| 400 | 9.50 | 34.77 | 26.88 | 118 | 0.96 |
| 500 | 8.27 | 34.70 | 27.02 | 105 | 1.08 |
| 600 | 7.11 | 34.62 | 27.13 | 95 | 1.19 |
| 700 | 6.23 | 34.65 | 27.27 | 81 | 1.29 |
| 800 | 5.52 | 34.65 | 27.36 | 73 | 1.37 |
| 1000 | 4.54 | 34.61 | 27.44 | 65 | 1.53 |

a) Alternate value, 1.00 µg at/L.

HBL

HMS-45

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

11

HUGH M. SMITH; April 7, 1958; 1834 GCT; 1°00'N, 139°57.5'W; sounding, missing; wind, 110°, 12 kt; weather, partly cloudy; sea, slight; wire angle, 32°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 27.26 | 34.97 | 4.35 | 0.47 | 22.63 |
| 30 | 26.83 | 35.08 | 4.26 | 0.25 | 22.85 |
| 65 | 25.18 | 35.01 | 3.72 | 0.61 | 23.32 |
| 109 | 20.16 | 35.21 | 2.93 | 0.77 | 24.90 |
| 149 | 14.64 | 34.84 | 2.51 | 0.69 | 25.95 |
| 211 | 12.36 | - | 1.78 | 0.98 | |
| 265 | 11.76 | 34.99 | 1.14 | 1.17 | 26.65 |
| 336 | 10.97 | 34.91 | 0.73 | 2.26 | 26.73 |
| 435 | 8.87 | - | 0.66 | 0.93 | |
| 549 | 7.55 | - | 1.07 | 1.05 | |
| 658 | 6.82 | - | 1.38 | 0.98 | |
| 768 | 5.70 | - | 1.76 | 0.46 | |
| 878 | 5.19 | - | 1.80 | 0.90 | |
| 1098 | 3.94 | 34.67 | 1.90 | 0.97 | 27.55 |

12

HUGH M. SMITH; April 8, 1958; 0610 GCT; 0°02'S, 140°08'W; sounding, missing; wind, 130°, 12 kt; weather, partly cloudy; sea, slight; wire angle, 12°.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 27.18 | 35.38 | 4.53 | 0.16 | 22.97 |
| 65 | 23.80 | 35.34 | 3.35 | 0.16 | 23.98 |
| 121 | 18.15 | 35.61 | 3.00 | 0.27 | 25.72 |
| 171 | 13.62 | 35.07 | 2.98 | 0.73 | 26.34 |
| 195 | 12.58 | 34.98 | 2.68 | 0.43 | 26.48 |
| 242 | 12.19 | 35.04 | 2.13 | 0.73 | 26.60 |
| 299 | 11.35 | 34.89 | 0.91 | 2.02 | 26.64 |
| 359 | 9.96 | 34.82 | 0.89 | 1.56 | 26.84 |
| 481 | 8.17 | - | 0.85 | 1.02 | |
| 600 | 7.04 | 34.65 | 1.39 | 1.02 | 27.16 |
| 717 | 6.02 | - | 1.70 | 0.97 | |
| 844 | 5.35 | - | 1.76 | 1.37 | |
| 958 | 4.52 | - | 1.98 | 1.03 | |
| 1197 | 3.74 | 34.61 | 2.03 | 1.14 | 27.52 |
| 1437 | 3.16 | - | 2.19 | 1.24 | |

13

HUGH M. SMITH; April 9, 1958; 0226 GCT; 1°00'S, 140°00'W; sounding, 2260 m; wind, 170°, 11 kt; weather, cloudy; sea, slight; wire angle, 13°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.63 | 35.26 | 4.82 | 0.53 | 22.73 | 0 | 27.63 | 35.26 | 22.73 | 513 | 0.00 |
| 39 | 27.25 | 35.27 | 4.35 | 0.35 | 22.86 | 10 | 27.53 | 35.26 | 22.76 | 510 | 0.05 |
| 101 | 20.74 | 35.51 | 3.06 | 0.78 | 24.97 | 20 | 27.44 | 35.26 | 22.79 | 507 | 0.10 |
| 136 | 16.72 | 35.24 | 3.02 | 0.98 | 25.78 | 30 | 27.34 | 35.26 | 22.83 | 504 | 0.15 |
| 166 | 14.79 | 35.16 | 2.88 | 0.85 | 26.16 | 50 | 27.02 | 35.33 | 22.98 | 489 | 0.25 |
| 219 | 12.32 | 34.94 | 2.14 | 1.18 | 26.50 | 75 | 25.40 | 35.44 | 23.57 | 433 | 0.37 |
| 279 | 11.90 | 34.88 | 1.73 | 1.20 | 26.53 | 100 | 20.88 | 35.50 | 24.93 | 304 | 0.46 |
| 335 | 11.42 | 34.84 | 1.04 | 2.52 | 26.59 | 125 | 17.89 | 35.33 | 25.57 | 242 | 0.53 |
| 447 | 8.89 | 34.71 | 0.72 | 0.89 | 26.93 | 150 | 15.71 | 35.19 | 25.98 | 204 | 0.59 |
| 559 | 7.57 | 34.58 | 1.07 | 0.90 | 27.03 | 200 | 13.02 | 35.01 | 26.41 | 162 | 0.68 |
| 671 | 6.64 | 34.58 | 1.49 | 0.93 | 27.16 | 250 | 11.95 | 34.89 | 26.53 | 151 | 0.76 |
| 894 | 5.10 | 34.52 | 1.98 | 0.93 | 27.30 | 300 | 11.76 | 34.86 | 26.54 | 150 | 0.84 |
| 1107 | 3.96 | 34.55 | 1.96 | 1.06 | 27.45 | 400 | 10.01 | 34.76 | 26.78 | 127 | 0.99 |
| 1320 | 3.40 | 34.56 | 2.08 | 1.32a) | 27.52 | 500 | 8.17 | 34.64 | 26.99 | 108 | 1.11 |
| | | | | | | 600 | 7.20 | 34.57 | 27.07 | 100 | 1.23 |
| | | | | | | 700 | 6.42 | 34.57 | 27.18 | 90 | 1.33 |
| | | | | | | 800 | 5.70 | 34.54 | 27.25 | 83 | 1.43 |
| | | | | | | 1000 | 4.48 | 34.53 | 27.38 | 70 | 1.60 |
| | | | | | | 1200 | 3.72 | 34.55 | 27.48 | 61 | 1.75 |

a) Alternate value, 1.03 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

14

HUGH M. SMITH; April 9, 1958; 1545 GCT; 2°02'S, 139°59.5'W; sounding, 2300 m; wind, 110°, 13 kt; weather, partly cloudy; sea, slight; wire angle, 41°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.62 | 35.05 | 4.50 | 0.61 | 22.58 | 0 | 27.62 | 35.05 | 22.58 | 528 | 0.00 |
| 32 | 27.52 | 35.09 | 4.43 | 0.24 | 22.64 | 10 | 27.59 | 35.06 | 22.59 | 526 | 0.05 |
| 68 | 26.50 | 35.39 | 4.42 | 0.53 | 23.19 | 20 | 27.56 | 35.07 | 22.61 | 525 | 0.11 |
| 96 | 22.58 | 35.42 | 3.62 | 0.40 | 24.39 | 30 | 27.53 | 35.08 | 22.63 | 523 | 0.16 |
| 118 | 16.96 | 35.26 | 2.13 | 0.61 | 25.74 | 50 | 27.35 | 35.24 | 22.81 | 506 | 0.26 |
| 156 | 13.23 | 34.94 | 0.84 | 0.90 | 26.32 | 75 | 25.82 | 35.41 | 23.42 | 447 | 0.38 |
| 201 | 12.68 | 34.92 | 0.69 | 1.65 | 26.41 | 100 | 21.55 | 35.46 | 24.71 | 324 | 0.48 |
| 238 | 12.38 | 34.98 | 0.69 | 0.97 | 26.52 | 125 | 15.88 | 35.19 | 25.94 | 207 | 0.55 |
| 317 | 11.45 | 34.85 | 0.53 | 0.90 | 26.60 | 150 | 13.47 | 34.98 | 26.30 | 173 | 0.59 |
| 397 | 9.83 | 34.82 | 0.53 | 0.87 | 26.86 | 200 | 12.67 | 34.91 | 26.41 | 163 | 0.68 |
| 477 | 8.45 | 34.70 | 1.14a) | 0.90 | 26.99 | 250 | 12.27 | 34.96 | 26.52 | 152 | 0.76 |
| 550 | 7.59 | 34.65 | 0.99 | 0.94 | 27.08 | 300 | 11.69 | 34.88 | 26.57 | 147 | 0.84 |
| 636 | 6.82 | 34.58 | 1.62 | 0.77 | 27.13 | 400 | 9.77 | 34.81 | 26.86 | 120 | 0.98 |
| 793 | 5.60 | 34.56 | 1.71 | 0.96 | 27.28 | 500 | 8.15 | 34.68 | 27.02 | 105 | 1.10 |
| 954 | 4.60 | 34.53 | 2.13 | 1.05b) | 27.37 | 600 | 7.12 | 34.60 | 27.11 | 96 | 1.21 |
| | | | | | | 700 | 6.29 | 34.56 | 27.19 | 89 | 1.31 |
| | | | | | | 800 | 5.56 | 34.55 | 27.27 | 81 | 1.41 |

15

HUGH M. SMITH; April 10, 1958; 0125 GCT; 3°00'S, 140°00'W; sounding, 2425 m; wind, 110°, 12 kt; weather, partly cloudy; sea, slight; wire angle, 41°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.00 | 35.09 | 4.50 | 0.73 | 22.48 | 0 | 28.00 | 35.09 | 22.48 | 537 | 0.00 |
| 31 | 27.58 | 35.05 | 4.43 | 0.44 | 22.59 | 10 | 27.86 | 35.07 | 22.51 | 534 | 0.05 |
| 75 | 26.24 | 35.21 | 4.35 | 0.50 | 23.14 | 20 | 27.73 | 35.06 | 22.55 | 531 | 0.11 |
| 100 | 21.25 | 35.46 | 3.34 | 0.65 | 24.79 | 30 | 27.59 | 35.05 | 22.59 | 527 | 0.16 |
| 134 | 13.94 | 35.00 | 1.09 | 0.92 | 26.22 | 50 | 27.50 | 35.08 | 22.64 | 522 | 0.27 |
| 157 | 13.47 | 34.98 | 1.01 | 0.93 | 26.30 | 75 | 26.24 | 35.21 | 23.14 | 474 | 0.39 |
| 198 | 12.76 | 34.95 | 1.13 | 0.96 | 26.42 | 100 | 21.25 | 35.46 | 24.79 | 316 | 0.49 |
| 236 | 12.57 | 34.95 | 0.69 | 1.14 | 26.46 | 125 | 14.45 | 35.14 | 26.22 | 181 | 0.55 |
| 316 | 11.76 | 34.91 | 0.45 | 0.99 | 26.58 | 150 | 13.42 | 34.97 | 26.30 | 173 | 0.60 |
| 397 | 10.16 | 34.87 | 0.23 | 1.43 | 26.84 | 200 | 12.75 | 34.95 | 26.42 | 161 | 0.68 |
| 475 | 8.62 | 34.72 | 0.54 | 1.14 | 26.98 | 250 | 12.48 | 34.94 | 26.47 | 157 | 0.77 |
| 554 | 7.34 | 34.65 | 0.88 | 1.17 | 27.12 | 300 | 11.97 | 34.92 | 26.55 | 149 | 0.85 |
| 633 | 6.56 | 34.58 | 1.29 | 1.55 | 27.17 | 400 | 10.10 | 34.86 | 26.84 | 121 | 0.99 |
| 724 | 5.34 | 34.59 | 1.62 | 1.17 | 27.33 | 500 | 8.17 | 34.69 | 27.03 | 104 | 1.11 |
| 881 | 4.94 | 34.58 | 1.67 | 1.30c) | 27.37 | 600 | 6.87 | 34.60 | 27.14 | 93 | 1.22 |
| | | | | | | 700 | 5.64 | 34.58 | 27.29 | 79 | 1.31 |
| | | | | | | 800 | 5.15 | 34.58 | 27.35 | 74 | 1.40 |

16

HUGH M. SMITH; April 10, 1958; 1515 GCT; 4°05'S, 140°09'W; sounding, missing; wind, 100°, 12 kt; weather, partly cloudy; sea, slight; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.91 | 34.72 | 4.50 | 0.31 | 22.24 | 0 | 27.91 | 34.72 | 22.23 | 561 | 0.00 |
| 58 | 27.66 | 35.16 | 4.27 | 0.14 | 22.65 | 10 | 27.87 | 34.79 | 22.30 | 554 | 0.06 |
| 142 | 14.78 | 35.07 | 1.26 | 2.05 | 26.09 | 20 | 27.82 | 34.87 | 22.38 | 547 | 0.11 |
| 163 | 13.65 | 35.03 | 1.30 | 2.18 | 26.30 | 30 | 27.78 | 34.94 | 22.44 | 541 | 0.17 |
| 197 | 12.84 | 34.94 | 0.85 | 2.07 | 26.40 | 50 | 27.69 | 35.09 | 22.58 | 527 | 0.27 |
| 233 | 12.56 | 34.94 | 1.00 | 2.29 | 26.45 | 75 | 25.11 | 35.30 | 23.56 | 434 | 0.39 |
| 290 | 12.16 | 34.94 | 0.18 | 2.07 | 26.53 | 100 | 21.31 | 35.40 | 24.73 | 322 | 0.49 |
| 342 | 11.34 | 34.97 | 0.17 | 2.73 | 26.71 | 125 | 17.44 | 35.23 | 25.60 | 239 | 0.56 |
| 461 | 9.01 | 34.77 | 0.46 | 3.20 | 26.96 | 150 | 14.27 | 35.05 | 26.19 | 184 | 0.61 |
| 579 | 7.45 | 34.70 | 0.92 | 2.54 | 27.14 | 200 | 12.80 | 34.93 | 26.40 | 164 | 0.70 |
| 691 | 6.59 | 34.65 | 1.14 | 3.37 | 27.22 | 250 | 12.47 | 34.93 | 26.46 | 158 | 0.79 |
| 804 | 5.76 | 34.58 | 1.68 | 3.07 | 27.27 | 300 | 12.02 | 34.94 | 26.56 | 149 | 0.87 |
| 915 | 5.04 | 34.58 | 2.03 | 3.34 | 27.36 | 400 | 10.20 | 34.88 | 26.84 | 122 | 1.01 |
| 1132 | 4.06 | 34.57 | 2.26 | 1.02 | 27.46 | 500 | 8.42 | 34.73 | 27.02 | 105 | 1.13 |
| 1349 | 3.70 | 34.57 | 2.25 | 2.29d) | 27.50 | 600 | 7.26 | 34.69 | 27.16 | 92 | 1.24 |
| | | | | | | 700 | 6.52 | 34.64 | 27.22 | 86 | 1.34 |
| | | | | | | 800 | 5.79 | 34.58 | 27.27 | 81 | 1.43 |
| | | | | | | 1000 | 4.59 | 34.57 | 27.40 | 69 | 1.60 |
| | | | | | | 1200 | 3.95 | 34.57 | 27.47 | 62 | 1.75 |

a) Value uncertain; used in interpolation.
b) Alternate value, 1.21 µg at/L.
c) Alternate value, 1.26 µg at/L.
d) Alternate value, 1.88 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **19** | HUGH M. SMITH; April 12, 1958; 1737 GCT; 0°01'S, 140°00.5'W; sounding, missing; wind, 100°, 8 kt; weather, partly cloudy; sea, slight; wire angle, 38-41°. | | | | | | | | | | |
| 0 | 26.83 | 35.14 | 4.31 | 0.16 | 22.90 | 0 | 26.83 | 35.14 | 22.90 | 497 | 0.00 |
| 28 | 26.70 | 35.19 | 4.30 | 0.02 | 22.98 | 10 | 26.78 | 35.15 | 22.93 | 495 | 0.05 |
| 77 | 25.34 | 35.27 | 3.84 | 0.53 | 23.46 | 20 | 26.74 | 35.17 | 22.96 | 492 | 0.10 |
| 140 | 19.36 | 35.29 | 3.08 | 0.12 | 25.17 | 30 | 26.69 | 35.19 | 22.98 | 490 | 0.15 |
| 173 | 14.44 | 35.00 | 3.07 | 0.13 | 26.11 | 50 | 26.36 | 35.23 | 23.12 | 478 | 0.24 |
| 199 | 13.21 | 34.97 | 2.91 | 0.50 | 26.35 | 75 | 25.44 | 35.26 | 23.43 | 449 | 0.36 |
| 251 | 12.28 | 35.05 | 2.19 | 1.50 | 26.59 | 100 | 23.69 | 35.32 | 24.00 | 396 | 0.47 |
| 300 | 11.54 | 34.88 | 0.99 | 0.94 | 26.60 | 125 | 21.20 | 35.32 | 24.70 | 329 | 0.56 |
| 425 | 9.30 | 34.72 | 0.54 | 1.32 | 26.87 | 150 | 17.74 | 35.19 | 25.51 | 253 | 0.63 |
| 517 | 7.86 | 34.67 | 0.90 | 0.73 | 27.06 | 200 | 13.18 | 34.97 | 26.35 | 174 | 0.74 |
| 626 | 7.04 | 34.61 | 1.30 | 0.80 | 27.13 | 250 | 12.29 | 35.04 | 26.59 | 152 | 0.82 |
| 887 | 4.86 | 34.55 | 1.92 | 0.98 | 27.36 | 300 | 11.54 | 34.88 | 26.60 | 152 | 0.89 |
| 1112 | 3.92 | 34.61 | 1.98 | 2.02 | 27.51 | 400 | 9.76 | 34.73 | 26.80 | 134 | 1.04 |
| 1338 | 3.44 | 34.61 | 2.13 | 2.42 | 27.55 | 500 | 8.09 | 34.67 | 27.03 | 113 | 1.16 |
| | | | | | | 600 | 7.19 | 34.62 | 27.12 | 105 | 1.27 |
| | | | | | | 700 | 6.38 | 34.58 | 27.19 | 98 | 1.37 |
| | | | | | | 800 | 5.54 | 34.55 | 27.28 | 90 | 1.47 |
| | | | | | | 1000 | 4.30 | 34.57 | 27.44 | 75 | 1.63 |
| | | | | | | 1200 | 3.73 | 34.61 | 27.53 | 67 | 1.77 |
| **22** | HUGH M. SMITH; April 13, 1958; 1725 GCT; 0°02'S, 139°57'W; sounding, 2650 m; wind, 150°, 6 kt; weather, partly cloudy; sea, slight; wire angle, 23°. | | | | | | | | | | |
| 0 | 26.86 | 35.19 | 4.39 | 0.10 | 22.93 | 0 | 26.86 | 35.19 | 22.93 | 494 | 0.00 |
| 32 | 26.52 | 35.24 | 4.28 | 0.25 | 23.07 | 10 | 26.75 | 35.20 | 22.97 | 490 | 0.05 |
| 88 | 22.97 | 35.35 | 3.25 | 0.67 | 24.23 | 20 | 26.65 | 35.22 | 23.02 | 486 | 0.10 |
| 168 | 15.27 | 35.03 | 3.08 | 0.27 | 25.95 | 30 | 26.54 | 35.23 | 23.06 | 483 | 0.15 |
| 215 | 12.96 | 34.97 | 2.88 | 0.78 | 26.40 | 50 | 25.67 | 35.28 | 23.38 | 454 | 0.24 |
| 224 | 12.56 | 34.92 | 2.56 | 1.28 | 26.44 | 75 | 24.03 | 35.33 | 23.91 | 404 | 0.35 |
| 282 | 11.85 | 34.86 | 1.61 | 1.21 | 26.53 | 100 | 21.76 | 35.31 | 24.54 | 344 | 0.44 |
| 339 | 11.24 | 34.85 | 0.82 | 1.27 | 26.63 | 125 | 19.31 | 35.22 | 25.13 | 289 | 0.52 |
| 456 | 9.03 | 34.73 | 0.67 | 0.62 | 26.92 | 150 | 16.93 | 35.11 | 25.64 | 241 | 0.59 |
| 578 | 7.13 | 34.62 | 1.18 | 1.09 | 27.12 | 200 | 13.59 | 35.00 | 26.29 | 179 | 0.69 |
| 694 | 6.23 | 34.62 | 1.53 | 1.80 | 27.24 | 250 | 12.04 | 34.86 | 26.49 | 162 | 0.78 |
| 811 | 5.49 | 34.58 | 1.76 | 2.27 | 27.31 | 300 | 11.67 | 34.85 | 26.56 | 156 | 0.86 |
| 927 | 4.76 | 34.56 | 1.95 | 2.09 | 27.38 | 400 | 10.14 | 34.79 | 26.79 | 136 | 1.00 |
| 1385 | 3.43 | 34.66 | 2.07 | 2.12a) | 27.60 | 500 | 8.26 | 34.68 | 27.01 | 115 | 1.13 |
| | | | | | | 600 | 6.92 | 34.61 | 27.15 | 102 | 1.24 |
| | | | | | | 700 | 6.19 | 34.61 | 27.25 | 93 | 1.33 |
| | | | | | | 800 | 5.56 | 34.58 | 27.30 | 88 | 1.42 |
| | | | | | | 1000 | 4.55 | 34.57 | 27.41 | 78 | 1.59 |
| | | | | | | 1200 | 3.97 | 34.62 | 27.51 | 69 | 1.74 |

a) Alternate value, 2.32 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; April 14, 1958; 1727 GCT; 0°01'S, 139°59'W; sounding, 2300 m; wind, 110°, 7 kt; weather, partly cloudy; sea, slight; wire angle, 27°. 25

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.90 | 35.18 | 4.39 | 0.30 | 22.91 | 0 | 26.90 | 35.18 | 22.91 | 496 | 0.00 |
| 33 | 26.57 | 35.23 | 4.21 | 0.43 | 23.05 | 10 | 26.80 | 35.19 | 22.95 | 493 | 0.05 |
| 102 | 19.99 | 35.30 | 2.91 | 0.61 | 25.01 | 20 | 26.70 | 35.21 | 22.99 | 488 | 0.10 |
| 126 | 17.94 | 35.20 | 3.03 | 0.36 | 25.46 | 30 | 26.60 | 35.22 | 23.03 | 484 | 0.15 |
| 197 | 14.10 | 35.08 | 2.91 | 0.55 | 26.25 | 50 | 25.27 | 35.34 | 23.54 | 436 | 0.24 |
| 224 | 12.92 | 34.98 | 2.70 | 0.63 | 26.41 | 75 | 22.98 | 35.40 | 24.26 | 367 | 0.34 |
| 281 | 11.85 | 34.86 | 1.52 | 0.70 | 26.53 | 100 | 20.23 | 35.30 | 24.95 | 302 | 0.43 |
| 338 | 11.22 | 34.88 | 0.70 | 0.85 | 26.66 | 125 | 18.02 | 35.20 | 25.44 | 255 | 0.50 |
| 457 | 9.02 | 34.70 | 0.56 | 1.29 | 26.90 | 150 | 16.40 | 35.15 | 25.79 | 222 | 0.56 |
| 582 | 7.14 | 34.60 | 1.14 | 0.87 | 27.11 | 200 | 13.95 | 35.06 | 26.26 | 177 | 0.66 |
| 703 | 6.36 | 34.56 | 1.49 | 1.09 | 27.18 | 250 | 12.29 | 34.90 | 26.47 | 157 | 0.74 |
| 823 | 5.62 | 34.58 | 1.75 | 1.59 | 27.29 | 300 | 11.63 | 34.86 | 26.57 | 148 | 0.82 |
| 943 | 4.79 | 34.56 | 1.89 | 1.19 | 27.37 | 400 | 10.12 | 34.80 | 26.79 | 126 | 0.97 |
| 1180 | 3.86 | 34.58 | 1.83 | 1.90 | 27.49 | 500 | 8.29 | 34.65 | 26.98 | 109 | 1.10 |
| 1412 | 3.32 | 34.59 | 1.99 | 2.09a) | 27.55 | 600 | 6.99 | 34.59 | 27.12 | 95 | 1.21 |
| | | | | | | 700 | 6.37 | 34.56 | 27.18 | 90 | 1.31 |
| | | | | | | 800 | 5.76 | 34.57 | 27.26 | 82 | 1.41 |
| | | | | | | 1000 | 4.51 | 34.56 | 27.40 | 68 | 1.58 |
| | | | | | | 1200 | 3.81 | 34.58 | 27.49 | 60 | 1.72 |

HUGH M. SMITH; April 15, 1958; 2109 GCT; 0°02'S, 139°58'W; sounding, 2350 m; wind, 120°, 12 kt; weather, partly cloudy; sea, slight; wire angle, 28°. 27

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.03 | 35.22 | 4.33 | 0.97 | 22.90 | 0 | 27.03 | 35.22 | 22.90 | 497 | 0.00 |
| 32 | 26.67 | 35.24 | 4.32 | 0.17 | 23.02 | 10 | 26.92 | 35.22 | 22.94 | 494 | 0.05 |
| 86 | 23.78 | 35.47 | 3.43 | 0.88 | 24.08 | 20 | 26.80 | 35.23 | 22.98 | 490 | 0.10 |
| 141 | 17.50 | 35.16 | 3.09 | 1.07 | 25.54 | 30 | 26.69 | 35.23 | 23.02 | 487 | 0.15 |
| 192 | 13.70 | 35.04 | 2.76 | 0.49 | 26.30 | 50 | 26.05 | 35.33 | 23.29 | 462 | 0.24 |
| 221 | 12.88 | 35.01 | 2.78 | 1.17 | 26.44 | 75 | 24.62 | 35.43 | 23.81 | 413 | 0.35 |
| 278 | 11.82 | 34.89 | 1.39 | 2.10 | 26.56 | 100 | 22.23 | 35.40 | 24.48 | 350 | 0.45 |
| 337 | 11.19 | 34.87 | 0.75 | 2.45 | 26.66 | 125 | 19.38 | 35.26 | 25.15 | 287 | 0.53 |
| 459 | 8.81 | 34.71 | 0.60 | 2.41 | 26.94 | 150 | 16.65 | 35.13 | 25.71 | 233 | 0.59 |
| 584 | 7.08 | 34.61 | 1.16 | 0.96 | 27.12 | 200 | 13.42 | 35.03 | 26.35 | 174 | 0.69 |
| 705 | 6.03 | 34.60 | 1.61 | 1.59 | 27.25 | 250 | 12.27 | 34.94 | 26.52 | 159 | 0.78 |
| 794 | 5.41 | 34.56 | 1.77 | 2.11 | 27.30 | 300 | 11.58 | 34.87 | 26.59 | 152 | 0.85 |
| 945 | 4.58 | 34.61 | 1.87 | 0.87 | 27.44 | 400 | 10.01 | 34.79 | 26.81 | 133 | 1.00 |
| 1180 | 3.84 | 34.60 | 1.87 | 1.19 | 27.51 | 500 | 8.17 | 34.66 | 27.01 | 115 | 1.12 |
| 1412 | 3.26 | 34.62 | 2.12 | 2.69 | 27.58 | 600 | 6.92 | 34.60 | 27.14 | 102 | 1.23 |
| | | | | | | 700 | 6.06 | 34.60 | 27.25 | 93 | 1.33 |
| | | | | | | 800 | 5.37 | 34.56 | 27.31 | 87 | 1.42 |
| | | | | | | 1000 | 4.37 | 34.61 | 27.46 | 73 | 1.58 |
| | | | | | | 1200 | 3.79 | 34.60 | 27.51 | 68 | 1.72 |

a) Alternate value, 2.30 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 30 | HUGH M. SMITH; April 16, 1958; 1817 GCT; 0°02'S, 139°58'W; sounding, 2300 m; wind, 110°, 13 kt; weather, partly cloudy; sea, slight; wire angle, 32°. | | | | | | | | | | |
| 0 | 26.83 | 35.22 | 4.29 | 0.53 | 22.96 | 0 | 26.83 | 35.22 | 22.96 | 491 | 0.00 |
| 24 | 26.64 | 35.28 | 4.20 | 0.42 | 23.06 | 10 | 26.75 | 35.24 | 23.00 | 487 | 0.05 |
| 88 | 21.64 | 35.36 | 2.96 | 0.84 | 24.61 | 20 | 26.67 | 35.27 | 23.05 | 483 | 0.10 |
| 135 | 17.74 | 35.23 | 3.06 | 1.06 | 25.53 | 30 | 26.32 | 35.32 | 23.20 | 469 | 0.15 |
| 187 | 13.72 | 35.05 | 2.74 | 1.30 | 26.30 | 50 | 25.02 | 35.43 | 23.68 | 422 | 0.23 |
| 225 | 12.81 | 34.99 | 2.73 | 1.06 | 26.44 | 75 | 22.93 | 35.43 | 24.30 | 363 | 0.33 |
| 284 | 11.65 | 34.87 | 1.07 | 0.75 | 26.57 | 100 | 20.64 | 35.33 | 24.86 | 310 | 0.42 |
| 345 | 10.80 | 34.89 | 0.85a) | 1.68 | 26.75 | 125 | 18.57 | 35.26 | 25.35 | 264 | 0.49 |
| 468 | 8.97 | 34.70 | 0.54 | 0.85 | 26.91 | 150 | 16.40 | 35.17 | 25.80 | 220 | 0.55 |
| 597 | 7.13 | 34.63 | 0.99b) | 1.37 | 27.13 | 200 | 13.31 | 35.02 | 26.36 | 167 | 0.65 |
| 719 | 6.15 | 34.60 | 1.52 | 1.78 | 27.24 | 250 | 12.28 | 34.93 | 26.50 | 154 | 0.74 |
| 843 | 5.48 | 34.55 | 1.77 | 1.88 | 27.28 | 300 | 11.41 | 34.87 | 26.62 | 143 | 0.81 |
| 961 | 4.81 | 34.57 | 1.90 | 2.57 | 27.38 | 400 | 9.99 | 34.81 | 26.82 | 123 | 0.95 |
| 1197 | 4.00 | 34.61 | 1.90 | 2.95 | 27.50 | 500 | 8.47 | 34.67 | 26.96 | 110 | 1.08 |
| 1430 | 3.25 | 34.64 | 1.99 | 2.37c) | 27.60 | 600 | 7.10 | 34.62 | 27.13 | 95 | 1.19 |
| | | | | | | 700 | 6.27 | 34.60 | 27.22 | 86 | 1.29 |
| | | | | | | 800 | 5.70 | 34.56 | 27.26 | 82 | 1.38 |
| | | | | | | 1000 | 4.65 | 34.57 | 27.40 | 69 | 1.56 |
| | | | | | | 1200 | 3.99 | 34.61 | 27.50 | 59 | 1.71 |
| 33 | HUGH M. SMITH; April 17, 1958; 1823 GCT; 0°03'S, 139°58'W; sounding, 2300 m; wind, 120°, 12 kt; weather, cloudy; sea, slight; wire angle, 22°. | | | | | | | | | | |
| 0 | 26.83 | 35.23 | 4.31 | 0.67 | 22.97 | 0 | 26.83 | 35.23 | 22.97 | 491 | 0.00 |
| 28 | 26.64 | 35.28 | 4.26 | 0.26 | 23.06 | 10 | 26.76 | 35.24 | 23.00 | 488 | 0.05 |
| 76 | 24.14 | 35.43 | 3.37 | 0.76 | 23.95 | 20 | 26.69 | 35.26 | 23.03 | 484 | 0.10 |
| 158 | 14.23 | 35.01 | 2.98 | 1.17 | 26.16 | 30 | 26.59 | 35.28 | 23.08 | 480 | 0.15 |
| 209 | 12.72 | 34.96 | 2.99 | 0.96 | 26.44 | 50 | 25.82 | 35.36 | 23.38 | 451 | 0.24 |
| 235 | 12.35 | 34.92 | 2.13 | 1.49 | 26.48 | 75 | 24.22 | 35.42 | 23.91 | 400 | 0.35 |
| 295 | 11.12 | 34.90 | 0.62 | 1.76 | 26.69 | 100 | 21.13 | 35.40 | 24.78 | 317 | 0.44 |
| 357 | 10.58 | 34.88 | 0.59 | 2.36 | 26.78 | 125 | 18.09 | 35.20 | 25.42 | 257 | 0.51 |
| 480 | 8.84 | 34.71 | 0.55 | 1.48 | 26.94 | 150 | 15.15 | 35.06 | 26.00 | 201 | 0.57 |
| 608 | 7.07 | 34.67 | 0.45d) | 1.43 | 27.17 | 200 | 12.82 | 34.96 | 26.42 | 162 | 0.66 |
| 729 | 5.94 | 34.63 | 1.53 | 0.97 | 27.29 | 250 | 12.03 | 34.91 | 26.53 | 151 | 0.74 |
| 850 | 5.33 | 34.63 | 1.73 | 2.08 | 27.36 | 300 | 11.07 | 34.89 | 26.70 | 135 | 0.82 |
| 968 | 4.59 | 34.65 | 1.90 | 1.26 | 27.47 | 400 | 10.02 | 34.82 | 26.83 | 123 | 0.95 |
| 1204 | 3.84 | 34.66 | 1.91 | 2.40 | 27.55 | 500 | 8.54 | 34.69 | 26.97 | 110 | 1.08 |
| 1434 | 3.13 | 34.72 | 2.04 | 2.69e) | 27.67 | 600 | 7.17 | 34.67 | 27.16 | 92 | 1.19 |
| | | | | | | 700 | 6.16 | 34.63 | 27.26 | 82 | 1.29 |
| | | | | | | 800 | 5.56 | 34.62 | 27.33 | 76 | 1.38 |
| | | | | | | 1000 | 4.46 | 34.65 | 27.48 | 61 | 1.53 |
| | | | | | | 1200 | 3.85 | 34.66 | 27.55 | 54 | 1.67 |

a) Value uncertain; used in interpolation.
b) This oxygen sample appeared to be contaminated.
c) Alternate value, 2.49 μg at/L.
d) Value uncertain; not used in interpolation.
e) Alternate value, 2.30 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

34

HUGH M. SMITH; April 18, 1958; 1722 GCT; 0°53'N, 140°02'W; sounding, 2375 m; wind, 120°, 10 kt; weather, cloudy; sea, slight; wire angle, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.23 | 35.09 | 4.50 | 0.50 | 22.73 | 0 | 27.23 | 35.09 | 22.73 | 513 | 0.00 |
| 52 | 24.82 | 35.00 | 3.49 | 0.35 | 23.42 | 10 | 26.77 | 35.07 | 22.87 | 500 | 0.05 |
| 57 | 24.17 | 35.05 | 3.36 | 0.31 | 23.65 | 20 | 26.30 | 35.05 | 23.00 | 488 | 0.10 |
| 81 | 22.39 | 35.04 | 2.99 | 0.70 | 24.16 | 30 | 25.84 | 35.03 | 23.13 | 476 | 0.15 |
| 114 | 17.53 | 34.88 | 2.92 | 0.85 | 25.31 | 50 | 24.91 | 35.00 | 23.39 | 452 | 0.24 |
| 155 | 13.16 | 34.80 | 2.59 | 1.02 | 26.22 | 75 | 22.80 | 35.06 | 24.06 | 389 | 0.35 |
| 200 | 12.23 | 34.86 | 2.14 | 0.78 | 26.45 | 100 | 19.69 | 34.95 | 24.83 | 317 | 0.43 |
| 256 | 11.55 | 34.95 | 0.84 | 0.58 | 26.65 | 125 | 16.10 | 34.84 | 25.62 | 241 | 0.50 |
| 303 | 10.97 | 34.81 | 0.59 | 0.64 | 26.65 | 150 | 13.55 | 34.80 | 26.15 | 192 | 0.56 |
| 360 | 9.68 | 34.83 | 0.92 | 0.71 | 26.89 | 200 | 12.23 | 34.86 | 26.45 | 164 | 0.65 |
| 451 | 8.41 | 34.72 | 0.57 | 2.04 | 27.01 | 250 | 11.61 | 34.94 | 26.64 | 147 | 0.72 |
| 539 | 7.13 | 34.68 | 1.14 | 1.39 | 27.17 | 300 | 11.01 | 34.82 | 26.65 | 147 | 0.80 |
| 627 | 6.38 | 34.61 | 1.37 | 1.68 | 27.22 | 400 | 9.07 | 34.78 | 26.96 | 118 | 0.93 |
| 716 | 5.80 | 34.56 | 1.67 | 2.22 | 27.25 | 500 | 7.67 | 34.69 | 27.10 | 105 | 1.04 |
| 896 | 4.72 | 34.60 | 1.77a) | 2.53 | 27.41 | 600 | 6.57 | 34.63 | 27.21 | 96 | 1.14 |
| 1074 | 4.10 | 34.57 | 1.83 | 2.53b) | 27.46 | 700 | 5.90 | 34.56 | 27.24 | 93 | 1.24 |
| | | | | | | 800 | 5.26 | 34.57 | 27.33 | 85 | 1.33 |
| | | | | | | 1000 | 4.36 | 34.58 | 27.44 | 75 | 1.49 |

35

HUGH M. SMITH; April 19, 1958; 0540 GCT; 2°00'N, 140°03'W; sounding, 2350 m; wind, 100°, 10 kt; weather, partly cloudy; sea, slight; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.35 | 34.80 | 4.50 | 0.29 | 22.15 | 0 | 28.35 | 34.80 | 22.15 | 569 | 0.00 |
| 19 | 28.15 | 34.81 | 4.46 | 0.26 | 22.22 | 10 | 28.24 | 34.80 | 22.19 | 565 | 0.06 |
| 50 | 27.70 | 34.91 | 4.42 | 0.37 | 22.45 | 20 | 28.17 | 34.81 | 22.22 | 562 | 0.11 |
| 91 | 20.16 | 34.88 | 2.53 | 0.87 | 24.65 | 30 | 28.00 | 34.84 | 22.30 | 555 | 0.17 |
| 118 | 15.05 | 34.90 | 1.46 | 1.31 | 25.90 | 50 | 27.70 | 34.91 | 22.45 | 540 | 0.28 |
| 136 | 14.13 | 34.93 | 1.33 | 1.62 | 26.12 | 75 | 23.59 | 34.89 | 23.70 | 421 | 0.40 |
| 171 | 13.21 | 34.95 | 1.11 | 1.22 | 26.33 | 100 | 18.21 | 34.88 | 25.15 | 283 | 0.49 |
| 197 | 12.84 | 34.90 | 1.16 | 0.72 | 26.37 | 125 | 14.56 | 34.91 | 26.02 | 200 | 0.55 |
| 251 | 11.96 | 34.86 | 0.93 | 1.40 | 26.51 | 150 | 13.66 | 34.94 | 26.23 | 180 | 0.60 |
| 300 | 11.11 | 34.82 | 1.26 | 1.80 | 26.63 | 200 | 12.79 | 34.89 | 26.37 | 167 | 0.69 |
| 398 | 9.11 | 34.69 | 0.93 | 0.85 | 26.88 | 250 | 11.98 | 34.86 | 26.50 | 154 | 0.77 |
| 495 | 8.05 | 34.65 | 0.90 | 1.27 | 27.01 | 300 | 11.11 | 34.82 | 26.63 | 141 | 0.85 |
| 596 | 7.08 | 34.58 | 1.39 | 1.40 | 27.10 | 400 | 9.08 | 34.68 | 26.87 | 119 | 0.98 |
| 696 | 5.98 | 34.56 | 1.68 | 1.63 | 27.23 | 500 | 8.00 | 34.64 | 27.01 | 106 | 1.10 |
| 796 | 5.40 | 34.54 | 1.83 | 2.02 | 27.29 | 600 | 7.03 | 34.57 | 27.10 | 97 | 1.22 |
| 999 | 4.32 | 34.58 | 1.82 | 1.92 | 27.44 | 700 | 5.95 | 34.55 | 27.22 | 85 | 1.32 |
| 1210 | 3.74 | 34.61 | 1.81 | 2.40c) | 27.52 | 800 | 5.38 | 34.54 | 27.29 | 79 | 1.41 |
| | | | | | | 1000 | 4.32 | 34.58 | 27.44 | 65 | 1.57 |
| | | | | | | 1200 | 3.77 | 34.60 | 27.51 | 58 | 1.72 |

a) Air in sample.
b) Alternate value, 2.42 µg at/L.
c) Alternate value, 2.14 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 36 | HUGH M. SMITH; April 19, 1958; 1326 GCT; 3°00'N, 140°01'W; sounding, 2350 m; wind, 030°, 9 kt; weather, precipitation near ship; sea, slight; wire angle, 11°. | | | | | | | | | | |
| 0 | 28.31 | 34.54 | 4.51 | 0.35 | 21.97 | 0 | 28.31 | 34.54 | 21.97 | 586 | 0.00 |
| 24 | 28.04 | 34.59 | 4.51 | 0.30 | 22.09 | 10 | 28.20 | 34.56 | 22.02 | 581 | 0.06 |
| 44 | 27.80 | 34.72 | 4.53 | 0.11 | 22.27 | 20 | 28.08 | 34.58 | 22.07 | 576 | 0.12 |
| 84 | 21.74 | 34.89 | 2.91 | 0.55 | 24.23 | 30 | 28.07 | 34.62 | 22.11 | 573 | 0.17 |
| 99 | 15.68 | 34.91 | 1.52 | 1.01 | 25.77 | 50 | 27.60 | 34.88 | 22.46 | 539 | 0.29 |
| 119 | 14.07 | 34.95 | 1.45 | 0.64 | 26.15 | 75 | 24.07 | 34.95 | 23.60 | 430 | 0.41 |
| 163 | 13.18 | 34.94 | 1.44 | 1.13 | 26.33 | 100 | 15.50 | 34.91 | 25.81 | 220 | 0.49 |
| 218 | 12.34 | 34.92 | 1.01 | 0.93 | 26.48 | 125 | 13.84 | 34.95 | 26.20 | 183 | 0.54 |
| 277 | 11.62 | 34.83 | 0.84 | 0.70 | 26.55 | 150 | 13.24 | 34.95 | 26.32 | 171 | 0.59 |
| 333 | 10.92 | 34.80 | 1.23 | 1.92 | 26.65 | 200 | 12.59 | 34.93 | 26.44 | 160 | 0.67 |
| 441 | 9.19 | 34.71 | 1.53 | 0.80 | 26.88 | 250 | 11.94 | 34.87 | 26.52 | 152 | 0.75 |
| 549 | 7.74 | 34.63 | 0.37 | 2.01 | 27.04 | 300 | 11.34 | 34.81 | 26.58 | 146 | 0.83 |
| 663 | 6.38 | - | 1.15 | 1.18 | | 400 | 9.86 | 34.74 | 26.79 | 126 | 0.97 |
| 772 | 5.58 | 34.60 | 1.71 | 1.70 | 27.31 | 500 | 8.37 | 34.65 | 26.96 | 110 | 1.10 |
| 879 | 5.00 | 34.57 | 1.61 | 2.54 | 27.36 | 600 | 7.09 | 34.63 | 27.14 | 94 | 1.21 |
| 1093 | 4.10 | 34.63 | 1.64 | 2.43 | 27.50 | 700 | 6.07 | 34.61 | 27.26 | 82 | 1.31 |
| 1311 | 3.41 | 34.60 | 2.00 | 2.03a) | 27.55 | 800 | 5.41 | 34.58 | 27.32 | 77 | 1.40 |
| | | | | | | 1000 | 4.46 | 34.60 | 27.44 | 65 | 1.56 |
| | | | | | | 1200 | 3.76 | 34.61 | 27.52 | 57 | 1.70 |
| 37 | HUGH M. SMITH; April 19, 1958; 1758 GCT; 3°26'N, 140°02'W; sounding, 2310 m; wind, 030°, 8 kt; weather, precipitation near ship; sea, slight; wire angle, 12°. | | | | | | | | | | |
| 0 | 28.24 | 34.29 | 4.50 | 0.18 | 21.80 | 0 | 28.24 | 34.29 | 21.80 | 602 | 0.00 |
| 40 | 27.75 | 35.01 | 4.39 | 0.28 | 22.51 | 10 | 28.12 | 34.47 | 21.98 | 585 | 0.06 |
| 73 | 27.04 | 35.07 | 4.06 | 0.44 | 22.78 | 20 | 27.99 | 34.65 | 22.16 | 568 | 0.12 |
| 98 | 19.54 | 34.87 | 2.71 | 0.37 | 24.80 | 30 | 27.87 | 34.83 | 22.33 | 551 | 0.17 |
| 113 | 15.61 | 34.88 | 1.30 | 1.40 | 25.76 | 50 | 27.60 | 35.07 | 22.60 | 526 | 0.28 |
| 128 | 13.92 | 34.94 | 1.31 | 0.56 | 26.18 | 75 | 26.53 | 35.05 | 22.93 | 494 | 0.41 |
| 163 | 12.97 | 34.98 | 1.69 | 1.30 | 26.40 | 100 | 18.94 | 34.86 | 24.95 | 302 | 0.51 |
| 202 | 12.29 | 34.94 | 1.22 | 1.20 | 26.51 | 125 | 14.14 | 34.92 | 26.11 | 191 | 0.57 |
| 255 | 11.70 | 34.90 | 0.83 | 0.66 | 26.59 | 150 | 13.06 | 34.97 | 26.38 | 166 | 0.62 |
| 303 | 11.10 | 34.84 | 0.98 | 0.87 | 26.65 | 200 | 12.32 | 34.94 | 26.50 | 154 | 0.70 |
| 402 | 9.89 | 34.77 | 1.25 | 0.87 | 26.81 | 250 | 11.75 | 34.90 | 26.58 | 147 | 0.78 |
| 504 | 8.79 | 34.68 | 1.05 | 1.33 | 26.92 | 300 | 11.14 | 34.84 | 26.64 | 140 | 0.85 |
| 608 | 7.27 | 34.66 | 0.60 | 1.43 | 27.13 | 400 | 9.91 | 34.77 | 26.81 | 125 | 0.99 |
| 706 | 6.27 | 34.59 | 1.12 | 1.53 | 27.22 | 500 | 8.84 | 34.68 | 26.91 | 115 | 1.12 |
| 807 | 5.48 | 34.58 | 1.28b) | 2.52 | 27.31 | 600 | 7.39 | 34.66 | 27.12 | 96 | 1.24 |
| 1005 | 4.42 | 34.56 | 1.52 | 2.59 | 27.41 | 700 | 6.32 | 34.59 | 27.21 | 87 | 1.34 |
| 1208 | 3.67 | 34.58 | 1.71 | 2.51c) | 27.51 | 800 | 5.53 | 34.58 | 27.30 | 78 | 1.43 |
| | | | | | | 1000 | 4.44 | 34.56 | 27.41 | 68 | 1.60 |
| | | | | | | 1200 | 3.70 | 34.57 | 27.50 | 60 | 1.74 |

a) Alternate value, 2.22 µg at/L.
b) Value uncertain; not used in interpolation.
c) Alternate value, 2.36 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

38

HUGH M. SMITH; April 20, 1958; 0126 GCT; 2°30'N, 139°55'W; sounding, 2350 m; wind, 180°, 6 kt; weather, distant precipitation; sea, slight; wire angle, 11°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.58 | 34.70 | 4.50 | 0.25 | 22.00 | 0 | 28.58 | 34.70 | 22.00 | 583 | 0.00 |
| 34 | 28.00 | 34.70 | 4.55 | 0.28 | 22.19 | 10 | 28.41 | 34.70 | 22.06 | 578 | 0.06 |
| 78 | 25.68 | 35.01 | 3.66 | 0.67 | 23.16 | 20 | 28.24 | 34.70 | 22.11 | 572 | 0.12 |
| 98 | 19.88 | 34.88 | 2.58 | 0.63 | 24.72 | 30 | 28.07 | 34.70 | 22.17 | 567 | 0.17 |
| 122 | 14.34 | 34.97 | 1.37 | 1.66 | 26.11 | 50 | 28.09 | 34.84 | 22.27 | 558 | 0.29 |
| 137 | 13.56 | 34.96 | 1.35 | 0.67 | 26.27 | 75 | 26.09 | 34.99 | 23.02 | 486 | 0.42 |
| 177 | 13.13 | 34.94 | 1.39 | 0.95 | 26.34 | 100 | 19.29 | 34.88 | 24.87 | 309 | 0.52 |
| 206 | 12.67 | 34.89 | 1.07 | 1.10 | 26.39 | 125 | 14.09 | 34.97 | 26.16 | 186 | 0.58 |
| 255 | 11.83 | 34.84 | 0.81 | 1.06 | 26.52 | 150 | 13.30 | 34.95 | 26.31 | 172 | 0.63 |
| 310 | 11.22 | 34.81 | 1.14 | 1.06 | 26.61 | 200 | 12.77 | 34.90 | 26.38 | 166 | 0.71 |
| 414 | 9.67 | 34.71 | 0.54 | 1.09 | 26.80 | 250 | 11.91 | 34.84 | 26.50 | 154 | 0.79 |
| 519 | 8.09 | - | 0.46 | 1.38 | | 300 | 11.32 | 34.81 | 26.59 | 146 | 0.87 |
| 623 | 7.26 | 34.64 | 0.69 | 1.25 | 27.12 | 400 | 9.89 | 34.71 | 26.76 | 129 | 1.02 |
| 726 | 5.99 | 34.56 | 1.36 | 1.25 | 27.23 | 500 | 8.35 | 34.66 | 26.97 | 109 | 1.15 |
| 830 | 5.42 | - | 1.63 | 2.60 | | 600 | 7.43 | 34.65 | 27.10 | 97 | 1.26 |
| 1035 | 4.35 | 34.60 | 1.75 | 2.53 | 27.45 | 700 | 6.30 | 34.56 | 27.19 | 89 | 1.36 |
| 1236 | 3.62 | 34.61 | 1.83 | 2.40a) | 27.54 | 800 | 5.55 | 34.56 | 27.28 | 80 | 1.46 |
| | | | | | | 1000 | 4.52 | 34.60 | 27.43 | 66 | 1.62 |
| | | | | | | 1200 | 3.75 | 34.60 | 27.52 | 58 | 1.77 |

41

HUGH M. SMITH; April 20, 1958; 2235 GCT; 1°30'N, 140°03'W; sounding, 2375 m; wind, 150°, 13 kt; weather, cloudy; sea, slight; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.20 | 34.95 | 4.52 | 0.31 | 22.31 | 0 | 28.20 | 34.95 | 22.31 | 553 | 0.00 |
| 24 | 27.81 | 34.94 | 4.50 | 0.20 | 22.43 | 10 | 28.04 | 34.94 | 22.36 | 549 | 0.06 |
| 58 | 26.34 | 34.94 | 4.16 | 0.44 | 22.90 | 20 | 27.87 | 34.94 | 22.41 | 544 | 0.11 |
| 84 | 23.87 | 34.93 | 3.39 | 0.64 | 23.65 | 30 | 27.66 | 34.94 | 22.48 | 538 | 0.16 |
| 98 | 20.17 | 34.85 | 2.51 | 0.79 | 24.62 | 50 | 26.82 | 34.94 | 22.75 | 513 | 0.27 |
| 133 | 14.84 | 34.83 | 2.45 | 1.02 | 25.89 | 75 | 25.11 | 34.94 | 23.29 | 463 | 0.39 |
| 182 | 13.08 | 34.93 | 1.31 | 0.78 | 26.34 | 100 | 19.74 | 34.84 | 24.73 | 326 | 0.49 |
| 217 | 12.50 | 34.89 | 1.12 | 0.87 | 26.43 | 125 | 15.66 | 34.82 | 25.70 | 233 | 0.56 |
| 275 | 11.52 | 34.85 | 0.99 | 1.00 | 26.58 | 150 | 13.79 | 34.86 | 26.15 | 192 | 0.61 |
| 329 | 10.63 | 34.77 | 1.07 | 1.68 | 26.68 | 200 | 12.75 | 34.91 | 26.40 | 169 | 0.70 |
| 438 | 8.68 | 34.67 | 0.54 | 1.29 | 26.93 | 250 | 11.94 | 34.86 | 26.52 | 159 | 0.79 |
| 545 | 7.62 | 34.64 | 0.99 | 1.83 | 27.07 | 300 | 11.11 | 34.81 | 26.63 | 149 | 0.86 |
| 658 | 6.53 | 34.56 | 1.54 | 0.73 | 27.16 | 400 | 9.32 | 34.69 | 26.85 | 129 | 1.00 |
| 765 | 5.81 | 34.57 | 1.76 | 1.38 | 27.26 | 500 | 8.01 | 34.65 | 27.02 | 114 | 1.12 |
| 872 | 5.14 | 34.57 | 1.81 | 2.31 | 27.34 | 600 | 7.07 | 34.59 | 27.11 | 105 | 1.23 |
| 1086 | 4.06 | 34.58 | 1.80 | 2.40 | 27.47 | 700 | 6.23 | 34.56 | 27.20 | 98 | 1.33 |
| 1302 | 3.50 | 34.61 | 1.90 | 2.14 | 27.55 | 800 | 5.58 | 34.57 | 27.29 | 90 | 1.43 |
| | | | | | | 1000 | 4.44 | 34.57 | 27.42 | 77 | 1.59 |
| | | | | | | 1200 | 3.76 | 34.59 | 27.51 | 68 | 1.74 |

a) Alternate value, 1.97 µg at/L.

HBL

HMS-45

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 3 | HUGH M. SMITH; April 21, 1958; 1452 GCT; 0°38'N, 139°52'W; sounding, 2400 m; wind, 120°, 12 kt; weather, cloudy; sea, slight; wire angle, 26°. | | | | | | | | | | |
| 0 | 27.18 | 35.14 | 4.46 | 0.21 | 22.79 | 0 | 27.18 | 35.14 | 22.79 | 508 | 0.00 |
| 18 | 27.12 | 35.13 | 4.42 | 0.13 | 22.80 | 10 | 27.15 | 35.13 | 22.79 | 508 | 0.05 |
| 68 | 24.98 | 35.06 | 3.59 | 0.44 | 23.41 | 20 | 27.17 | 35.12 | 22.77 | 509 | 0.10 |
| 90 | 20.64 | 35.13 | 3.03 | 0.30 | 24.71 | 30 | 26.97 | 35.10 | 22.82 | 504 | 0.15 |
| 122 | 17.56 | 35.10 | 3.09 | 0.64 | 25.47 | 50 | 26.54 | 35.07 | 22.94 | 493 | 0.25 |
| 230 | 13.95 | 34.81 | 2.58 | 0.90 | 26.07 | 75 | 23.61 | 35.08 | 23.84 | 407 | 0.37 |
| 284 | 12.27 | 34.89 | 2.02 | 0.63 | 26.47 | 100 | 19.42 | 35.13 | 25.03 | 294 | 0.45 |
| 312 | 12.04 | 34.83 | 1.06 | 1.28 | 26.47 | 125 | 17.39 | 35.09 | 25.51 | 248 | 0.52 |
| 352 | 12.53 | 34.88 | - | - | 26.41 | 150 | 16.50 | 35.01 | 25.66 | 234 | 0.58 |
| 421 | 9.29 | 34.73 | 0.68 | 1.01 | 26.88 | 200 | 15.20 | 34.87 | 25.85 | 216 | 0.70 |
| 532 | 7.55 | 34.61 | 1.07 | 1.38 | 27.05 | 250 | 13.23 | 34.84 | 26.24 | 179 | 0.80 |
| 647 | 6.64 | 34.60 | 1.36 | 1.91 | 27.17 | 300 | 12.08 | 34.85 | 26.48 | 156 | 0.89 |
| 757 | 5.60 | 34.56 | 1.79 | 2.03 | 27.28 | 400 | 10.46 | 34.78 | 26.72 | 133 | 1.04 |
| 868 | 4.95 | 34.59 | 1.85 | 2.35 | 27.38 | 500 | 7.79 | 34.63 | 27.04 | 103 | 1.17 |
| 1086 | 4.15 | 34.58 | 1.90 | 2.13 | 27.46 | 600 | 6.97 | 34.59 | 27.12 | 95 | 1.28 |
| 1307 | 3.42 | 34.62 | 2.06 | 2.01 | 27.56 | 700 | 6.12 | 34.57 | 27.22 | 86 | 1.38 |
| | | | | | | 800 | 5.31 | 34.56 | 27.31 | 77 | 1.47 |
| | | | | | | 1000 | 4.42 | 34.58 | 27.43 | 66 | 1.63 |
| | | | | | | 1200 | 3.77 | 34.60 | 27.51 | 58 | 1.78 |
| 44 | HUGH M. SMITH; April 21, 1958; 0028 GCT; 0°29'S, 140°00'W; sounding, 2350 m; wind, 130°, 12 kt; weather, partly cloudy; sea, slight; wire angle, 11°. | | | | | | | | | | |
| 0 | 27.52 | 35.25 | 4.47 | 0.50 | 22.76 | 0 | 27.52 | 35.25 | 22.76 | 510 | 0.00 |
| 28 | 26.91 | 35.27 | 4.41 | 0.49 | 22.97 | 10 | 27.30 | 35.25 | 22.83 | 504 | 0.05 |
| 77 | 21.80 | 35.27 | 3.00 | 0.49 | 24.50 | 20 | 27.08 | 35.26 | 22.91 | 496 | 0.10 |
| 121 | 18.66 | 35.27 | 3.04 | 0.28 | 25.33 | 30 | 26.74 | 35.27 | 23.03 | 485 | 0.15 |
| 179 | 13.79 | 34.99 | 2.98 | 0.78 | 26.24 | 50 | 24.83 | 35.27 | 23.62 | 428 | 0.24 |
| 238 | 12.46 | 34.94 | 2.30 | 1.38 | 26.47 | 75 | 22.04 | 35.27 | 24.43 | 351 | 0.34 |
| 268 | 11.93 | 34.89 | 1.68 | 1.11 | 26.54 | 100 | 20.10 | 35.28 | 24.97 | 300 | 0.42 |
| 298 | 11.80 | 34.87 | 1.32 | 1.07 | 26.55 | 125 | 18.28 | 35.25 | 25.41 | 257 | 0.49 |
| 328 | 11.14 | 34.84 | 0.74 | 0.71 | 26.64 | 150 | 16.06 | 35.13 | 25.85 | 216 | 0.55 |
| 357 | 10.72 | 34.19 | 0.76 | 1.39 | 26.21 | 200 | 13.09 | 34.96 | 26.36 | 167 | 0.65 |
| 476 | 8.86 | 34.72 | 0.65 | 1.00 | 26.94 | 250 | 12.22 | 34.91 | 26.50 | 155 | 0.73 |
| 600 | 7.25 | 34.61 | 1.19 | 1.77 | 27.10 | 300 | 11.76 | 34.87 | 26.55 | 149 | 0.81 |
| 719 | 6.40 | 34.57 | 1.46 | 0.85 | 27.18 | 400 | 10.04 | 34.77 | 26.79 | 127 | 0.96 |
| 761 | 5.29 | 34.54 | 1.75 | 1.50 | 27.30 | 500 | 8.51 | 34.72 | 27.00 | 107 | 1.09 |
| 954 | 4.60 | 34.61 | 1.60a) | 1.88 | 27.43 | 600 | 7.25 | 34.61 | 27.10 | 97 | 1.20 |
| 1190 | 3.75 | 34.62 | 1.89 | 2.21 | 27.53 | 700 | 6.63 | 34.57 | 27.15 | 92 | 1.30 |
| 1422 | 3.15 | 34.61 | 1.99 | 2.41b) | 27.58 | 800 | 4.86 | 34.54 | 27.35 | 74 | 1.39 |
| | | | | | | 1000 | 4.43 | 34.61 | 27.45 | 64 | 1.55 |
| | | | | | | 1200 | 3.72 | 34.62 | 27.53 | 56 | 1.69 |

a) Value uncertain; not used in interpolation.
b) Alternate value, 2.39 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; April 22, 1958; 1245 GCT; 1°33'S, 140°07'W; sounding, 2300 m; wind, 120°, 10 kt; weather, partly cloudy; sea, slight; wire angle, 15°. 46

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.77 | 34.87 | 4.52 | 0.43 | 22.39 | 0 | 27.77 | 34.87 | 22.39 | 545 | 0.00 |
| 33 | 27.51 | 35.11 | 4.51 | 0.20 | 22.66 | 10 | 27.69 | 34.94 | 22.47 | 538 | 0.05 |
| 68 | 25.92 | 35.25 | 4.31 | 0.38 | 23.27 | 20 | 27.61 | 35.01 | 22.55 | 531 | 0.11 |
| 81 | 23.76 | 35.39 | 3.95 | 0.28 | 24.03 | 30 | 27.53 | 35.08 | 22.63 | 524 | 0.16 |
| 98 | 19.92 | 35.40 | 3.05 | 0.49 | 25.11 | 50 | 27.21 | 35.16 | 22.80 | 509 | 0.26 |
| 129 | 15.57 | 35.16 | 1.68 | 0.58 | 25.99 | 75 | 24.85 | 35.33 | 23.66 | 428 | 0.38 |
| 160 | 13.29 | 34.99 | 1.20 | 0.75 | 26.34 | 100 | 19.56 | 35.38 | 25.19 | 282 | 0.47 |
| 213 | 12.42 | 34.90 | 0.82 | 1.01 | 26.45 | 125 | 15.98 | 35.19 | 25.92 | 213 | 0.53 |
| 266 | 11.83 | 34.92 | 0.77 | 0.57 | 26.58 | 150 | 13.84 | 35.03 | 26.27 | 180 | 0.58 |
| 319 | 11.28 | 34.85 | 0.97 | 0.77 | 26.63 | 200 | 12.44 | 34.90 | 26.45 | 164 | 0.67 |
| 427 | 9.22 | 34.71 | 0.87 | 0.86 | 26.88 | 250 | 11.99 | 34.91 | 26.54 | 156 | 0.75 |
| 541 | 8.05 | 34.67 | 0.98 | 0.85 | 27.03 | 300 | 11.49 | 34.88 | 26.61 | 151 | 0.82 |
| 652 | 6.64 | 34.59 | 1.66 | 1.89 | 27.17 | 400 | 9.75 | 34.74 | 26.81 | 133 | 0.97 |
| 783 | 5.56 | 34.62 | 1.75 | 1.49 | 27.33 | 500 | 8.43 | 34.68 | 26.98 | 118 | 1.09 |
| 893 | 5.16 | 34.56 | 1.90 | 2.40 | 27.33 | 600 | 7.29 | 34.62 | 27.10 | 107 | 1.20 |
| 1115 | 3.93 | 34.60 | 2.00 | 2.28 | 27.50 | 700 | 6.17 | 34.60 | 27.24 | 94 | 1.30 |
| 1340 | 3.44 | 34.58 | 2.19 | 2.22a) | 27.53 | 800 | 5.49 | 34.61 | 27.33 | 85 | 1.39 |
| | | | | | | 1000 | 4.56 | 34.57 | 27.41 | 78 | 1.56 |
| | | | | | | 1200 | 3.74 | 34.59 | 27.51 | 68 | 1.70 |

HUGH M. SMITH; April 23, 1958; 0042 GCT; 2°32'S, 140°01'W; sounding, 2375 m; wind, 020°, 7 kt; weather, distant precipitation; sea, smooth; wire angle, 34°. 48

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.23 | 34.62 | 4.51 | 0.51 | 22.06 | 0 | 28.23 | 34.62 | 22.06 | 578 | 0.00 |
| 66 | 26.90 | 35.28 | 4.45 | 0.44 | 22.98 | 10 | 28.03 | 34.72 | 22.20 | 564 | 0.06 |
| 82 | 27.70 | 34.68 | - | - | 22.27 | 20 | 27.83 | 34.82 | 22.34 | 551 | 0.11 |
| 86 | 24.50 | 35.37 | 3.98 | 0.64 | 23.79 | 30 | 27.63 | 34.92 | 22.48 | 537 | 0.17 |
| 112 | 16.97 | 35.20 | 2.00 | 1.11 | 25.69 | 50 | 27.22 | 35.12 | 22.76 | 510 | 0.27 |
| 131 | 13.67 | 34.99 | 0.78 | 0.51 | 26.27 | 75 | 26.10 | 35.36 | 23.29 | 459 | 0.39 |
| 139 | 13.45 | 34.98 | 0.93 | 0.69 | 26.30 | 100 | 18.80 | 35.78 | 25.69 | 231 | 0.48 |
| 184 | 12.68 | 34.94 | 1.40 | 1.62 | 26.43 | 125 | 14.40 | 35.04 | 26.15 | 187 | 0.53 |
| 227 | 12.21 | 34.90 | 0.88 | 0.54 | 26.49 | 150 | 13.21 | 34.96 | 26.34 | 169 | 0.58 |
| 269 | 12.07 | 34.91 | 0.31 | 1.62 | 26.52 | 200 | 12.47 | 34.92 | 26.45 | 158 | 0.66 |
| 350 | 10.77 | 34.82 | 0.67 | 0.76 | 26.70 | 250 | 12.14 | 34.90 | 26.50 | 154 | 0.75 |
| 436 | 9.46 | - | 0.33 | 1.61 | | 300 | 11.65 | 34.87 | 26.57 | 147 | 0.82 |
| 517 | 8.22 | 34.68 | 0.64 | 1.69 | 27.01 | 400 | 10.00 | 34.78 | 26.80 | 126 | 0.97 |
| 600 | 7.13 | 34.61 | 1.23 | 1.28 | 27.11 | 500 | 8.47 | 34.68 | 26.97 | 109 | 1.10 |
| 685 | 6.30 | 34.53 | 1.63 | 2.26 | 27.16 | 600 | 7.13 | 34.61 | 27.11 | 96 | 1.21 |
| 863 | 5.16 | 34.62 | 1.77 | 2.23 | 27.38 | 700 | 6.18 | 34.53 | 27.18 | 90 | 1.31 |
| 1060 | 4.16 | 34.56 | 2.00 | 2.23b) | 27.44 | 800 | 5.50 | 34.57 | 27.30 | 79 | 1.40 |
| | | | | | | 1000 | 4.46 | 34.57 | 27.42 | 67 | 1.57 |

a) Alternate value, 2.29 μg at/L.
b) Alternate value, 2.44 μg at/L; possible double amount of stannous chloride used.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 49 | HUGH M. SMITH; April 23, 1958; 0918 GCT; 3°33'S, 139°56'W; sounding, 2400 m; wind, 060°, 9 kt; weather, thunderstorm; sea, slight; wire angle, 37°. | | | | | | | | | | |
| 0 | 28.21 | 34.73 | 4.52 | 0.38 | 22.14 | 0 | 28.21 | 34.73 | 22.14 | 569 | 0.00 |
| 38 | 27.96 | 35.20 | 4.58 | 0.38 | 22.58 | 10 | 28.14 | 34.85 | 22.26 | 558 | 0.06 |
| 73 | 27.72 | 35.40 | 4.45 | 0.50 | 22.81 | 20 | 28.08 | 34.97 | 22.37 | 548 | 0.11 |
| 90 | 25.44 | 35.75 | 4.17 | 0.62 | 23.79 | 30 | 28.01 | 35.10 | 22.49 | 536 | 0.17 |
| 106 | 20.61 | 35.65 | 3.67 | 0.64 | 25.11 | 50 | 27.94 | 35.24 | 22.62 | 524 | 0.27 |
| 124 | 15.86 | 35.26 | 2.06 | 0.57 | 26.00 | 75 | 27.56 | 35.44 | 22.89 | 498 | 0.40 |
| 151 | 13.41 | 34.98 | 1.08 | 1.11 | 26.31 | 100 | 22.54 | 35.72 | 24.63 | 332 | 0.51 |
| 180 | 12.91 | 34.96 | 0.93 | 0.88 | 26.40 | 125 | 15.70 | 35.24 | 26.02 | 200 | 0.57 |
| 223 | 12.56 | 34.95 | 1.26 | 0.58 | 26.46 | 150 | 13.43 | 34.98 | 26.31 | 172 | 0.62 |
| 266 | 12.36 | 34.93 | 0.38 | 0.88 | 26.48 | 200 | 12.71 | 34.95 | 26.43 | 161 | 0.71 |
| 349 | 11.07 | 34.79 | 0.26 | 0.85 | 26.62 | 250 | 12.44 | 34.94 | 26.48 | 156 | 0.79 |
| 435 | 9.19 | 34.72 | 0.32 | 1.11 | 26.89 | 300 | 11.93 | 34.87 | 26.52 | 152 | 0.87 |
| 517 | 7.75 | 34.67 | 0.70 | 1.82 | 27.07 | 400 | 9.97 | 34.74 | 26.77 | 128 | 1.02 |
| 601 | 6.75 | 34.63 | 1.14 | 2.06 | 27.18 | 500 | 8.02 | 34.67 | 27.03 | 104 | 1.14 |
| 685 | 5.93 | 34.59 | 1.47 | 2.39 | 27.26 | 600 | 6.76 | 34.63 | 27.18 | 89 | 1.25 |
| 854 | 5.00 | 34.62 | 1.64 | 2.21 | 27.40 | 700 | 5.82 | 34.59 | 27.27 | 81 | 1.34 |
| 1028 | 4.27 | 34.56 | 2.14 | 1.96a) | 27.43 | 800 | 5.23 | 34.60 | 27.35 | 73 | 1.43 |
| | | | | | | 1000 | 4.39 | 34.57 | 27.42 | 66 | 1.59 |
| 50 | HUGH M. SMITH; April 23, 1958; 1351 GCT; 3°04'S, 139°56'W; sounding, 2375 m; wind, 030°, 11 kt; weather, partly cloudy; sea, slight; wire angle, 27°. | | | | | | | | | | |
| 0 | 28.06 | 34.65 | 4.52 | 0.35 | 22.13 | 0 | 28.06 | 34.65 | 22.13 | 570 | 0.00 |
| 38 | 27.96 | 34.66 | 4.50 | 0.42 | 22.17 | 10 | 28.03 | 34.65 | 22.14 | 569 | 0.06 |
| 67 | 27.44 | 35.32 | 4.43 | 0.35 | 22.84 | 20 | 28.01 | 34.65 | 22.15 | 569 | 0.11 |
| 92 | 23.14 | 35.46 | 3.73 | 0.62 | 24.26 | 30 | 27.98 | 34.65 | 22.16 | 568 | 0.17 |
| 104 | 18.49 | 35.42 | 3.05 | 0.84 | 25.49 | 50 | 27.82 | 34.93 | 22.42 | 543 | 0.28 |
| 122 | 16.06 | 35.24 | 2.04 | 0.54 | 25.94 | 75 | 26.65 | 35.40 | 23.15 | 473 | 0.41 |
| 146 | 13.27 | 34.99 | 1.36 | 1.06 | 26.35 | 100 | 20.00 | 35.50 | 25.16 | 281 | 0.50 |
| 201 | 12.78 | - | 1.69 | 0.86 | | 125 | 15.65 | 35.20 | 26.00 | 202 | 0.57 |
| 251 | 12.44 | 34.94 | 0.97 | 0.54 | 26.48 | 150 | 13.09 | 34.98 | 26.38 | 166 | 0.61 |
| 300 | 12.22 | 34.94 | 0.58 | 1.37 | 26.52 | 200 | 12.75 | 34.96 | 26.43 | 161 | 0.70 |
| 399 | 9.97 | 34.78 | 0.33 | 1.10 | 26.80 | 250 | 12.45 | 34.94 | 26.47 | 157 | 0.78 |
| 503 | 8.21 | 34.64 | 0.48 | 1.75 | 26.98 | 300 | 12.22 | 34.94 | 26.52 | 152 | 0.86 |
| 604 | 6.79 | 34.58 | 1.14 | 0.96 | 27.14 | 400 | 9.95 | 34.77 | 26.80 | 126 | 1.01 |
| 705 | 5.99 | 34.63 | 1.54 | 2.09 | 27.28 | 500 | 8.25 | 34.64 | 26.97 | 109 | 1.13 |
| 804 | 5.36 | 34.54 | 1.89 | 2.38 | 27.29 | 600 | 6.84 | 34.58 | 27.13 | 94 | 1.24 |
| 1005 | 4.46 | 34.56 | 1.91 | 2.39 | 27.41 | 700 | 6.02 | 34.62 | 27.27 | 81 | 1.34 |
| 1210 | 3.59 | 34.57 | 2.08 | 2.29b) | 27.51 | 800 | 5.38 | 34.54 | 27.29 | 79 | 1.43 |
| | | | | | | 1000 | 4.48 | 34.55 | 27.40 | 69 | 1.60 |
| | | | | | | 1200 | 3.63 | 34.57 | 27.50 | 59 | 1.75 |

a) Alternate value, 1.61 µg at/L.
b) Alternate value, 2.36 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

51

HUGH M. SMITH; April 23, 1958; 2300 GCT; 2°06'S, 140°16'W; sounding, 2350 m; wind, 020°, 4 kt; weather, partly cloudy; sea, slight; wire angle, 02°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 28.22 | 34.60 | 4.57 | 0.42 | 22.04 | 0 | 28.22 | 34.60 | 22.04 | 579 | 0.00 |
| 48 | 27.25 | 35.00 | 4.58 | 0.53 | 22.66 | 10 | 28.02 | 34.68 | 22.17 | 567 | 0.06 |
| 86 | 23.18 | 35.29 | 4.43a) | 0.47 | 24.12 | 20 | 27.82 | 34.76 | 22.29 | 555 | 0.11 |
| 120 | 16.72 | 35.17 | 1.93 | 1.16 | 25.73 | 30 | 27.61 | 34.85 | 22.43 | 542 | 0.17 |
| 144 | 13.95 | 34.97 | 0.90 | 1.47 | 26.19 | 50 | 27.11 | 35.02 | 22.72 | 514 | 0.27 |
| 178 | 12.79 | 34.90 | 0.73 | 1.26 | 26.38 | 75 | 24.68 | 35.23 | 23.63 | 427 | 0.39 |
| 236 | 12.35 | 34.89 | 0.57 | 1.36 | 26.45 | 100 | 20.50 | 35.32 | 24.89 | 307 | 0.49 |
| 279 | 12.09 | 34.87 | 0.42 | 1.06 | 26.49 | 125 | 16.02 | 35.12 | 25.85 | 216 | 0.55 |
| 317 | 11.59 | 34.84 | 0.33 | 0.85 | 26.56 | 150 | 13.60 | 34.94 | 26.24 | 179 | 0.60 |
| 351 | 11.23 | 34.80 | 0.85 | 1.49 | 26.60 | 200 | 12.50 | 34.88 | 26.42 | 162 | 0.69 |
| 467 | 8.82 | 34.68 | 0.84 | 1.04 | 26.92 | 250 | 12.28 | 34.88 | 26.46 | 158 | 0.77 |
| 588 | 7.40 | 34.60 | 1.36 | 1.07 | 27.07 | 300 | 11.82 | 34.85 | 26.53 | 152 | 0.85 |
| 704 | 6.26 | 34.54 | 1.68 | 1.82 | 27.18 | 400 | 10.26 | 34.74 | 26.72 | 133 | 1.00 |
| 819 | 5.54 | 34.54 | 1.77 | 1.49 | 27.27 | 500 | 8.37 | 34.65 | 26.96 | 110 | 1.13 |
| 934 | 5.00 | 34.57 | 1.88 | 2.72 | 27.36 | 600 | 7.27 | 34.59 | 27.08 | 99 | 1.25 |
| 1163 | 3.88 | 34.59 | 2.09 | 1.14 | 27.49 | 700 | 6.29 | 34.54 | 27.17 | 90 | 1.35 |
| 1394 | 3.22 | 34.59 | 2.09 | 2.38b) | 27.56 | 800 | 5.64 | 34.53 | 27.25 | 83 | 1.45 |
| | | | | | | 1000 | 4.66 | 34.57 | 27.39 | 69 | 1.62 |
| | | | | | | 1200 | 3.77 | 34.59 | 27.51 | 59 | 1.77 |

52

HUGH M. SMITH; April 24, 1958; 1301 GCT; 0°58'S, 140°02'W; sounding, 2300 m; wind, 150°, 6 kt; weather, partly cloudy; sea, slight; wire angle, 15°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.65 | 35.11 | 4.56 | 0.69 | 22.61 | 0 | 27.65 | 35.11 | 22.61 | 524 | 0.00 |
| 19 | 27.50 | 35.09 | 4.51 | 0.48 | 22.65 | 10 | 27.57 | 35.09 | 22.63 | 523 | 0.05 |
| 48 | 27.03 | 35.27 | 4.50 | 0.58 | 22.93 | 20 | 27.51 | 35.09 | 22.65 | 522 | 0.10 |
| 88 | 22.29 | 35.52 | 3.32 | 0.68 | 24.55 | 30 | 27.49 | 35.14 | 22.69 | 518 | 0.16 |
| 132 | 18.32 | 35.46 | 2.74 | 0.74 | 25.56 | 50 | 26.84 | 35.28 | 23.01 | 489 | 0.26 |
| 171 | 14.15 | 35.15 | 2.36 | 0.85 | 26.29 | 75 | 24.03 | 35.45 | 24.00 | 395 | 0.37 |
| 239 | 12.12 | 34.88 | 1.22 | 1.00 | 26.49 | 100 | 21.18 | 35.53 | 24.87 | 313 | 0.46 |
| 284 | 11.76 | 34.87 | 0.99 | 1.01 | 26.55 | 125 | 18.93 | 35.49 | 25.43 | 260 | 0.53 |
| 324 | 11.08 | 34.86 | 1.07 | 0.87 | 26.67 | 150 | 16.30 | 35.32 | 25.95 | 211 | 0.59 |
| 358 | 10.22 | 34.75 | 0.70 | 2.02 | 26.74 | 200 | 12.77 | 34.99 | 26.45 | 164 | 0.68 |
| 476 | 8.39 | 34.75 | 0.74 | 1.40 | 27.04 | 250 | 12.02 | 34.87 | 26.51 | 160 | 0.76 |
| 616 | 6.87 | 34.60 | 1.38 | 1.20 | 27.14 | 300 | 11.53 | 34.87 | 26.60 | 152 | 0.84 |
| 714 | 5.83 | 34.56 | 1.75 | 1.30 | 27.25 | 400 | 9.44 | 34.72 | 26.85 | 129 | 0.98 |
| 945 | 4.72 | 34.57 | 2.14 | 2.58 | 27.39 | 500 | 8.10 | 34.72 | 27.06 | 110 | 1.10 |
| 1173 | 3.83 | 34.57 | 1.90 | 2.40 | 27.48 | 600 | 7.02 | 34.61 | 27.14 | 103 | 1.21 |
| 1400 | 3.22 | 34.56 | 2.15 | 2.11c) | 27.54 | 700 | 5.97 | 34.56 | 27.23 | 94 | 1.30 |
| | | | | | | 800 | 5.29 | 34.55 | 27.31 | 87 | 1.39 |
| | | | | | | 1000 | 4.48 | 34.57 | 27.42 | 78 | 1.56 |
| | | | | | | 1200 | 3.76 | 34.56 | 27.49 | 70 | 1.71 |

a) Value uncertain; used in interpolation.
b) Alternate value, 2.46 µg at/L.
c) Alternate value, 1.90 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **53** | HUGH M. SMITH; April 24, 1958; 2143 GCT; 0°01'S, 139°59'W; sounding, missing; wind, 130°, 13 kt; weather, partly cloudy; sea, slight; wire angle, 17°. | | | | | | | | | | |
| 0 | 27.49 | 35.24 | 4.50 | 0.56 | 22.76 | 0 | 27.49 | 35.24 | 22.76 | 510 | 0.00 |
| 48 | 25.27 | 35.40 | 3.69 | 0.72 | 23.58 | 10 | 27.40 | 35.27 | 22.81 | 505 | 0.05 |
| 81 | 20.56 | 35.18 | 2.97 | 0.90 | 24.77 | 20 | 27.20 | 35.30 | 22.90 | 497 | 0.10 |
| 96 | 19.30 | 35.33 | 2.97 | 0.68 | 25.21 | 30 | 26.80 | 35.34 | 23.06 | 482 | 0.15 |
| 127 | 16.43 | 35.13 | 3.05 | 1.08 | 25.77 | 50 | 24.98 | 35.38 | 23.66 | 425 | 0.24 |
| 164 | 14.07 | 34.96 | 3.01 | 1.20 | 26.16 | 75 | 21.41 | 35.20 | 24.55 | 339 | 0.34 |
| 198 | 12.68 | 34.93 | 2.65 | 0.84 | 26.42 | 100 | 18.92 | 35.32 | 25.30 | 268 | 0.41 |
| 237 | 12.16 | 34.86 | 2.08 | 0.69 | 26.47 | 125 | 16.61 | 35.15 | 25.74 | 226 | 0.48 |
| 297 | 11.13 | 34.83 | 0.61 | 1.31 | 26.64 | 150 | 14.84 | 35.01 | 26.03 | 198 | 0.53 |
| 357 | 10.23 | 34.76 | 0.76 | 0.74 | 26.74 | 200 | 12.64 | 34.92 | 26.42 | 162 | 0.62 |
| 478 | 8.68 | 34.60 | 0.78 | 0.98 | 26.88 | 250 | 11.94 | 34.85 | 26.50 | 154 | 0.70 |
| 604 | 7.11 | 34.61 | 1.25 | 2.10 | 27.12 | 300 | 11.08 | 34.82 | 26.64 | 141 | 0.78 |
| 723 | 6.10 | 34.58 | 1.58 | 1.55 | 27.23 | 400 | 9.66 | 34.69 | 26.79 | 127 | 0.92 |
| 962 | 4.57 | 34.61 | 1.91 | 2.42 | 27.44 | 500 | 8.39 | 34.59 | 26.91 | 115 | 1.05 |
| 1197 | 3.62 | 34.62 | 1.92 | 2.49 | 27.54 | 600 | 7.16 | 34.60 | 27.10 | 97 | 1.17 |
| 1426 | 3.16 | 34.62 | 2.04 | 2.57a) | 27.59 | 700 | 6.27 | 34.58 | 27.21 | 87 | 1.27 |
| | | | | | | 800 | 5.54 | 34.58 | 27.30 | 78 | 1.36 |
| | | | | | | 1000 | 4.38 | 34.61 | 27.46 | 63 | 1.52 |
| | | | | | | 1200 | 3.61 | 34.62 | 27.55 | 55 | 1.66 |
| **56** | HUGH M. SMITH; April 25, 1958; 1929 GCT; 0°09'N, 140°10'W; sounding, 2350 m; wind, 100°, 16 kt; weather, partly cloudy; sea, slight; wire angle, 19°. | | | | | | | | | | |
| 0 | 27.17 | 35.25 | 4.38 | 0.42 | 22.87 | 0 | 27.17 | 35.25 | 22.87 | 500 | 0.00 |
| 32 | 26.84 | 35.29 | 4.22 | 0.65 | 23.01 | 10 | 27.07 | 35.26 | 22.91 | 496 | 0.05 |
| 59 | 25.20 | 35.33 | 3.54 | 0.86 | 23.55 | 20 | 26.96 | 35.27 | 22.96 | 492 | 0.10 |
| 93 | 20.89 | 35.26 | 2.92 | 1.07 | 24.74 | 30 | 26.86 | 35.28 | 22.99 | 488 | 0.15 |
| 138 | 16.72 | 35.18 | 2.93 | 1.10 | 25.74 | 50 | 25.90 | 35.28 | 23.30 | 459 | 0.24 |
| 162 | 15.76 | 35.19 | 3.04 | 1.28 | 25.97 | 75 | 23.27 | 35.40 | 24.18 | 375 | 0.35 |
| 195 | 13.43 | 34.94 | 2.80 | 1.17 | 26.28 | 100 | 20.08 | 35.24 | 24.94 | 302 | 0.43 |
| 227 | 12.78 | 34.90 | 2.72 | 1.54 | 26.38 | 125 | 17.68 | 35.19 | 25.51 | 248 | 0.50 |
| 283 | 11.83 | 34.86 | 1.46 | 1.42 | 26.53 | 150 | 16.22 | 35.19 | 25.86 | 215 | 0.56 |
| 339 | 11.03 | 34.81 | 0.53 | 2.98 | 26.64 | 200 | 13.27 | 34.92 | 26.29 | 174 | 0.66 |
| 457 | 8.92 | 34.79 | 0.59 | 2.98 | 26.99 | 250 | 12.37 | 34.88 | 26.44 | 159 | 0.75 |
| 574 | 7.21 | 34.65 | 1.21 | 1.61 | 27.13 | 300 | 11.59 | 34.84 | 26.56 | 148 | 0.83 |
| 683 | 6.52 | 34.68 | 1.40 | 3.20 | 27.25 | 400 | 9.95 | 34.80 | 26.82 | 123 | 0.97 |
| 788 | 5.42 | 34.56 | 1.73 | 2.74 | 27.30 | 500 | 8.21 | 34.73 | 27.05 | 102 | 1.09 |
| 891 | 4.67 | 34.59 | 1.93 | 3.30 | 27.41 | 600 | 7.03 | 34.65 | 27.16 | 92 | 1.20 |
| 1114 | 3.90 | 34.61 | 1.86 | 1.48 | 27.51 | 700 | 6.34 | 34.66 | 27.26 | 82 | 1.30 |
| 1339 | 3.23 | 34.65 | 2.00 | 3.30 | 27.61 | 800 | 5.32 | 34.56 | 27.31 | 77 | 1.39 |
| | | | | | | 1000 | 4.21 | 34.60 | 27.47 | 62 | 1.54 |
| | | | | | | 1200 | 3.64 | 34.62 | 27.54 | 55 | 1.68 |

a) Alternate value, 2.42 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

59

HUGH M. SMITH; April 26, 1958; 2209 GCT; 0°02'S, 140°02'W; sounding, 2350 m; wind, 140°, 12 kt; weather, distant precipitation; sea, slight; wire angle, 28°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.35 | 35.29 | 4.33 | 0.63a) | 22.85 | 0 | 27.35 | 35.29 | 22.84 | 502 | 0.00 |
| 33 | 26.77 | 35.30 | 4.24 | 2.04 | 23.04 | 10 | 27.17 | 35.29 | 22.90 | 497 | 0.05 |
| 71 | 24.71 | 35.46 | 3.50 | 1.09 | 23.80 | 20 | 27.00 | 35.29 | 22.96 | 491 | 0.10 |
| 104 | 20.94 | 35.21 | 2.94 | 2.57 | 24.69 | 30 | 26.82 | 35.29 | 23.01 | 486 | 0.15 |
| 137 | 17.24 | 35.19 | 3.05 | 1.45 | 25.62 | 50 | 26.09 | 35.28 | 23.24 | 465 | 0.24 |
| 170 | 14.85 | 35.06 | 3.07 | 1.10 | 26.07 | 75 | 24.30 | 35.43 | 23.90 | 402 | 0.35 |
| 203 | 13.36 | 34.94 | 2.87 | 1.20 | 26.29 | 100 | 21.44 | 35.24 | 24.58 | 337 | 0.45 |
| 252 | 12.40 | 34.89 | 2.39 | 1.07 | 26.45 | 125 | 18.51 | 35.26 | 25.36 | 262 | 0.52 |
| 302 | 11.38 | 34.84 | 0.69 | 2.07 | 26.60 | 150 | 16.17 | 35.14 | 25.83 | 217 | 0.58 |
| 347 | 10.66 | 34.82 | 0.62 | 2.15 | 26.72 | 200 | 13.46 | 34.94 | 26.27 | 176 | 0.68 |
| 469 | 8.84 | 34.69 | 0.61 | 1.57 | 26.92 | 250 | 12.42 | 34.89 | 26.44 | 160 | 0.77 |
| 596 | 7.06 | 34.60 | 1.23 | 1.72 | 27.12 | 300 | 11.42 | 34.84 | 26.59 | 145 | 0.85 |
| 720 | 6.06 | 34.59 | 1.60 | 1.57 | 27.24 | 400 | 9.85 | 34.76 | 26.81 | 125 | 0.99 |
| 961 | 4.61 | 34.57 | 1.99 | 2.30 | 27.40 | 500 | 8.36 | 34.66 | 26.97 | 109 | 1.12 |
| 1197 | 3.88 | 34.59 | 1.86 | 1.85 | 27.49 | 600 | 7.02 | 34.59 | 27.11 | 96 | 1.23 |
| 1427 | 3.21 | 34.61 | 2.07 | 1.60b) | 27.58 | 700 | 6.19 | 34.58 | 27.22 | 86 | 1.33 |
| | | | | | | 800 | 5.50 | 34.58 | 27.30 | 78 | 1.42 |
| | | | | | | 1000 | 4.46 | 34.57 | 27.42 | 67 | 1.59 |
| | | | | | | 1200 | 3.87 | 34.59 | 27.50 | 60 | 1.74 |

60

HUGH M. SMITH; April 27, 1958; 0008 GCT; 0°02'S, 140°02'W; sounding, 2350 m; wind, 110°, 8 kt; weather, distant precipitation; sea, slight; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.39 | 35.30 | 4.31 | 0.62 | 22.84 | 0 | 27.39 | 35.30 | 22.84 | 503 | 0.00 |
| 42 | 26.30 | 35.27 | 4.07 | 0.86 | 23.16 | 10 | 27.13 | 35.29 | 22.92 | 495 | 0.05 |
| 71 | 24.18 | 35.41 | 3.36 | 0.80 | 23.92 | 20 | 26.87 | 35.28 | 22.99 | 488 | 0.10 |
| 105 | 18.96 | 35.28 | 3.03 | 0.79 | 25.26 | 30 | 26.61 | 35.27 | 23.07 | 481 | 0.15 |
| 138 | 16.30 | 35.18 | 3.04 | 0.89 | 25.83 | 50 | 25.88 | 35.31 | 23.33 | 456 | 0.24 |
| 172 | 14.26 | 35.00 | 3.03 | 0.85 | 26.15 | 75 | 23.58 | 35.40 | 24.09 | 384 | 0.35 |
| 205 | 13.16 | 34.95 | 2.85 | 0.85 | 26.34 | 100 | 19.74 | 35.21 | 25.01 | 296 | 0.43 |
| 255 | 12.24 | 34.94 | 2.20 | 0.96 | 26.52 | 125 | 17.17 | 35.22 | 25.66 | 234 | 0.50 |
| 304 | 11.14 | 34.85 | 0.61 | 1.41 | 26.65 | 150 | 15.49 | 35.11 | 25.97 | 205 | 0.56 |
| 349 | 10.39 | 34.77 | 0.69 | 1.36 | 26.72 | 200 | 13.29 | 34.95 | 26.31 | 172 | 0.65 |
| 470 | 8.76 | 34.71 | 0.69 | 2.92 | 26.95 | 250 | 12.32 | 34.94 | 26.50 | 154 | 0.74 |
| 598 | 7.06 | 34.62 | 1.23 | 1.58 | 27.13 | 300 | 11.23 | 34.85 | 26.64 | 141 | 0.81 |
| 719 | 6.19 | 34.57 | 1.54 | 1.57 | 27.21 | 400 | 9.67 | 34.73 | 26.82 | 124 | 0.95 |
| 961 | 4.59 | 34.57 | 1.97 | 1.57 | 27.40 | 500 | 8.32 | 34.68 | 26.99 | 107 | 1.08 |
| 1200 | 3.86 | 34.59 | 1.89 | 1.57 | 27.50 | 600 | 7.04 | 34.61 | 27.13 | 95 | 1.19 |
| 1437 | 3.19 | 34.58 | 2.04 | 1.69c) | 27.55 | 700 | 6.30 | 34.57 | 27.20 | 88 | 1.29 |
| | | | | | | 800 | 5.60 | 34.56 | 27.28 | 80 | 1.38 |
| | | | | | | 1000 | 4.44 | 34.57 | 27.42 | 67 | 1.55 |
| | | | | | | 1200 | 3.86 | 34.59 | 27.50 | 60 | 1.70 |

a) Possible contamination of these phosphate samples.
b) Alternate value, 1.48 μg at/L.
c) Alternate value, 2.09 μg at/L.

61 HUGH M. SMITH; April 27, 1958; 0202 GCT; 0°01'S, 140°02'W; sounding, 2350 m; wind, 110°, 12 kt; weather, distant precipitation; sea, slight; wire angle, 30°.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 27.39 | 35.32 | 4.37 | 0.90 | 22.85 | 0 | 27.39 | 35.32 | 22.85 | 501 | 0.00 |
| 28 | 26.77 | 35.33 | 4.23 | 0.77 | 23.06 | 10 | 27.17 | 35.32 | 22.93 | 495 | 0.05 |
| 70 | 24.30 | 35.50 | 3.37 | 0.90 | 23.95 | 20 | 26.95 | 35.32 | 23.00 | 488 | 0.10 |
| 89 | 22.06 | 35.32 | 2.99 | 1.03 | 24.46 | 30 | 26.71 | 35.34 | 23.09 | 479 | 0.15 |
| 112 | 19.07 | 35.30 | 2.99 | 0.95 | 25.25 | 50 | 25.80 | 35.45 | 23.46 | 444 | 0.24 |
| 146 | 16.66 | 35.19 | 3.01 | 0.93 | 25.76 | 75 | 23.75 | 35.45 | 24.08 | 385 | 0.34 |
| 184 | 14.58 | 35.09 | 3.16 | 1.26 | 26.15 | 100 | 20.58 | 35.21 | 24.79 | 317 | 0.43 |
| 218 | 13.10 | 34.89 | 2.84 | 1.35 | 26.31 | 125 | 17.98 | 35.26 | 25.49 | 250 | 0.50 |
| 286 | 11.81 | 34.85 | 1.47 | 0.89 | 26.53 | 150 | 16.42 | 35.18 | 25.81 | 220 | 0.56 |
| 346 | 10.72 | 34.79 | 0.61 | 2.54 | 26.68 | 200 | 13.83 | 34.99 | 26.23 | 179 | 0.67 |
| 465 | 8.83 | 34.72 | 0.63 | 2.63 | 26.95 | 250 | 12.35 | 34.84 | 26.42 | 162 | 0.76 |
| 593 | 7.01 | 34.61 | 1.23 | 2.63 | 27.13 | 300 | 11.55 | 34.83 | 26.56 | 148 | 0.84 |
| 716 | 6.21 | 34.57 | 1.54 | 2.75 | 27.21 | 400 | 9.83 | 34.75 | 26.81 | 125 | 0.98 |
| 838 | 5.14 | 34.59 | 1.78 | 2.66 | 27.36 | 500 | 8.27 | 34.68 | 27.00 | 106 | 1.11 |
| 960 | 4.58 | 34.60 | 1.92 | 2.71 | 27.43 | 600 | 6.96 | 34.60 | 27.13 | 94 | 1.21 |
| 1197 | 3.84 | 34.62 | 1.93 | 2.64 | 27.52 | 700 | 6.30 | 34.57 | 27.20 | 88 | 1.32 |
| 1429 | 3.16 | 34.66 | 2.03 | 2.78a) | 27.62 | 800 | 5.46 | 34.58 | 27.31 | 77 | 1.41 |
| | | | | | | 1000 | 4.44 | 34.60 | 27.44 | 65 | 1.57 |
| | | | | | | 1200 | 3.83 | 34.62 | 27.52 | 57 | 1.71 |

62 HUGH M. SMITH; April 27, 1958; 0411 GCT; 0°01'N, 140°03'W; sounding, 2350 m; wind, 110°, 13 kt; weather, distant precipitation; sea, slight; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.34 | 35.26 | 4.31 | 0.70 | 22.83 | 0 | 27.34 | 35.26 | 22.83 | 504 | 0.00 |
| 20 | 26.94 | 35.28 | 4.30 | 0.64 | 22.97 | 10 | 27.14 | 35.27 | 22.90 | 497 | 0.05 |
| 33 | 26.64 | 35.28 | 4.23 | 0.77 | 23.06 | 20 | 26.94 | 35.28 | 22.97 | 490 | 0.10 |
| 69 | 23.05 | 35.31 | 3.14 | 0.89 | 24.17 | 30 | 26.73 | 35.28 | 23.04 | 484 | 0.15 |
| 82 | 20.27 | 35.18 | 2.93 | 0.98 | 24.85 | 50 | 25.57 | 35.32 | 23.43 | 446 | 0.24 |
| 104 | 18.55 | 35.28 | 3.01 | 1.03 | 25.37 | 75 | 21.73 | 35.24 | 24.50 | 345 | 0.34 |
| 162 | 15.71 | 35.13 | 3.04 | 1.18 | 25.93 | 100 | 18.71 | 35.29 | 25.33 | 265 | 0.42 |
| 217 | 13.24 | 34.94 | 2.85 | 1.32 | 26.32 | 125 | 17.37 | 35.26 | 25.64 | 235 | 0.48 |
| 269 | 12.39 | 34.92 | 2.32 | 1.61 | 26.47 | 150 | 16.19 | 35.18 | 25.86 | 215 | 0.54 |
| 324 | 11.17 | 34.85 | 0.54 | 2.18 | 26.65 | 200 | 13.91 | 34.99 | 26.22 | 181 | 0.64 |
| 436 | 8.99 | 34.71 | 0.62 | 2.57 | 26.91 | 250 | 12.63 | 34.92 | 26.42 | 161 | 0.73 |
| 559 | 7.31 | 34.61 | 1.13 | 3.21 | 27.09 | 300 | 11.72 | 34.88 | 26.57 | 148 | 0.81 |
| 676 | 6.54 | 34.58 | 1.42 | 2.84 | 27.17 | 400 | 9.63 | 34.75 | 26.84 | 122 | 0.95 |
| 798 | 5.56 | 34.56 | 1.63 | 2.71 | 27.28 | 500 | 8.01 | 34.65 | 27.02 | 105 | 1.07 |
| 918 | 4.82 | 34.60 | 1.92 | 2.88 | 27.40 | 600 | 7.00 | 34.59 | 27.12 | 96 | 1.18 |
| 1156 | 3.98 | 34.56 | 1.85 | 2.47 | 27.46 | 700 | 6.35 | 34.57 | 27.19 | 89 | 1.29 |
| 1393 | 3.30 | 34.60 | 1.99 | 2.66b) | 27.56 | 800 | 5.55 | 34.56 | 27.28 | 80 | 1.38 |
| | | | | | | 1000 | 4.47 | 34.59 | 27.43 | 66 | 1.55 |
| | | | | | | 1200 | 3.85 | 34.56 | 27.47 | 62 | 1.69 |

a) Alternate value, 2.45 μg at/L.
b) Alternate value, 2.78 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

63

HUGH M. SMITH; April 27, 1958; 0609 GCT; 0°01'N, 140°03'W; sounding, 2350 m; wind, 100°, 10 kt; weather, partly cloudy; sea, slight; wire angle, 33°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.29 | 35.31 | 4.36 | 0.62 | 22.88 | 0 | 27.29 | 35.31 | 22.88 | 499 | 0.00 |
| 22 | 27.06 | 35.32 | 4.30 | 0.61 | 22.96 | 10 | 27.19 | 35.31 | 22.91 | 496 | 0.05 |
| 48 | 26.35 | 35.28 | 4.00 | 0.68 | 23.16 | 20 | 27.08 | 35.31 | 22.95 | 492 | 0.10 |
| 79 | 24.07 | 35.41 | 3.30 | 0.91 | 23.95 | 30 | 26.93 | 35.30 | 22.99 | 489 | 0.15 |
| 106 | 19.64 | 35.21 | 2.94 | 1.25 | 25.04 | 50 | 26.27 | 35.29 | 23.19 | 469 | 0.24 |
| 151 | 16.61 | 35.16 | 3.00 | 1.15 | 25.75 | 75 | 24.49 | 35.39 | 23.81 | 410 | 0.36 |
| 191 | 14.54 | 34.98 | 2.99 | 1.30 | 26.07 | 100 | 20.64 | 35.20 | 24.76 | 319 | 0.45 |
| 234 | 13.00 | 34.92 | 2.81 | 1.45 | 26.35 | 125 | 17.98 | 35.27 | 25.50 | 249 | 0.52 |
| 276 | 12.32 | 34.94 | 2.29 | 1.44 | 26.50 | 150 | 16.64 | 35.16 | 25.74 | 226 | 0.58 |
| 329 | 11.16 | 34.87 | 0.55 | 2.18 | 26.66 | 200 | 14.15 | 34.95 | 26.14 | 189 | 0.69 |
| 448 | 8.94 | 34.82 | 0.61 | 2.34 | 27.01 | 250 | 12.71 | 34.92 | 26.41 | 163 | 0.78 |
| 577 | 7.18 | 34.63 | 1.16 | 2.74 | 27.12 | 300 | 11.81 | 34.91 | 26.57 | 147 | 0.86 |
| 698 | 6.47 | 34.66 | 1.47 | 2.91 | 27.24 | 400 | 9.77 | 34.83 | 26.88 | 118 | 1.00 |
| 820 | 5.35 | 34.58 | 1.76 | 2.54 | 27.32 | 500 | 8.13 | 34.73 | 27.06 | 101 | 1.12 |
| 941 | 4.71 | 34.64 | 1.89 | 2.82 | 27.44 | 600 | 7.03 | 34.63 | 27.14 | 93 | 1.22 |
| 1179 | 3.91 | 34.60 | 1.83 | 3.00 | 27.50 | 700 | 6.45 | 34.65 | 27.24 | 84 | 1.32 |
| 1411 | 3.23 | 34.67 | 2.00 | 2.85a) | 27.62 | 800 | 5.53 | 34.59 | 27.31 | 77 | 1.41 |
| | | | | | | 1000 | 4.48 | 34.63 | 27.46 | 63 | 1.57 |
| | | | | | | 1200 | 3.85 | 34.60 | 27.51 | 59 | 1.71 |

64

HUGH M. SMITH; April 27, 1958; 0808 GCT; 0°02'N, 140°03'W; sounding, 2325 m; wind, 120°, 9 kt; weather, overcast; sea, slight; wire angle, 32°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.24 | 35.26 | 4.37 | 0.69 | 22.86 | 0 | 27.24 | 35.26 | 22.86 | 501 | 0.00 |
| 33 | 26.80 | 35.28 | 4.28 | 0.62 | 23.01 | 10 | 27.11 | 35.26 | 22.90 | 497 | 0.05 |
| 71 | 24.40 | 35.42 | 3.36 | 0.89 | 23.86 | 20 | 26.97 | 35.27 | 22.95 | 492 | 0.10 |
| 104 | 19.56 | 35.16 | 2.95 | 1.12 | 25.02 | 30 | 26.84 | 35.27 | 22.99 | 488 | 0.15 |
| 113 | 19.27 | 35.33 | 3.00 | 1.06 | 25.22 | 50 | 26.06 | 35.36 | 23.31 | 458 | 0.24 |
| 160 | 16.10 | 35.17 | 3.04 | 1.10 | 25.87 | 75 | 23.72 | 35.36 | 24.02 | 390 | 0.35 |
| 189 | 14.62 | 35.00 | 2.94 | 1.39 | 26.07 | 100 | 20.06 | 35.16 | 24.89 | 307 | 0.44 |
| 199 | 13.92 | 35.01 | 3.01 | 1.62 | 26.23 | 125 | 18.55 | 35.33 | 25.41 | 258 | 0.51 |
| 284 | 12.12 | 34.91 | 1.90 | 1.36 | 26.51 | 150 | 16.85 | 35.22 | 25.74 | 227 | 0.57 |
| 344 | 10.90 | 34.83 | 0.55 | 2.07 | 26.68 | 200 | 13.88 | 35.01 | 26.24 | 179 | 0.68 |
| 462 | 8.88 | 34.72 | 0.63 | - | 26.94 | 250 | 12.85 | 34.97 | 26.42 | 162 | 0.76 |
| 587 | 7.06 | 34.66 | 1.23 | 2.75 | 27.16 | 300 | 11.79 | 34.88 | 26.55 | 149 | 0.84 |
| 707 | 6.03 | 34.57 | 1.54 | 2.52 | 27.23 | 400 | 9.89 | 34.77 | 26.81 | 125 | 0.99 |
| 828 | 5.14 | 34.58 | 1.73 | 2.66 | 27.35 | 500 | 8.27 | 34.70 | 27.02 | 105 | 1.11 |
| 948 | 4.62 | - | 1.91 | 2.74 | | 600 | 6.93 | 34.64 | 27.17 | 91 | 1.22 |
| 1187 | 3.84 | 34.68 | 1.84 | 2.59 | 27.57 | 700 | 6.08 | 34.57 | 27.22 | 85 | 1.32 |
| 1423 | 3.14 | 34.62 | 1.99 | 2.71b) | 27.59 | 800 | 5.32 | 34.56 | 27.31 | 77 | 1.41 |
| | | | | | | 1000 | 4.43 | 34.61 | 27.45 | 64 | 1.57 |
| | | | | | | 1200 | 3.80 | 34.67 | 27.57 | 53 | 1.71 |

a) Alternate value, 2.95 μg at/L.
b) Alternate value, 2.57 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **65** | HUGH M. SMITH; April 27, 1958; 1014 GCT; 0°02'N, 140°03'W; sounding, 2325 m; wind, 120°, 10 kt; weather, cloudy; sea, slight; wire angle, 28°. | | | | | | | | | | |
| 0 | 27.18 | 35.25 | 4.30 | 0.61 | 22.87 | 0 | 27.18 | 35.25 | 22.87 | 500 | 0.00 |
| 19 | 27.10 | 35.30 | 4.23 | 0.67 | 22.93 | 10 | 27.14 | 35.27 | 22.90 | 497 | 0.05 |
| 42 | 26.44 | 35.26 | 4.03 | 0.72 | 23.11 | 20 | 27.09 | 35.29 | 22.93 | 494 | 0.10 |
| 87 | 22.24 | 35.31 | 2.91 | 1.01 | 24.41 | 30 | 26.89 | 35.28 | 22.98 | 489 | 0.15 |
| 110 | 19.30 | 35.32 | 3.01 | 0.93 | 25.21 | 50 | 25.91 | 35.26 | 23.28 | 461 | 0.24 |
| 139 | 16.80 | - | 3.06 | 1.23 | | 75 | 23.65 | 35.40 | 24.07 | 385 | 0.35 |
| 173 | 15.06 | 35.08 | 2.99 | 1.36 | 26.04 | 100 | 20.56 | 35.20 | 24.78 | 317 | 0.44 |
| 207 | 13.38 | 35.04 | 2.85 | 1.58 | 26.37 | 125 | 17.86 | 35.28 | 25.54 | 245 | 0.51 |
| 291 | 11.73 | 34.99 | 1.34 | 2.03 | 26.65 | 150 | 16.16 | 35.15 | 25.84 | 216 | 0.57 |
| 351 | 10.63 | 34.80 | 0.61 | 2.42 | 26.71 | 200 | 13.70 | 35.03 | 26.29 | 174 | 0.67 |
| 473 | 8.84 | 34.71 | 0.67 | 2.09 | 26.94 | 250 | 12.30 | 35.02 | 26.57 | 148 | 0.75 |
| 599 | 6.98 | 34.64 | 1.24 | 2.44 | 27.16 | 300 | 11.56 | 34.96 | 26.66 | 139 | 0.83 |
| 721 | 5.93 | 34.59 | 1.71 | 2.27 | 27.26 | 400 | 9.88 | 34.73 | 26.78 | 127 | 0.97 |
| 843 | 4.90 | 34.57 | 1.85 | 2.67 | 27.37 | 500 | 8.41 | 34.69 | 26.99 | 108 | 1.10 |
| 964 | 4.58 | 34.60 | 1.90 | 2.86 | 27.43 | 600 | 6.97 | 34.63 | 27.15 | 92 | 1.20 |
| 1202 | 3.61 | 34.62 | 1.86 | 3.02 | 27.55 | 700 | 6.08 | 34.59 | 27.24 | 84 | 1.30 |
| 1436 | 3.14 | 34.62 | 1.99 | 2.68a) | 27.59 | 800 | 5.22 | 34.57 | 27.33 | 75 | 1.39 |
| | | | | | | 1000 | 4.43 | 34.60 | 27.44 | 65 | 1.55 |
| | | | | | | 1200 | 3.62 | 34.62 | 27.54 | 55 | 1.69 |
| **66** | HUGH M. SMITH; April 27, 1958; 1212 GCT; 0°03'N, 140°04'W; sounding, 2350 m; wind, 130°, 10 kt; weather, cloudy; sea, slight; wire angle, 26°. | | | | | | | | | | |
| 0 | 27.17 | 35.28 | 4.36 | 0.80 | 22.90 | 0 | 27.17 | 35.28 | 22.90 | 497 | 0.00 |
| 33 | 26.84 | 35.29 | 4.23 | 0.69 | 23.01 | 10 | 27.07 | 35.28 | 22.93 | 494 | 0.05 |
| 81 | 22.44 | 35.23 | 3.01 | 0.95 | 24.29 | 20 | 26.97 | 35.28 | 22.96 | 491 | 0.10 |
| 120 | 18.40 | 35.34 | 2.99 | 1.22 | 25.45 | 30 | 26.87 | 35.28 | 22.99 | 488 | 0.15 |
| 143 | 16.48 | 35.18 | 3.01 | 1.22 | 25.79 | 50 | 25.58 | 35.39 | 23.48 | 442 | 0.24 |
| 168 | 15.33 | 35.07 | 3.01 | 1.31 | 25.97 | 75 | 23.13 | 35.31 | 24.15 | 378 | 0.34 |
| 202 | 13.35 | 34.97 | 2.84 | 1.32 | 26.32 | 100 | 20.44 | 35.16 | 24.79 | 317 | 0.43 |
| 221 | 12.90 | 34.96 | 2.84 | 1.54 | 26.40 | 125 | 17.93 | 35.31 | 25.54 | 245 | 0.50 |
| 280 | 11.80 | 34.81 | 1.39 | 1.98 | 26.50 | 150 | 16.12 | 35.14 | 25.85 | 216 | 0.56 |
| 330 | 10.84 | 34.83 | 0.54 | 2.44 | 26.69 | 200 | 13.45 | 34.97 | 26.30 | 173 | 0.66 |
| 450 | 8.87 | 34.73 | 0.63 | 2.78 | 26.95 | 250 | 12.33 | 34.94 | 26.50 | 154 | 0.75 |
| 574 | 7.07 | 34.64 | 1.23 | 2.61 | 27.15 | 300 | 11.41 | 34.88 | 26.63 | 142 | 0.82 |
| 690 | 6.35 | 34.63 | 1.46 | 2.71 | 27.24 | 400 | 9.65 | 34.78 | 26.86 | 120 | 0.96 |
| 807 | 5.18 | 34.59 | 1.76 | 2.66 | 27.35 | 500 | 8.07 | 34.68 | 27.03 | 104 | 1.08 |
| 923 | 4.64 | 34.57 | 2.01 | 2.87 | 27.40 | 600 | 6.89 | 34.63 | 27.16 | 91 | 1.19 |
| 1154 | 3.94 | 34.57 | 1.83 | 2.88 | 27.47 | 700 | 6.25 | 34.62 | 27.24 | 84 | 1.29 |
| 1381 | 3.30 | 34.59 | 1.99 | 2.80 | 27.55 | 800 | 5.25 | 34.59 | 27.34 | 74 | 1.38 |
| | | | | | | 1000 | 4.38 | 34.56 | 27.42 | 67 | 1.54 |
| | | | | | | 1200 | 3.81 | 34.57 | 27.49 | 61 | 1.68 |

a) Alternate value, 2.89 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

67

HUGH M. SMITH; April 27, 1958; 1409 GCT; 0°04'N, 140°04'W; sounding, 2350 m; wind, 130°, 8 kt; weather, slight to moderate thunderstorm; sea, smooth; wire angle, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.14 | 35.27 | 4.30 | 1.43a) | 22.90 | 0 | 27.14 | 35.27 | 22.90 | 497 | 0.00 |
| 24 | 27.08 | 35.31 | 4.28 | 0.74 | 22.95 | 10 | 27.11 | 35.28 | 22.92 | 496 | 0.05 |
| 42 | 26.50 | 35.30 | 4.08 | 0.80 | 23.12 | 20 | 27.09 | 35.30 | 22.94 | 494 | 0.10 |
| 67 | 24.82 | 35.43 | 3.54 | 1.00 | 23.74 | 30 | 26.94 | 35.30 | 22.99 | 490 | 0.15 |
| 101 | 19.53 | 35.23 | 2.94 | 0.89 | 25.08 | 50 | 26.12 | 35.34 | 23.28 | 463 | 0.24 |
| 115 | 18.30 | 35.24 | 3.05 | 1.14 | 25.40 | 75 | 23.58 | 35.38 | 24.08 | 387 | 0.35 |
| 168 | 15.11 | 35.04 | 2.97 | 1.54 | 26.00 | 100 | 19.69 | 35.23 | 25.04 | 296 | 0.44 |
| 222 | 12.85 | 34.93 | 2.78 | 1.69 | 26.39 | 125 | 17.57 | 35.21 | 25.56 | 248 | 0.50 |
| 281 | 11.96 | 34.85 | 1.40 | 2.00 | 26.50 | 150 | 16.01 | 35.12 | 25.86 | 220 | 0.56 |
| 330 | 10.85 | 34.82 | 0.58 | 2.63 | 26.68 | 200 | 13.63 | 34.96 | 26.26 | 183 | 0.66 |
| 451 | 8.88 | 34.70 | 0.67 | 2.92 | 26.92 | 250 | 12.36 | 34.88 | 26.45 | 165 | 0.75 |
| 575 | 7.09 | 34.61 | 1.23 | 3.00 | 27.12 | 300 | 11.54 | 34.83 | 26.57 | 155 | 0.83 |
| 694 | 6.23 | 34.62 | 1.53 | 2.92 | 27.24 | 400 | 9.63 | 34.75 | 26.84 | 130 | 0.97 |
| 812 | 5.16 | 34.53 | 1.77 | 3.06 | 27.31 | 500 | 8.10 | 34.65 | 27.01 | 115 | 1.09 |
| 929 | 4.63 | 34.54 | 2.15 | 3.08 | 27.37 | 600 | 6.88 | 34.61 | 27.15 | 102 | 1.20 |
| 1157 | 3.90 | 34.56 | 1.84 | 3.12 | 27.47 | 700 | 6.17 | 34.61 | 27.25 | 93 | 1.30 |
| 1379 | 3.29 | 34.61 | 1.99 | 3.00b) | 27.57 | 800 | 5.26 | 34.53 | 27.30 | 88 | 1.39 |
| | | | | | | 1000 | 4.38 | 34.54 | 27.41 | 78 | 1.56 |
| | | | | | | 1200 | 3.78 | 34.57 | 27.49 | 71 | 1.70 |

68

HUGH M. SMITH; April 27, 1958; 1606 GCT; 0°04'N, 140°04'W; sounding, 2350 m; wind, 130°, 11 kt; weather, cloudy; sea, slight; wire angle, 31°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 27.12 | 35.24 | 4.37 | 0.74 | 22.88 | 0 | 27.12 | 35.24 | 22.88 | 499 | 0.00 |
| 41 | 26.62 | 35.28 | 4.16 | 0.72 | 23.07 | 10 | 27.00 | 35.25 | 22.93 | 494 | 0.05 |
| 83 | 22.16 | 35.35 | 2.95 | 1.02 | 24.46 | 20 | 26.88 | 35.26 | 22.97 | 490 | 0.10 |
| 106 | 18.94 | 35.33 | 2.99 | 1.06 | 25.31 | 30 | 26.75 | 35.26 | 23.01 | 486 | 0.15 |
| 130 | 17.51 | 35.26 | 2.97 | 1.15 | 25.61 | 50 | 25.91 | 35.30 | 23.31 | 458 | 0.24 |
| 149 | 16.08 | 35.15 | 3.03 | 1.27 | 25.86 | 75 | 23.23 | 35.42 | 24.21 | 372 | 0.35 |
| 172 | 15.17 | - | 2.99 | 1.35 | | 100 | 19.72 | 35.23 | 25.03 | 294 | 0.43 |
| 217 | 13.09 | 34.96 | 2.72 | 2.15 | 26.36 | 125 | 17.74 | 35.28 | 25.57 | 243 | 0.50 |
| 276 | 12.05 | 34.88 | 1.90 | 1.92 | 26.51 | 150 | 16.03 | 35.17 | 25.89 | 212 | 0.56 |
| 327 | 11.02 | 34.80 | 0.50c) | 2.53 | 26.64 | 200 | 13.83 | 35.01 | 26.25 | 178 | 0.66 |
| 450 | 8.87 | 34.72 | 1.30 | 2.90 | 26.94 | 250 | 12.40 | 34.90 | 26.45 | 159 | 0.74 |
| 573 | 7.14 | 34.60 | 1.17 | 2.92 | 27.11 | 300 | 11.57 | 34.84 | 26.56 | 148 | 0.82 |
| 691 | 6.42 | 34.59 | 1.37 | 2.97 | 27.20 | 400 | 9.69 | 34.74 | 26.82 | 124 | 0.97 |
| 807 | 5.31 | 34.58 | 1.84 | 2.98 | 27.33 | 500 | 8.08 | 34.66 | 27.02 | 105 | 1.09 |
| 924 | 4.70 | 34.57 | 1.86 | 2.90 | 27.39 | 600 | 6.95 | 34.59 | 27.12 | 95 | 1.20 |
| 1156 | 3.96 | 34.62 | 1.87 | 3.26 | 27.51 | 700 | 6.33 | 34.58 | 27.20 | 88 | 1.30 |
| 1381 | 3.34 | 34.62 | 1.97 | 2.74d) | 27.57 | 800 | 5.38 | 34.58 | 27.32 | 76 | 1.39 |
| | | | | | | 1000 | 4.42 | 34.58 | 27.43 | 66 | 1.56 |
| | | | | | | 1200 | 3.84 | 34.62 | 27.52 | 57 | 1.70 |

a) Value uncertain; used in interpolation.
b) Alternate value, 2.62 µg at/L.
c) Estimated value owing to overtitration.
d) Alternate value, 3.02 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **69** | HUGH M. SMITH; April 27, 1958; 1804 GCT; 0°04'N, 140°04'W; sounding, 2350 m; wind, 130°, 10 kt; weather, partly cloudy; sea, slight; wire angle, 26°. | | | | | | | | | | |
| 0 | 27.14 | 35.24 | 4.31 | 1.32 | 22.87 | 0 | 27.14 | 35.24 | 22.87 | 499 | 0.00 |
| 33 | 26.88 | 35.22 | 4.20 | 1.14 | 22.94 | 10 | 27.06 | 35.23 | 22.89 | 498 | 0.05 |
| 75 | 23.72 | 35.36 | 3.17 | 1.16 | 24.02 | 20 | 26.98 | 35.22 | 22.91 | 496 | 0.10 |
| 109 | 19.39 | 35.30 | 2.97 | 1.07 | 25.17 | 30 | 26.90 | 35.22 | 22.94 | 493 | 0.15 |
| 133 | 17.76 | 35.26 | 3.01 | 1.34 | 25.55 | 50 | 25.94 | 35.28 | 23.28 | 460 | 0.24 |
| 157 | 15.97 | 35.08 | 3.02 | 1.40 | 25.83 | 75 | 23.72 | 35.36 | 24.02 | 390 | 0.35 |
| 190 | 14.24 | 34.94 | 2.88 | 1.27 | 26.11 | 100 | 20.50 | 35.20 | 24.80 | 316 | 0.44 |
| 229 | 12.87 | 34.89 | 2.75 | 1.35 | 26.35 | 125 | 18.25 | 35.28 | 25.44 | 255 | 0.51 |
| 288 | 12.07 | 34.92 | 1.92 | - | 26.53 | 150 | 16.48 | 35.13 | 25.75 | 225 | 0.57 |
| 347 | 10.89 | 34.76 | 0.54 | 2.49 | 26.63 | 200 | 13.82 | 34.91 | 26.17 | 185 | 0.68 |
| 467 | 8.87 | 34.68 | 0.64 | 2.63 | 26.91 | 250 | 12.52 | 34.90 | 26.43 | 161 | 0.77 |
| 594 | 7.17 | 34.61 | 1.19 | 2.74 | 27.11 | 300 | 11.84 | 34.89 | 26.55 | 149 | 0.85 |
| 717 | 6.42 | 34.59 | 1.46 | 3.62 | 27.20 | 400 | 9.94 | 34.70 | 26.75 | 131 | 1.00 |
| 838 | 5.24 | 34.55 | 1.71 | 3.62 | 27.31 | 500 | 8.36 | 34.65 | 26.96 | 110 | 1.13 |
| 960 | 4.62 | 34.55 | 1.90 | 2.54 | 27.38 | 600 | 7.13 | 34.60 | 27.11 | 97 | 1.24 |
| 1200 | 3.90 | 34.61 | 1.92 | 2.86 | 27.51 | 700 | 6.51 | 34.59 | 27.18 | 89 | 1.34 |
| 1432 | 3.24 | 34.57 | 1.96 | 1.81a) | 27.54 | 800 | 5.60 | 34.56 | 27.28 | 80 | 1.44 |
| | | | | | | 1000 | 4.48 | 34.56 | 27.41 | 68 | 1.61 |
| | | | | | | 1200 | 3.90 | 34.61 | 27.51 | 59 | 1.75 |
| **70** | HUGH M. SMITH; April 27, 1958; 2027 GCT; 0°04'N, 140°06'W; sounding, 2350 m; wind, 160°, 12 kt; weather, cloudy; sea, slight; wire angle, 28-30°. | | | | | | | | | | |
| 0 | 27.27 | 35.28 | 4.38 | - | 22.86 | 0 | 27.27 | 35.28 | 22.86 | 500 | 0.00 |
| 56 | 26.18 | 35.26 | 3.93 | - | 23.19 | 10 | 27.08 | 35.27 | 22.92 | 495 | 0.05 |
| 78 | 24.02 | 35.40 | 3.24 | 1.34b) | 23.96 | 20 | 26.88 | 35.27 | 22.98 | 490 | 0.10 |
| 102 | 20.96 | 35.26 | 2.92 | 1.98 | 24.72 | 30 | 26.69 | 35.26 | 23.04 | 485 | 0.15 |
| 125 | 17.98 | 35.18 | 3.01 | 1.53 | 25.43 | 50 | 26.30 | 35.26 | 23.16 | 474 | 0.24 |
| 158 | 16.26 | 35.15 | 3.02 | 1.95 | 25.82 | 75 | 24.36 | 35.38 | 23.85 | 410 | 0.35 |
| 191 | 14.04 | 34.96 | 2.91 | 1.70 | 26.17 | 100 | 21.23 | 35.27 | 24.66 | 333 | 0.45 |
| 225 | 12.89 | 34.88 | 2.69 | 1.73 | 26.34 | 125 | 17.98 | 35.18 | 25.43 | 260 | 0.52 |
| 284 | 12.14 | 34.93 | 2.00 | 2.58 | 26.53 | 150 | 16.56 | 35.16 | 25.76 | 229 | 0.58 |
| 345 | 10.98 | 34.85 | 0.54 | 4.41 | 26.68 | 200 | 13.65 | 34.92 | 26.22 | 186 | 0.69 |
| 465 | 8.87 | 34.70 | 0.61 | 3.61 | 26.92 | 250 | 12.50 | 34.89 | 26.43 | 167 | 0.77 |
| 592 | 7.13 | 34.58 | 1.22 | 3.77 | 27.09 | 300 | 11.85 | 34.91 | 26.57 | 155 | 0.85 |
| 712 | 6.34 | 34.59 | 1.47 | 3.46 | 27.21 | 400 | 9.97 | 34.77 | 26.80 | 134 | 1.00 |
| 832 | 5.18 | 34.53 | 1.78 | 3.69 | 27.30 | 500 | 8.32 | 34.65 | 26.98 | 118 | 1.12 |
| 952 | 4.60 | 34.60 | 1.94 | 4.99 | 27.43 | 600 | 7.07 | 34.58 | 27.10 | 107 | 1.24 |
| 1188 | 3.75 | 34.60 | 1.89 | 3.71 | 27.52 | 700 | 6.41 | 34.58 | 27.20 | 98 | 1.34 |
| 1418 | 3.21 | 34.57 | 2.01 | 3.62c) | 27.54 | 800 | 5.48 | 34.54 | 27.28 | 90 | 1.43 |
| | | | | | | 1000 | 4.40 | 34.60 | 27.45 | 74 | 1.60 |
| | | | | | | 1200 | 3.72 | 34.59 | 27.52 | 68 | 1.74 |

a) Alternate value, 2.33 μg at/L.
b) Values uncertain owing to contamination of glassware.
c) Alternate value, 3.56 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; June 15, 1958; 1910 GCT; 0°00', 140°02'W; sounding, missing; wind, 120°, 10 kt; weather, partly cloudy; sea, smooth; wire angle, 34°. | | | | | | | | | | | |
| 0 | 27.30 | 34.67 | 4.31 | 0.47 | 22.39 | 0 | 27.30 | 34.67 | 22.39 | 545 | 0.00 |
| 9 | 27.09 | 34.72 | 4.25 | 0.45 | 22.50 | 10 | 27.07 | 34.73 | 22.52 | 534 | 0.05 |
| 69 | 24.08 | 35.35 | 3.20 | 0.48 | 23.90 | 20 | 26.80 | 34.85 | 22.69 | 518 | 0.11 |
| 101 | 20.73 | 35.26 | 2.88 | 1.02 | 24.78 | 30 | 26.44 | 34.97 | 22.90 | 499 | 0.16 |
| 134 | 19.21 | 35.26 | 2.91 | 0.91 | 25.18 | 50 | 25.42 | 35.17 | 23.37 | 454 | 0.25 |
| 166 | 14.86 | 35.01 | 2.99 | 0.84 | 26.03 | 75 | 23.43 | 35.34 | 24.09 | 386 | 0.36 |
| 198 | 13.57 | 34.97 | 2.97 | 1.28 | 26.27 | 100 | 20.83 | 35.26 | 24.76 | 323 | 0.45 |
| 221 | 12.60 | 34.92 | 2.59 | 1.83 | 26.43 | 125 | 19.68 | 35.26 | 25.07 | 294 | 0.52 |
| 278 | 12.16 | 34.83 | 2.16 | 1.29 | 26.45 | 150 | 17.02 | 35.13 | 25.63 | 241 | 0.59 |
| 336 | 11.04 | 34.79 | 0.60 | 1.29 | 26.62 | 200 | 13.48 | 34.96 | 26.29 | 180 | 0.70 |
| 456 | 9.49 | 34.70 | 0.51 | 1.56 | 26.82 | 250 | 12.24 | 34.86 | 26.46 | 164 | 0.78 |
| 581 | 7.74 | 34.60 | 0.89 | 1.43 | 27.02 | 300 | 11.76 | 34.81 | 26.51 | 161 | 0.86 |
| 702 | 6.76 | 34.56 | 1.28 | 1.94 | 27.13 | 400 | 10.16 | 34.74 | 26.74 | 140 | 1.01 |
| 823 | 5.48 | 34.54 | 1.76 | 2.29 | 27.28 | 500 | 8.84 | 34.66 | 26.90 | 126 | 1.15 |
| 943 | 5.01 | 34.54 | 1.73 | 1.74 | 27.33 | 600 | 7.57 | 34.59 | 27.04 | 113 | 1.27 |
| 1178 | 4.11 | 34.54 | 1.86 | 1.64 | 27.43 | 700 | 6.77 | 34.56 | 27.12 | 105 | 1.37 |
| 1410 | 3.22 | 34.56 | 1.95 | 2.33 | 27.54 | 800 | 5.70 | 34.54 | 27.25 | 93 | 1.47 |
| | | | | | | 1000 | 4.79 | 34.53 | 27.36 | 84 | 1.65 |
| | | | | | | 1200 | 4.03 | 34.54 | 27.44 | 76 | 1.81 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; July 23, 1958; 0652 GCT; 23°56'N, 158°33'W; wind, 060°, 18 kt; weather, missing; sea, moderate; wire angle, <03°. | | | | | | | | | | | 4 |
| 0 | 25.23 | 35.10 | 4.66 | 0.58 | 23.37 | 0 | 25.23 | 35.10 | 23.37 | 452 | 0.00 |
| 20 | 25.22 | 35.12 | 4.72 | 0.43 | 23.39 | 10 | 25.22 | 35.11 | 23.38 | 451 | 0.05 |
| 40 | 25.14 | 35.10 | 4.64 | 0.47 | 23.40 | 20 | 25.22 | 35.12 | 23.39 | 451 | 0.09 |
| 70 | 21.40 | 35.08 | 4.91 | 0.49 | 24.46 | 30 | 25.20 | 35.11 | 23.38 | 451 | 0.14 |
| 90 | 20.44 | 35.10 | 4.66 | 0.58 | 24.74 | 50 | 23.98 | 35.08 | 23.73 | 418 | 0.22 |
| 305 | 12.04 | 34.33 | 4.57 | 1.23 | 26.08 | 75 | 21.10 | 35.08 | 24.55 | 340 | 0.32 |
| 511 | 6.95 | 34.04 | 3.34 | 2.38 | 26.69 | 100 | 19.98 | 35.10 | 24.86 | 310 | 0.40 |
| 615 | 5.45 | - | 1.73 | 3.19 | | 125 | 18.85 | 35.02 | 25.09 | 288 | 0.48 |
| 820 | 4.43 | - | 0.89 | 3.69 | | 150 | 17.76 | 34.91 | 25.28 | 270 | 0.55 |
| 1018 | 3.90 | 34.50 | 1.20 | 3.46 | 27.42 | 200 | 15.73 | 34.70 | 25.60 | 240 | 0.68 |
| 1222 | 3.33 | 34.55 | 1.47 | 3.77a) | 27.52 | 250 | 13.87 | 34.50 | 25.85 | 216 | 0.79 |
| | | | | | | 300 | 12.20 | 34.35 | 26.07 | 195 | 0.90 |
| | | | | | | 400 | 9.34 | 34.06 | 26.35 | 169 | 1.09 |
| | | | | | | 500 | 7.15 | 34.02 | 26.65 | 140 | 1.25 |
| | | | | | | 600 | 5.62 | 34.13 | 26.93 | 113 | 1.39 |
| | | | | | | 700 | 4.84 | 34.28 | 27.14 | 93 | 1.50 |
| | | | | | | 800 | 4.46 | 34.39 | 27.27 | 81 | 1.59 |
| | | | | | | 1000 | 3.94 | 34.54 | 27.45 | 64 | 1.75 |
| | | | | | | 1200 | 3.39 | 34.54 | 27.50 | 59 | 1.89 |
| HUGH M. SMITH; July 23, 1958; 1847 GCT; 25°33'N, 158°34'W; wind, 050°, 10 kt; weather, sky obscured; sea, slight; wire angle, 00°. | | | | | | | | | | | 5 |
| 0 | 24.06 | 35.35 | 4.55 | 0.30 | 23.91 | 0 | 24.06 | 35.35 | 23.91 | 401 | 0.00 |
| 14 | 24.04 | 35.03 | 4.70 | 0.25 | 23.67 | 10 | 24.05 | 35.12 | 23.74 | 417 | 0.04 |
| 34 | 23.97 | 35.37 | 4.99 | 0.35 | 23.95 | 20 | 24.07 | 35.10 | 23.72 | 419 | 0.08 |
| 62 | 22.48 | 35.25 | 4.67 | 0.48 | 24.29 | 30 | 24.02 | 35.27 | 23.86 | 405 | 0.12 |
| 72 | 21.92 | 35.27 | 4.59 | 0.35 | 24.46 | 50 | 23.23 | 35.32 | 24.13 | 380 | 0.20 |
| 198 | 17.96 | 34.95 | 4.66 | 0.63 | 25.26 | 75 | 21.80 | 35.27 | 24.50 | 344 | 0.29 |
| 298 | 14.37 | 34.51 | 1.02 | 2.29 | 25.75 | 100 | 20.82 | 35.21 | 24.72 | 323 | 0.38 |
| 402 | 11.05 | 34.25 | 0.81 | 2.92 | 26.20 | 125 | 19.94 | 35.14 | 24.90 | 306 | 0.46 |
| 501 | 8.46 | 34.11 | 1.94 | 2.08 | 26.53 | 150 | 19.17 | 35.06 | 25.04 | 293 | 0.53 |
| 601 | 6.24 | 34.06 | 3.41 | 1.24 | 26.80 | 200 | 17.89 | 34.94 | 25.27 | 271 | 0.68 |
| 808 | 4.50 | 34.26 | 4.40 | 0.66 | 27.17 | 250 | 16.09 | 34.72 | 25.53 | 246 | 0.81 |
| 1006 | 3.76 | 34.43 | 4.16 | 0.43 | 27.38 | 300 | 14.30 | 34.50 | 25.76 | 225 | 0.93 |
| 1208 | 3.29 | 34.51 | 1.29 | 3.71 | 27.49 | 400 | 11.11 | 34.25 | 26.19 | 183 | 1.14 |
| | | | | | | 500 | 8.48 | 34.11 | 26.52 | 152 | 1.32 |
| | | | | | | 600 | 6.26 | 34.06 | 26.80 | 126 | 1.47 |
| | | | | | | 700 | 5.11 | 34.13 | 27.00 | 107 | 1.59 |
| | | | | | | 800 | 4.52 | 34.24 | 27.15 | 93 | 1.70 |
| | | | | | | 1000 | 3.77 | 34.42 | 27.37 | 72 | 1.88 |
| | | | | | | 1200 | 3.31 | 34.50 | 27.48 | 61 | 2.03 |

a) Alternate value, 3.19 µg at/L; duplicate values did not agree within 0.1 µg at/L, the tolerance for phosphate values.

HBL

HMS-46

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **7** | HUGH M. SMITH; July 24, 1958; 0613 GCT; 27°08'N, 158°38'W; wind, 070°, 14 kt; weather, partly cloudy; sea, moderate; wire angle, 01°. | | | | | | | | | | |
| 0 | 23.74 | 35.42 | 4.61 | 0.40 | 24.06 | 0 | 23.74 | 35.42 | 24.06 | 387 | 0.00 |
| 30 | 23.58 | 35.39 | 4.78 | 0.20 | 24.08 | 10 | 23.69 | 35.41 | 24.06 | 386 | 0.04 |
| 55 | 19.98 | 35.12 | 5.42 | 0.09 | 24.88 | 20 | 23.63 | 35.40 | 24.07 | 386 | 0.08 |
| 104 | 17.13 | 34.86 | 5.61 | 0.24 | 25.39 | 30 | 23.58 | 35.39 | 24.08 | 385 | 0.12 |
| 154 | 15.75 | 34.72 | 4.82 | 0.38 | 25.61 | 50 | 20.77 | 35.17 | 24.71 | 326 | 0.19 |
| 203 | 14.38 | 34.53 | 4.84 | 0.48 | 25.76 | 75 | 18.39 | 34.98 | 25.18 | 282 | 0.26 |
| 305 | 11.34 | 34.29 | 4.82 | 0.98 | 26.18 | 100 | 17.23 | 34.87 | 25.38 | 264 | 0.33 |
| 414 | 9.29 | 34.17 | 4.56 | 1.51 | 26.44 | 125 | 16.46 | 34.79 | 25.50 | 253 | 0.40 |
| 516 | 7.10 | 34.04 | 3.42 | 2.22 | 26.67 | 150 | 15.83 | 34.73 | 25.60 | 244 | 0.46 |
| 624 | 5.60 | 34.03 | 2.25 | 2.93 | 26.86 | 200 | 14.46 | 34.54 | 25.75 | 231 | 0.58 |
| 833 | 4.21 | 34.30 | 0.61 | 3.59 | 27.23 | 250 | 12.93 | 34.39 | 25.96 | 212 | 0.69 |
| 1033 | 3.66 | 34.44 | 0.67 | 3.70 | 27.40 | 300 | 11.48 | 34.29 | 26.16 | 193 | 0.79 |
| 1236 | 3.16 | 34.55 | 1.12 | 2.65a) | 27.53 | 400 | 9.53 | 34.18 | 26.41 | 170 | 0.97 |
| | | | | | | 500 | 7.43 | 34.05 | 26.64 | 149 | 1.13 |
| | | | | | | 600 | 5.87 | 34.02 | 26.82 | 131 | 1.27 |
| | | | | | | 700 | 4.93 | 34.11 | 27.00 | 114 | 1.39 |
| | | | | | | 800 | 4.34 | 34.24 | 27.18 | 98 | 1.50 |
| | | | | | | 1000 | 3.72 | 34.42 | 27.38 | 79 | 1.68 |
| | | | | | | 1200 | 3.25 | 34.53 | 27.51 | 67 | 1.82 |
| **8** | HUGH M. SMITH; July 24, 1958; 1831 GCT; 28°45'N, 158°44'W; wind, 100°, 10 kt; weather, sky obscured; sea, slight; wire angle, 20°. | | | | | | | | | | |
| 0 | 23.36 | 35.38 | 4.66 | 0.30 | 24.14 | 0 | 23.36 | 35.38 | 24.14 | 379 | 0.00 |
| 19 | 23.34 | 35.40 | 4.66 | 0.12 | 24.16 | 10 | 23.35 | 35.39 | 24.15 | 378 | 0.04 |
| 41 | 20.30 | 35.14 | 5.24 | 0.12 | 24.81 | 20 | 23.22 | 35.39 | 24.19 | 375 | 0.08 |
| 69 | 18.77 | 35.05 | 5.22 | Trace | 25.14 | 30 | 21.92 | 35.27 | 24.47 | 348 | 0.11 |
| 134 | 17.36 | 34.93 | 4.96 | 0.17 | 25.39 | 50 | 19.64 | 35.09 | 24.95 | 303 | 0.18 |
| 203 | 15.41 | 34.64 | 4.87 | 0.35 | 25.62 | 75 | 18.59 | 35.03 | 25.17 | 283 | 0.25 |
| 282 | 12.65 | 34.37 | 4.63 | 0.62 | 25.99 | 100 | 17.94 | 34.99 | 25.30 | 271 | 0.32 |
| 381 | 10.68 | 34.21 | 4.66 | 0.70 | 26.24 | 125 | 17.48 | 34.94 | 25.38 | 265 | 0.39 |
| 475 | 8.65 | 34.10 | 4.14 | 0.96 | 26.49 | 150 | 16.95 | 34.86 | 25.44 | 259 | 0.45 |
| 575 | 6.43 | 34.01 | 3.09 | 2.05 | 26.74 | 200 | 15.50 | 34.65 | 25.61 | 244 | 0.58 |
| 770 | 4.36 | 34.09 | 0.91 | 3.10 | 27.05 | 250 | 13.74 | 34.46 | 25.85 | 223 | 0.69 |
| 959 | 3.68 | 34.31 | 0.48 | 3.45 | 27.29 | 300 | 12.24 | 34.33 | 26.04 | 205 | 0.80 |
| 1152 | 3.26 | 34.39b) | 0.81 | 3.47c) | 27.40 | 400 | 10.28 | 34.18 | 26.29 | 183 | 1.00 |
| | | | | | | 500 | 8.06 | 34.07 | 26.56 | 157 | 1.16 |
| | | | | | | 600 | 6.04 | 34.00 | 26.78 | 135 | 1.31 |
| | | | | | | 700 | 4.85 | 34.03 | 26.95 | 119 | 1.44 |
| | | | | | | 800 | 4.20 | 34.12 | 27.09 | 105 | 1.55 |
| | | | | | | 1000 | 3.59 | 34.32 | 27.31 | 85 | 1.74 |

a) Alternate value, 3.35 μg at/L.
b) Sample bottle only three-quarters full.
c) Alternate value, 3.11 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

10

HUGH M. SMITH; July 25, 1958; 0642 GCT; 30°36'N, 158°56'W; wind, 120°, 10 kt; weather, partly cloudy; sea, slight; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.10 | 35.43 | 4.68 | 0.66 | 23.96 | 0 | 24.10 | 35.43 | 23.96 | 396 | 0.00 |
| 20 | 23.88 | 35.38 | 4.68 | 0.11 | 23.98 | 10 | 23.99 | 35.40 | 23.97 | 395 | 0.04 |
| 39 | 18.56 | 34.76 | 5.46 | 0.13 | 24.97 | 20 | 23.88 | 35.38 | 23.98 | 393 | 0.08 |
| 94 | 15.36 | 34.60 | 5.43 | 0.17 | 25.60 | 30 | 21.26 | 35.07 | 24.50 | 345 | 0.12 |
| 150 | 13.75 | 34.46 | 4.94 | 0.34 | 25.84 | 50 | 17.13 | 34.70 | 25.27 | 271 | 0.18 |
| 204 | 12.54 | 34.34 | 5.06 | 0.45 | 25.99 | 75 | 16.10 | 34.64 | 25.47 | 252 | 0.24 |
| 307 | 10.85 | 34.26 | 4.74 | 0.80 | 26.25 | 100 | 15.14 | 34.58 | 25.64 | 236 | 0.31 |
| 414 | 8.96 | 34.22 | 4.49 | 1.20 | 26.53 | 125 | 14.34 | 34.52 | 25.76 | 224 | 0.36 |
| 514 | 7.20 | 34.06 | 3.72 | 1.47 | 26.67 | 150 | 13.75 | 34.46 | 25.84 | 217 | 0.42 |
| 621 | 5.43 | 34.05 | 2.47 | 2.48 | 26.89 | 200 | 12.62 | 34.34 | 25.98 | 204 | 0.53 |
| 828 | 4.02 | 34.23 | 0.67 | 2.68 | 27.19 | 250 | 11.74 | 34.29 | 26.11 | 191 | 0.63 |
| 1028 | 3.52 | 34.41 | 0.39 | 3.30 | 27.39 | 300 | 10.95 | 34.26 | 26.23 | 180 | 0.72 |
| 1227 | 3.14 | 34.49 | 0.77 | 3.28 | 27.49 | 400 | 9.21 | 34.22 | 26.49 | 155 | 0.90 |
| | | | | | | 500 | 7.44 | 34.08 | 26.65 | 139 | 1.05 |
| | | | | | | 600 | 5.74 | 34.04 | 26.85 | 121 | 1.19 |
| | | | | | | 700 | 4.68 | 34.10 | 27.02 | 105 | 1.31 |
| | | | | | | 800 | 4.11 | 34.19 | 27.15 | 92 | 1.42 |
| | | | | | | 1000 | 3.56 | 34.38 | 27.36 | 73 | 1.60 |
| | | | | | | 1200 | 3.19 | 34.47 | 27.47 | 62 | 1.75 |

11

HUGH M. SMITH; July 25, 1958; 1940 GCT; 32°25'N, 158°50'W; wind, 190°, 13 kt; weather, partly cloudy; sea, slight; wire angle, <03°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.60 | 34.62 | 4.81 | 0.12 | 23.49 | 0 | 23.60 | 34.62 | 23.49 | 440 | 0.00 |
| 19 | 23.26 | 35.05 | 4.82 | 0.32 | 23.92 | 10 | 23.42 | 34.84 | 23.71 | 419 | 0.04 |
| 39 | 17.57 | 34.75 | 5.49 | 0.26 | 25.20 | 20 | 23.01 | 35.04 | 23.98 | 394 | 0.08 |
| 93 | 14.98 | 34.54 | 5.32 | 0.12 | 25.64 | 30 | 20.31 | 34.92 | 24.64 | 331 | 0.12 |
| 138 | 13.92 | 34.45 | 5.10 | 0.37 | 25.80 | 50 | 16.23 | 34.66 | 25.45 | 254 | 0.18 |
| 203 | 12.52 | 34.34 | 4.96 | 0.64 | 26.00 | 75 | 15.40 | 34.55 | 25.56 | 244 | 0.24 |
| 303 | 10.84 | 34.27 | 4.80 | 1.00 | 26.26 | 100 | 14.78 | 34.52 | 25.67 | 233 | 0.30 |
| 410 | 9.16 | 34.17 | 4.65 | 1.24 | 26.46 | 125 | 14.17 | 34.47 | 25.76 | 224 | 0.36 |
| 511 | 7.16 | 34.01 | 3.80 | 1.40 | 26.64 | 150 | 13.65 | 34.42 | 25.83 | 218 | 0.42 |
| 610 | 5.50 | 34.02 | 2.61 | 2.42 | 26.86 | 200 | 12.58 | 34.34 | 25.98 | 203 | 0.52 |
| 820 | 4.02 | 34.22 | 0.67 | 3.40 | 27.19 | 250 | 11.69 | 34.30 | 26.12 | 190 | 0.62 |
| 1019 | 3.48 | 34.38 | 0.29 | 2.82 | 27.37 | 300 | 10.89 | 34.27 | 26.25 | 178 | 0.72 |
| 1219 | 3.10 | 34.51 | 0.52 | 3.48a) | 27.51 | 400 | 9.32 | 34.18 | 26.45 | 159 | 0.90 |
| | | | | | | 500 | 7.38 | 34.02 | 26.62 | 143 | 1.05 |
| | | | | | | 600 | 5.65 | 34.01 | 26.84 | 122 | 1.19 |
| | | | | | | 700 | 4.64 | 34.09 | 27.02 | 105 | 1.32 |
| | | | | | | 800 | 4.08 | 34.19 | 27.16 | 92 | 1.42 |
| | | | | | | 1000 | 3.51 | 34.36 | 27.35 | 74 | 1.60 |
| | | | | | | 1200 | 3.14 | 34.49 | 27.49 | 61 | 1.75 |

a) Alternate value, 3.00 µg at/L.

13

HUGH M. SMITH; July 26, 1958; 0726 GCT; 34°01'N, 158°54'W; wind, 180°, 20 kt; weather, missing; sea, moderate; wire angle, 21°.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 23.56 | 34.52 | 4.83 | 0.32 | 23.43 | 0 | 23.56 | 34.52 | 23.43 | 446 | 0.00 |
| 14 | 23.55 | 34.52 | 5.70 | 0.20 | 23.43 | 10 | 23.55 | 34.52 | 23.43 | 446 | 0.04 |
| 27 | 18.80 | 34.28 | 5.66 | Trace | 24.54 | 20 | 21.54 | 34.41 | 23.92 | 400 | 0.09 |
| 54 | 14.32 | 34.43 | 6.71 | 0.42 | 25.70 | 30 | 18.04 | 34.27 | 24.72 | 323 | 0.12 |
| 90 | 13.32 | 34.37 | 5.34 | 0.59 | 25.86 | 50 | 14.65 | 34.43 | 25.63 | 237 | 0.18 |
| 186 | 12.00 | 34.34 | 5.08 | 0.59 | 26.10 | 75 | 13.60 | 34.38 | 25.81 | 220 | 0.24 |
| 278 | 10.80 | 34.26 | 4.87 | 0.83 | 26.26 | 100 | 13.14 | 34.36 | 25.89 | 212 | 0.29 |
| 375 | 9.06 | 34.16 | 4.53 | 0.83 | 26.47 | 125 | 12.72 | 34.35 | 25.96 | 205 | 0.34 |
| 469 | 7.32 | 34.03 | 4.24 | 1.32 | 26.63 | 150 | 12.38 | 34.34 | 26.02 | 199 | 0.40 |
| 567 | 5.65 | 34.03 | 3.13 | 1.82 | 26.85 | 200 | 11.83 | 34.33 | 26.12 | 190 | 0.50 |
| 759 | 4.14 | 34.19 | 1.11 | 2.92 | 27.15 | 250 | 11.19 | 34.28 | 26.20 | 183 | 0.59 |
| 948 | 3.46 | 34.33 | 0.40 | 3.09 | 27.33 | 300 | 10.43 | 34.24 | 26.30 | 173 | 0.68 |
| 1140 | 3.06 | 34.46 | 0.33 | 3.17a) | 27.47 | 400 | 8.59 | 34.12 | 26.51 | 153 | 0.85 |
| | | | | | | 500 | 6.75 | 34.02 | 26.70 | 135 | 1.00 |
| | | | | | | 600 | 5.28 | 34.05 | 26.91 | 115 | 1.14 |
| | | | | | | 700 | 4.44 | 34.13 | 27.07 | 100 | 1.25 |
| | | | | | | 800 | 3.95 | 34.22 | 27.19 | 88 | 1.35 |
| | | | | | | 1000 | 3.35 | 34.36 | 27.36 | 72 | 1.53 |

14

HUGH M. SMITH; July 26, 1958; 1939 GCT; 35°44'N, 158°58'W; wind, 020°, 11 kt; weather, cloudy; sea, rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 22.78 | 34.32 | 4.99 | Trace | 23.50 | 0 | 22.78 | 34.32 | 23.50 | 439 | 0.00 |
| 9 | 22.77 | 34.33 | 4.96 | Trace | 23.51 | 10 | 22.51 | 34.32 | 23.58 | 432 | 0.04 |
| 24 | 17.90 | 34.21 | 5.87 | Trace | 24.71 | 20 | 19.41 | 34.24 | 24.36 | 358 | 0.08 |
| 54 | 13.46 | 34.28 | 6.47 | 0.32 | 25.76 | 30 | 16.62 | 34.20 | 25.01 | 296 | 0.12 |
| 107 | 12.28 | 34.30 | 5.53 | 0.70 | 26.01 | 50 | 13.77 | 34.26 | 25.68 | 232 | 0.17 |
| 202 | 11.36 | 34.28 | 5.53 | 0.70 | 26.17 | 75 | 12.90 | 34.29 | 25.88 | 213 | 0.22 |
| 301 | 10.04 | 34.18 | 4.90 | 0.70 | 26.33 | 100 | 12.38 | 34.30 | 25.99 | 202 | 0.28 |
| 408 | 8.10 | 34.13 | 4.54 | 1.16 | 26.60 | 125 | 12.06 | 34.30 | 26.05 | 196 | 0.33 |
| 512 | 6.20 | 34.00 | 3.39 | 2.00 | 26.76 | 150 | 11.79 | 34.30 | 26.10 | 192 | 0.38 |
| 619 | 4.87 | 34.05 | 2.18 | 2.20 | 26.96 | 200 | 11.37 | 34.28 | 26.17 | 186 | 0.47 |
| 828 | 3.87 | 34.21 | 0.90 | 2.52 | 27.19 | 250 | 10.77 | 34.23 | 26.24 | 179 | 0.57 |
| 1028 | 3.26 | 34.36 | 0.34 | 3.25 | 27.37 | 300 | 10.06 | 34.18 | 26.32 | 171 | 0.66 |
| 1227 | 2.89 | 34.46 | 0.39 | 3.09 | 27.49 | 400 | 8.25 | 34.13 | 26.57 | 147 | 0.82 |
| | | | | | | 500 | 6.40 | 34.01 | 26.74 | 131 | 0.97 |
| | | | | | | 600 | 5.06 | 34.03 | 26.92 | 114 | 1.10 |
| | | | | | | 700 | 4.34 | 34.10 | 27.06 | 101 | 1.21 |
| | | | | | | 800 | 3.93 | 34.18 | 27.16 | 91 | 1.32 |
| | | | | | | 1000 | 3.33 | 34.34 | 27.35 | 74 | 1.49 |
| | | | | | | 1200 | 2.94 | 34.44 | 27.47 | 63 | 1.65 |

a) Alternate value, 3.00 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

16

HUGH M. SMITH; July 27, 1958; 0810 GCT; 37°25'N, 159°09'W; wind, 210°, 8 kt; weather, cloudy; sea, slight; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.80 | 34.22 | 5.13 | Trace | 23.70 | 0 | 21.80 | 34.22 | 23.70 | 420 | 0.00 |
| 9 | 21.72 | 34.20 | 5.13 | Trace | 23.71 | 10 | 21.37 | 34.18 | 23.79 | 412 | 0.04 |
| 19 | 17.52 | 34.05 | 5.97 | 0.20 | 24.68 | 20 | 17.24 | 34.04 | 24.74 | 321 | 0.08 |
| 47 | 12.98 | 34.09 | 6.47 | 0.20 | 25.71 | 30 | 14.93 | 34.02 | 25.25 | 273 | 0.11 |
| 95 | 11.90 | 34.17 | - | - | 25.98 | 50 | 12.78 | 34.09 | 25.75 | 225 | 0.16 |
| 197 | 11.39 | 34.24 | 5.52 | 0.54 | 26.13 | 75 | 12.15 | 34.13 | 25.90 | 211 | 0.21 |
| 295 | 10.41 | 34.21 | 5.59 | 0.91 | 26.28 | 100 | 11.85 | 34.17 | 25.99 | 202 | 0.27 |
| 398 | 9.06 | 34.13 | 4.85 | 1.16 | 26.45 | 125 | 11.65 | 34.20 | 26.05 | 196 | 0.32 |
| 496 | 6.92 | 34.00 | 4.10 | 1.48 | 26.66 | 150 | 11.51 | 34.22 | 26.10 | 193 | 0.37 |
| 601 | 5.28 | 34.01 | 2.95 | 1.91 | 26.88 | 200 | 11.37 | 34.24 | 26.14 | 189 | 0.46 |
| 803 | 4.06 | 34.18 | 1.18 | 2.82 | 27.15 | 250 | 10.91 | 34.23 | 26.21 | 181 | 0.56 |
| 999 | 3.40 | 34.29 | 0.49 | 3.00 | 27.30 | 300 | 10.36 | 34.20 | 26.29 | 174 | 0.65 |
| 1196 | 2.94 | 34.40 | 0.34 | 3.09 | 27.43 | 400 | 9.02 | 34.12 | 26.45 | 159 | 0.82 |
| | | | | | | 500 | 6.85 | 33.99 | 26.67 | 138 | 0.98 |
| | | | | | | 600 | 5.29 | 34.00 | 26.87 | 119 | 1.12 |
| | | | | | | 700 | 4.49 | 34.08 | 27.03 | 104 | 1.23 |
| | | | | | | 800 | 4.07 | 34.17 | 27.14 | 93 | 1.34 |
| | | | | | | 1000 | 3.40 | 34.29 | 27.30 | 78 | 1.52 |

17

HUGH M. SMITH; July 27, 1958; 1936 GCT; 38°35'N, 159°13'W; wind, 250°, 14 kt; weather, overcast; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 20.94 | 34.14 | 5.06 | Trace | 23.88 | 0 | 20.94 | 34.14 | 23.88 | 404 | 0.00 |
| 10 | 20.93 | 34.14 | 5.01 | Trace | 23.88 | 10 | 20.93 | 34.14 | 23.88 | 403 | 0.04 |
| 20 | 15.55 | 34.15 | 6.37 | Trace | 25.22 | 20 | 15.55 | 34.15 | 25.21 | 276 | 0.07 |
| 50 | 12.44 | 34.20 | 5.66 | 0.26 | 25.90 | 30 | 14.40 | 34.16 | 25.47 | 252 | 0.10 |
| 100 | 10.98 | 34.20 | 5.46 | 0.59 | 26.18 | 50 | 12.44 | 34.20 | 25.90 | 211 | 0.15 |
| 206 | 10.36 | 34.17 | 5.63 | 0.50 | 26.26 | 75 | 11.37 | 34.20 | 26.11 | 192 | 0.20 |
| 308 | 9.71 | 34.18 | 4.91 | 1.00 | 26.38 | 100 | 10.98 | 34.20 | 26.18 | 185 | 0.25 |
| 415 | 7.69 | 34.07 | 4.31 | 1.64 | 26.61 | 125 | 10.68 | 34.19 | 26.22 | 180 | 0.29 |
| 518 | 5.97 | 33.98 | 3.54 | 1.64 | 26.77 | 150 | 10.48 | 34.18 | 26.25 | 178 | 0.34 |
| 627 | 4.81 | 34.03 | 2.30 | 2.20 | 26.95 | 200 | 10.35 | 34.17 | 26.26 | 176 | 0.43 |
| 836 | 3.76 | 34.24 | 0.85 | 3.00 | 27.23 | 250 | 10.16 | 34.17 | 26.30 | 173 | 0.52 |
| 1038 | 3.20 | 34.33 | 0.41 | 3.00 | 27.35 | 300 | 9.78 | 34.18 | 26.37 | 167 | 0.61 |
| 1241 | 2.81 | 34.42 | 0.32 | 2.63a) | 27.46 | 400 | 8.01 | 34.08 | 26.57 | 147 | 0.77 |
| | | | | | | 500 | 6.24 | 33.99 | 26.75 | 131 | 0.91 |
| | | | | | | 600 | 5.05 | 34.00 | 26.90 | 116 | 1.04 |
| | | | | | | 700 | 4.33 | 34.10 | 27.06 | 101 | 1.16 |
| | | | | | | 800 | 3.87 | 34.20 | 27.19 | 89 | 1.26 |
| | | | | | | 1000 | 3.28 | 34.31 | 27.33 | 75 | 1.44 |
| | | | | | | 1200 | 2.89 | 34.40 | 27.44 | 65 | 1.59 |

a) Alternate value, 4.00 µg at/L.

HBL

HMS-46

| | OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| | m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 19 | HUGH M. SMITH; July 28, 1958; 0735 GCT; 39°40'N, 159°15'W; wind, 300°, 14 kt; weather, missing; sea, missing; wire angle, 00°. | | | | | | | | | | | |
| | 0 | 19.18 | 33.96 | 5.36 | 0.32 | 24.20 | 0 | 19.18 | 33.96 | 24.20 | 373 | 0.00 |
| | 10 | 19.20 | 33.98 | 5.33 | 0.37 | 24.21 | 10 | 19.20 | 33.98 | 24.21 | 372 | 0.04 |
| | 20 | 15.32 | 34.10 | 6.58 | 0.37 | 25.23 | 20 | 15.32 | 34.10 | 25.23 | 276 | 0.07 |
| | 49 | 12.33 | 34.13 | 5.69 | 0.54 | 25.87 | 30 | 13.51 | 34.13 | 25.64 | 237 | 0.10 |
| | 97 | 10.59 | 34.20 | 5.62 | 0.64 | 26.25 | 50 | 12.27 | 34.13 | 25.88 | 214 | 0.14 |
| | 199 | 9.96 | 34.17 | 5.75 | 0.70 | 26.33 | 75 | 11.08 | 34.17 | 26.13 | 190 | 0.19 |
| | 258 | 9.72 | 34.08u | 5.74 | 0.91 | 26.30 | 100 | 10.54 | 34.20 | 26.26 | 180 | 0.24 |
| | 297 | 9.72 | 34.08 | - | - | 26.30 | 125 | 10.20 | 34.21 | 26.32 | 174 | 0.28 |
| | 354 | 8.14 | 34.04 | 4.34 | 1.73 | 26.52 | 150 | 9.99 | 34.21 | 26.36 | 171 | 0.32 |
| | 399 | 8.14 | 34.04 | - | - | 26.52 | 200 | 9.95 | 34.16 | 26.33 | 174 | 0.41 |
| | 499 | 5.96 | 33.94 | 3.64 | 2.10 | 26.74 | 250 | 9.74 | 34.09 | 26.31 | 178 | 0.50 |
| | 604 | 4.67 | 34.03 | 2.35 | 2.92 | 26.97 | 300 | 9.64 | 34.07 | 26.31 | 178 | 0.59 |
| | 813 | 3.85 | 34.21 | 1.01 | 2.92 | 27.20 | 400 | 8.12 | 34.03 | 26.52 | 159 | 0.76 |
| | 1015 | 3.24 | 34.32 | 0.50 | 3.00 | 27.34 | 500 | 5.94 | 33.94 | 26.74 | 137 | 0.90 |
| | 1217 | 2.84 | 34.42 | 0.34 | 3.09 | 27.46 | 600 | 4.70 | 34.02 | 26.96 | 117 | 1.03 |
| | | | | | | | 700 | 4.14 | 34.11 | 27.09 | 104 | 1.14 |
| | | | | | | | 800 | 3.86 | 34.20 | 27.19 | 96 | 1.24 |
| | | | | | | | 1000 | 3.28 | 34.31 | 27.33 | 82 | 1.42 |
| | | | | | | | 1200 | 2.87 | 34.41 | 27.45 | 72 | 1.57 |
| 22 | HUGH M. SMITH; July 29, 1958; 1844 GCT; 40°48'N, 159°39'W; wind, 010°, 8 kt; weather, drizzle; sea, slight; wire angle, 01°. | | | | | | | | | | | |
| | 0 | 17.26 | 34.00 | 5.68 | 0.12 | 24.71 | 0 | 17.26 | 34.00 | 24.71 | 325 | 0.00 |
| | 10 | 17.02 | 34.00 | 5.75 | 0.20 | 24.76 | 10 | 17.02 | 34.00 | 24.76 | 320 | 0.03 |
| | 21 | 14.06 | 34.19 | 6.55 | 0.12 | 25.57 | 20 | 14.36 | 34.17 | 25.49 | 251 | 0.06 |
| | 51 | 12.20 | 34.25 | 5.83 | 0.32 | 25.99 | 30 | 12.98 | 34.24 | 25.83 | 218 | 0.08 |
| | 102 | 11.18 | 34.32 | 5.57 | 0.54 | 26.23 | 50 | 12.18 | 34.25 | 25.99 | 203 | 0.13 |
| | 209 | 9.94 | 34.20 | 5.61 | 0.46 | 26.36 | 75 | 11.53 | 34.29 | 26.15 | 190 | 0.18 |
| | 311 | 8.83 | 34.10 | 4.80 | 0.91 | 26.46 | 100 | 11.19 | 34.31 | 26.23 | 182 | 0.22 |
| | 418 | 6.76 | 34.02 | 4.16 | 1.73 | 26.70 | 125 | 10.86 | 34.30 | 26.28 | 178 | 0.27 |
| | 520 | 5.29 | 34.00 | 3.19 | 1.73 | 26.87 | 150 | 10.54 | 34.28 | 26.32 | 174 | 0.31 |
| | 626 | 4.52 | 34.06 | 1.97 | 2.30 | 27.01 | 200 | 10.02 | 34.21 | 26.36 | 172 | 0.40 |
| | 833 | 3.74 | 34.25 | 0.94 | 3.00 | 27.24 | 250 | 9.54 | 34.15 | 26.39 | 169 | 0.48 |
| | 1033 | 3.22 | 34.35 | 0.52 | 3.09 | 27.37 | 300 | 8.97 | 34.11 | 26.45 | 165 | 0.57 |
| | 1237 | 2.80 | 34.43 | 0.40 | 3.40a) | 27.47 | 400 | 7.12 | 34.03 | 26.66 | 145 | 0.72 |
| | | | | | | | 500 | 5.53 | 33.99 | 26.84 | 128 | 0.86 |
| | | | | | | | 600 | 4.66 | 34.04 | 26.98 | 115 | 0.98 |
| | | | | | | | 700 | 4.17 | 34.12 | 27.10 | 104 | 1.09 |
| | | | | | | | 800 | 3.82 | 34.21 | 27.21 | 94 | 1.19 |
| | | | | | | | 1000 | 3.29 | 34.33 | 27.35 | 80 | 1.36 |
| | | | | | | | 1200 | 2.88 | 34.41 | 27.45 | 71 | 1.51 |

a) Alternate value, 1.91 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; July 30, 1958; 0705 GCT; 41°20'N, 159°56'W; wind, 350°, 8 kt; weather, cloudy; sea, slight; wire angle, 00°. | | | | | | | | | | | 26 |
| 0 | 16.12 | 33.80 | 5.86 | 0.42 | 24.82 | 0 | 16.12 | 33.80 | 24.82 | 314 | 0.00 |
| 9 | 16.08 | 33.85 | 5.91 | 0.42 | 24.87 | 10 | 16.03 | 33.84 | 24.87 | 309 | 0.03 |
| 20 | 15.20 | 33.79 | 6.02 | 0.42 | 25.02 | 20 | 15.20 | 33.79 | 25.02 | 295 | 0.06 |
| 48 | 11.11 | 33.98 | 6.10 | 0.54 | 25.98 | 30 | 13.76 | 33.83 | 25.35 | 263 | 0.09 |
| 99 | 9.73 | 34.10 | 5.94 | 0.59 | 26.32 | 50 | 10.98 | 33.98 | 26.01 | 201 | 0.14 |
| 203 | 8.92 | 33.99 | 6.00 | 0.83 | 26.36 | 75 | 10.25 | 34.06 | 26.20 | 183 | 0.18 |
| 305 | 7.72 | 34.07 | 4.38 | 1.48 | 26.61 | 100 | 9.72 | 34.10 | 26.32 | 171 | 0.23 |
| 412 | 5.90 | 33.98 | 3.64 | 2.10 | 26.78 | 125 | 9.42 | 34.08 | 26.35 | 168 | 0.27 |
| 515 | 4.84 | 34.00 | 2.64 | 2.20 | 26.92 | 150 | 9.19 | 34.06 | 26.37 | 166 | 0.31 |
| 621 | 4.29 | 34.12 | 1.74 | 2.30 | 27.08 | 200 | 8.93 | 33.99 | 26.36 | 167 | 0.40 |
| 827 | 3.64 | 34.27 | 0.92 | 2.82 | 27.26 | 250 | 8.42 | 34.02 | 26.46 | 158 | 0.48 |
| 1028 | 3.12 | 34.37 | 0.47 | 3.00 | 27.39 | 300 | 7.79 | 34.06 | 26.59 | 146 | 0.56 |
| 1227 | 2.78 | 34.44 | 0.52 | 2.82 | 27.48 | 400 | 6.10 | 33.99 | 26.76 | 129 | 0.70 |
| | | | | | | 500 | 4.96 | 33.99 | 26.90 | 116 | 0.83 |
| | | | | | | 600 | 4.37 | 34.09 | 27.05 | 102 | 0.95 |
| | | | | | | 700 | 4.00 | 34.18 | 27.16 | 92 | 1.05 |
| | | | | | | 800 | 3.71 | 34.25 | 27.24 | 84 | 1.14 |
| | | | | | | 1000 | 3.18 | 34.35 | 27.37 | 71 | 1.31 |
| | | | | | | 1200 | 2.83 | 34.43 | 27.47 | 62 | 1.46 |
| HUGH M. SMITH; July 31, 1958; 0705 GCT; 41°46'N, 159°24'W; wind, 310°, 6 kt; weather, sky obscured; sea, slight; wire angle, 00°. | | | | | | | | | | | 29 |
| 0 | 14.62 | 33.47 | 5.82 | 0.54 | 24.90 | 0 | 14.62 | 33.47 | 24.90 | 307 | 0.00 |
| 9 | 14.76u | 33.47 | 5.74 | 0.46 | 24.87 | 10 | 14.74 | 33.47 | 24.87 | 309 | 0.03 |
| 20 | 14.30 | 33.59 | 5.93 | 0.54 | 25.06 | 20 | 14.30 | 33.59 | 25.06 | 291 | 0.06 |
| 49 | 10.54 | 33.84 | 6.19 | 0.64 | 25.97 | 30 | 13.10 | 33.68 | 25.37 | 261 | 0.09 |
| 99 | 8.90 | 33.95 | 5.91 | 0.91 | 26.33 | 50 | 10.47 | 33.84 | 25.99 | 203 | 0.14 |
| 203 | 8.66 | 33.95 | 5.85 | 0.91 | 26.37 | 75 | 9.24 | 33.92 | 26.26 | 177 | 0.18 |
| 304 | 7.44 | 34.02 | 4.25 | 1.64 | 26.61 | 100 | 8.89 | 33.95 | 26.33 | 170 | 0.23 |
| 412 | 5.60 | 33.95 | 3.65 | 1.82 | 26.79 | 125 | 8.88 | 33.96 | 26.34 | 169 | 0.27 |
| 515 | 4.42 | 34.01 | 2.48 | 2.82 | 26.98 | 150 | 8.86 | 33.96 | 26.35 | 169 | 0.31 |
| 625 | 4.20 | 34.10 | 1.63 | 2.92 | 27.07 | 200 | 8.64 | 33.95 | 26.37 | 166 | 0.40 |
| 835 | 3.56 | 34.25 | 0.73 | 3.17 | 27.26 | 250 | 8.18 | 33.98 | 26.47 | 157 | 0.48 |
| 1033 | 3.12 | 34.35 | 0.54 | 3.40 | 27.38 | 300 | 7.50 | 34.01 | 26.59 | 146 | 0.56 |
| 1213 | 2.78 | 34.43 | 0.33 | 3.35 | 27.47 | 400 | 5.80 | 33.95 | 26.77 | 128 | 0.70 |
| | | | | | | 500 | 4.55 | 33.99 | 26.95 | 112 | 0.83 |
| | | | | | | 600 | 4.21 | 34.07 | 27.05 | 102 | 0.94 |
| | | | | | | 700 | 3.98 | 34.15 | 27.13 | 94 | 1.04 |
| | | | | | | 800 | 3.67 | 34.22 | 27.22 | 86 | 1.14 |
| | | | | | | 1000 | 3.19 | 34.33 | 27.36 | 73 | 1.31 |
| | | | | | | 1200 | 2.80 | 34.42 | 27.46 | 63 | 1.46 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 33 | HUGH M. SMITH; August 1, 1958; 0654 GCT; 41°09'N, 158°24'W; wind, 360°, 7 kt; weather, overcast; sea, slight; wire angle, 04°. | | | | | | | | | | |
| 0 | 16.38 | 33.64 | 5.79 | 0.42 | 24.64 | 0 | 16.38 | 33.64 | 24.64 | 331 | 0.00 |
| 10 | - | 33.66 | 5.73 | 0.26 | | 10 | 16.41 | 33.66 | 24.64 | 331 | 0.03 |
| 20 | 14.28 | 34.01 | 6.60 | 0.32 | 25.38 | 20 | 14.28 | 34.01 | 25.38 | 260 | 0.06 |
| 50 | 11.22 | 34.10 | 5.87 | 0.54 | 26.06 | 30 | 12.87 | 34.84 | 26.31 | 172 | 0.08 |
| 100 | 10.50 | 34.27 | 5.60 | 0.76 | 26.32 | 50 | 11.22 | 34.10 | 26.06 | 196 | 0.12 |
| 203 | 9.21 | 34.11 | 5.68 | 0.50 | 26.41 | 75 | 11.00 | 34.19 | 26.16 | 186 | 0.17 |
| 305 | 8.02 | 34.11 | 4.37 | 1.08 | 26.59 | 100 | 10.50 | 34.27 | 26.32 | 172 | 0.21 |
| 412 | 6.01 | 34.01 | 3.67 | 1.91 | 26.79 | 125 | 10.17 | 34.25 | 26.36 | 168 | 0.26 |
| 514 | 4.84 | 33.99 | 2.74 | 2.42 | 26.92 | 150 | 9.85 | 34.22 | 26.39 | 165 | 0.30 |
| 623 | 4.35 | 34.10 | 1.82 | 2.00 | 27.06 | 200 | 9.25 | 34.11 | 26.40 | 163 | 0.38 |
| 831 | 3.58 | 34.25 | 0.73 | 2.82 | 27.25 | 250 | 8.70 | 34.10 | 26.48 | 156 | 0.47 |
| 1031 | 3.08 | 34.36 | 0.51 | 2.63 | 27.39 | 300 | 8.09 | 34.10 | 26.57 | 147 | 0.54 |
| 1229 | 2.70 | 34.44 | 0.42 | 3.32 | 27.49 | 400 | 6.23 | 34.02 | 26.77 | 128 | 0.69 |
| | | | | | | 500 | 4.96 | 33.98 | 26.89 | 117 | 0.81 |
| | | | | | | 600 | 4.42 | 34.07 | 27.02 | 104 | 0.93 |
| | | | | | | 700 | 4.04 | 34.16 | 27.14 | 94 | 1.04 |
| | | | | | | 800 | 3.68 | 34.23 | 27.23 | 85 | 1.13 |
| | | | | | | 1000 | 3.15 | 34.34 | 27.37 | 72 | 1.30 |
| | | | | | | 1200 | 2.76 | 34.42 | 27.47 | 63 | 1.45 |
| 37 | HUGH M. SMITH; August 2, 1958; 0705 GCT; 42°19'N, 158°22'W; wind, 350°, 8 kt; weather, missing; sea, smooth; wire angle, 07°. | | | | | | | | | | |
| 0 | 15.36 | 33.67 | 5.97 | 0.54 | 24.89 | 0 | 15.36 | 33.67 | 24.89 | 307 | 0.00 |
| 15 | 15.29 | 33.69 | 5.94 | 0.42 | 24.92 | 10 | 15.31 | 33.68 | 24.91 | 306 | 0.03 |
| 29 | 11.05 | 33.86 | 6.72 | 0.54 | 25.90 | 20 | 13.83 | 33.75 | 25.28 | 270 | 0.06 |
| 49 | 10.24 | 33.84 | 6.13 | 0.64 | 26.03 | 30 | 10.93 | 33.86 | 25.92 | 209 | 0.08 |
| 97 | 9.05 | 33.99 | 5.90 | 0.64 | 26.34 | 50 | 10.21 | 33.84 | 26.03 | 199 | 0.12 |
| 200 | 8.64 | 33.98 | 5.92 | 0.12 | 26.40 | 75 | 9.65 | 33.91 | 26.18 | 184 | 0.17 |
| 297 | 7.08 | 34.05 | 4.25 | 1.32 | 26.68 | 100 | 9.03 | 33.99 | 26.34 | 169 | 0.22 |
| 399 | 5.39 | 34.00 | 3.42 | 2.52 | 26.86 | 125 | 8.86 | 34.00 | 26.38 | 166 | 0.26 |
| 498 | 4.58 | 34.06 | 2.37 | 2.92 | 27.00 | 150 | 8.74 | 34.00 | 26.40 | 164 | 0.30 |
| 602 | 4.19 | 34.14 | 1.45 | 2.92 | 27.10 | 200 | 8.64 | 33.98 | 26.40 | 164 | 0.38 |
| 807 | 3.55 | 34.30 | 1.66a) | 2.92 | 27.30 | 250 | 7.91 | 34.01 | 26.53 | 151 | 0.47 |
| 1005 | 3.08 | 34.41 | 0.48 | 3.25 | 27.43 | 300 | 7.02 | 34.04 | 26.68 | 137 | 0.54 |
| 1205 | 2.73 | 34.46 | 0.45 | 2.63 | 27.50 | 400 | 5.38 | 34.00 | 26.86 | 120 | 0.67 |
| | | | | | | 500 | 4.57 | 34.06 | 27.00 | 107 | 0.79 |
| | | | | | | 600 | 4.20 | 34.13 | 27.10 | 98 | 0.90 |
| | | | | | | 700 | 3.86 | 34.21 | 27.19 | 88 | 1.00 |
| | | | | | | 800 | 3.57 | 34.29 | 27.29 | 79 | 1.09 |
| | | | | | | 1000 | 3.09 | 34.40 | 27.42 | 67 | 1.25 |
| | | | | | | 1200 | 2.74 | 34.45 | 27.49 | 60 | 1.39 |

a) Value uncertain; not used in interpolation.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

40

HUGH M. SMITH; August 3, 1958; 0716 GCT; 43°10'N, 158°47'W; wind, 280°, 13 kt; weather, overcast; sea, moderate; wire angle, 27°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.56 | 33.35 | 6.04 | - | 25.02 | 0 | 13.56 | 33.35 | 25.02 | 294 | 0.00 |
| 13 | - | 33.30 | 6.02 | 0.83 | | 10 | 13.55 | 33.31 | 24.99 | 297 | 0.03 |
| 26 | 13.13 | 33.32 | 6.22 | 1.00 | 25.09 | 20 | 13.50 | 33.29 | 24.99 | 298 | 0.06 |
| 43 | 9.65 | 33.57 | 6.49 | 1.00 | 25.92 | 30 | 12.39 | 33.37 | 25.27 | 271 | 0.09 |
| 87 | 7.99 | 33.66 | 6.27 | 1.08 | 26.25 | 50 | 9.00 | 33.61 | 26.05 | 197 | 0.13 |
| 178 | 7.64 | 33.76 | 6.08 | 1.08 | 26.37 | 75 | 7.87 | 33.67 | 26.27 | 176 | 0.18 |
| 265 | 6.82 | 33.99 | 4.24 | 2.00 | 26.67 | 100 | 7.83 | 33.67 | 26.28 | 175 | 0.23 |
| 356 | 5.25 | 33.92 | 3.54 | 3.09 | 26.81 | 125 | 7.62 | 33.70 | 26.33 | 170 | 0.27 |
| 445 | 4.50 | 33.94 | 2.69 | 3.40 | 26.91 | 150 | 7.55 | 33.72 | 26.36 | 168 | 0.31 |
| 537 | 4.22 | 34.04 | 1.85 | 3.56 | 27.02 | 200 | 7.49 | 33.82 | 26.44 | 160 | 0.40 |
| 718 | 3.78 | 34.21 | 0.95 | 3.72 | 27.20 | 250 | 7.00 | 33.95 | 26.61 | 143 | 0.47 |
| 900 | 3.30 | 34.30 | 0.77 | 4.10 | 27.32 | 300 | 6.21 | 33.97 | 26.73 | 132 | 0.54 |
| 1091 | 2.92 | 34.41 | 0.54 | 3.90 | 27.44 | 400 | 4.80 | 33.92 | 26.86 | 120 | 0.67 |
| | | | | | | 500 | 4.30 | 33.99 | 26.97 | 109 | 0.79 |
| | | | | | | 600 | 4.06 | 34.10 | 27.09 | 98 | 0.90 |
| | | | | | | 700 | 3.82 | 34.19 | 27.18 | 89 | 1.00 |
| | | | | | | 800 | 3.56 | 34.25 | 27.26 | 82 | 1.09 |
| | | | | | | 1000 | 3.10 | 34.35 | 27.38 | 71 | 1.26 |

41

HUGH M. SMITH; August 4, 1958; 0553 GCT; 44°16'N, 158°57'W; wind, 250°, 25 kt; weather, moderate rain; sea, very rough; wire angle, 21°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.62 | 33.25 | 6.09 | 0.54 | 25.13 | 0 | 12.62 | 33.25 | 25.13 | 284 | 0.00 |
| 19 | 12.64 | 33.27 | 6.63 | 0.64 | 25.14 | 10 | 12.63 | 33.26 | 25.14 | 284 | 0.03 |
| 34 | 9.23 | 33.39 | 6.60 | 0.91 | 25.84 | 20 | 12.44 | 33.27 | 25.19 | 279 | 0.06 |
| 77 | 7.36 | 33.53 | 6.72 | 1.24 | 26.23 | 30 | 10.22 | 33.35 | 25.65 | 235 | 0.08 |
| 131 | 7.15 | 33.63 | 6.27 | 1.40 | 26.34 | 50 | 7.76 | 33.46 | 26.12 | 191 | 0.12 |
| 214 | 7.33 | 33.98 | 4.71 | 1.73 | 26.59 | 75 | 7.30 | 33.52 | 26.24 | 180 | 0.17 |
| 319 | 5.43 | 33.91 | - | 2.52 | 26.78 | 100 | 7.11 | 33.57 | 26.30 | 174 | 0.22 |
| 430 | 4.43 | 33.94 | 2.82 | 2.73 | 26.92 | 125 | 7.11 | 33.61 | 26.34 | 171 | 0.26 |
| 536 | 4.11 | 34.06 | 1.72 | 3.40 | 27.05 | 150 | 7.23 | 33.71 | 26.40 | 166 | 0.30 |
| 642 | 3.89 | 34.17 | 1.32 | 3.40 | 27.16 | 200 | 7.33 | 33.92 | 26.55 | 153 | 0.38 |
| 864 | 3.31 | 34.30 | 0.66 | 3.40 | 27.32 | 250 | 6.76 | 33.98 | 26.67 | 141 | 0.45 |
| 1055 | 2.92 | 34.40 | 0.50 | 3.56 | 27.44 | 300 | 5.83 | 33.94 | 26.76 | 133 | 0.52 |
| 1251 | 2.65 | 34.45 | 0.56 | 3.48 | 27.50 | 400 | 4.62 | 33.92 | 26.89 | 121 | 0.65 |
| | | | | | | 500 | 4.18 | 34.01 | 27.01 | 110 | 0.77 |
| | | | | | | 600 | 3.97 | 34.12 | 27.12 | 100 | 0.87 |
| | | | | | | 700 | 3.74 | 34.21 | 27.21 | 93 | 0.97 |
| | | | | | | 800 | 3.48 | 34.27 | 27.28 | 86 | 1.06 |
| | | | | | | 1000 | 3.02 | 34.37 | 27.41 | 75 | 1.22 |
| | | | | | | 1200 | 2.72 | 34.43 | 27.48 | 68 | 1.36 |

42

HUGH M. SMITH; August 4, 1958; 1944 GCT; 43°49'N, 159°55'W; wind, 250°, 22 kt; weather, sky obscured; sea, very rough; wire angle, 06°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.12 | 33.20 | 6.14 | 0.83 | 25.19 | 0 | 12.12 | 33.20 | 25.19 | 279 | 0.00 |
| 20 | 12.15 | 33.19 | 6.11 | 0.70 | 25.18 | 10 | 12.13 | 33.19 | 25.18 | 279 | 0.03 |
| 34 | 10.11 | 33.29 | 6.50 | 0.70 | 25.62 | 20 | 12.15 | 33.19 | 25.18 | 280 | 0.06 |
| 78 | 6.82 | 33.40 | 6.54 | 1.00 | 26.21 | 30 | 10.75 | 33.25 | 25.48 | 251 | 0.08 |
| 133 | 6.44 | 33.50 | 6.36 | 1.00 | 26.33 | 50 | 8.49 | 33.34 | 25.92 | 209 | 0.13 |
| 217 | 6.78 | 33.94 | 4.29 | 1.48 | 26.64 | 75 | 6.93 | 33.39 | 26.18 | 184 | 0.18 |
| 328 | 5.23 | 33.92 | 3.53 | 2.20 | 26.82 | 100 | 6.60 | 33.43 | 26.26 | 177 | 0.22 |
| 447 | 4.28 | 34.02 | 2.37 | 2.63 | 27.00 | 125 | 6.48 | 33.48 | 26.31 | 172 | 0.27 |
| 561 | 3.98 | 34.15 | 1.46 | 2.42 | 27.13 | 150 | 6.52 | 33.59 | 26.39 | 164 | 0.31 |
| 675 | 3.78 | 34.21 | 0.96 | 3.00 | 27.20 | 200 | 7.10 | 33.85 | 26.52 | 152 | 0.39 |
| 897 | 3.20 | 34.34 | 0.69 | 3.17 | 27.36 | 250 | 6.40 | 33.96 | 26.70 | 135 | 0.46 |
| 1113 | 2.80 | 34.44 | 0.57 | 3.17 | 27.48 | 300 | 5.70 | 33.95 | 26.78 | 127 | 0.53 |
| 1313 | 2.53 | 34.55 | 0.61 | 3.00 | 27.59 | 400 | 4.57 | 33.97 | 26.93 | 113 | 0.66 |
| | | | | | | 500 | 4.10 | 34.08 | 27.07 | 100 | 0.77 |
| | | | | | | 600 | 3.91 | 34.17 | 27.16 | 92 | 0.87 |
| | | | | | | 700 | 3.72 | 34.22 | 27.22 | 86 | 0.96 |
| | | | | | | 800 | 3.46 | 34.28 | 27.29 | 79 | 1.05 |
| | | | | | | 1000 | 2.99 | 34.38 | 27.41 | 67 | 1.21 |
| | | | | | | 1200 | 2.68 | 34.48 | 27.52 | 57 | 1.35 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **43** | HUGH M. SMITH; August 5, 1958; 0739 GCT; 45°00'N, 159°23'W; wind, 290°, 17 kt; weather, slight drizzle; sea, very rough; wire angle, 25°. | | | | | | | | | | |
| 0 | 11.87 | 33.26 | 6.19 | 0.50 | 25.28 | 0 | 11.87 | 33.26 | 25.28 | 270 | 0.00 |
| 18 | 11.79u | 33.28 | 6.14 | 0.42 | 25.31 | 10 | 11.83 | 33.27 | 25.30 | 268 | 0.03 |
| 31 | 11.46 | 33.36 | 6.27 | 0.42 | 25.44 | 20 | 11.76 | 33.29 | 25.33 | 265 | 0.05 |
| 72 | 7.62 | 33.51 | 6.42 | 1.00 | 26.18 | 30 | 11.50 | 33.35 | 25.42 | 257 | 0.08 |
| 121 | 6.80 | 33.56 | 6.28 | 0.70a) | 26.33 | 50 | 9.77 | 33.44 | 25.79 | 221 | 0.13 |
| 197 | 6.90 | 34.05 | 4.44 | 1.64 | 26.71 | 75 | 7.50 | 33.51 | 26.20 | 183 | 0.18 |
| 297 | 5.13 | 33.97 | 3.65 | 1.64 | 26.87 | 100 | 6.86 | 33.53 | 26.30 | 173 | 0.22 |
| 401 | 4.42 | 34.01 | 2.61 | 2.20 | 26.98 | 125 | 6.80 | 33.58 | 26.35 | 168 | 0.27 |
| 503 | 4.22 | 34.11 | 1.73 | 2.63 | 27.08 | 150 | 7.00 | 33.74 | 26.45 | 159 | 0.31 |
| 608 | 3.93 | 34.20 | 1.18 | 3.00 | 27.18 | 200 | 6.85 | 34.05 | 26.71 | 134 | 0.38 |
| 818 | 3.40 | 34.32 | 0.68 | 3.00 | 27.33 | 250 | 6.03 | 34.05 | 26.82 | 124 | 0.45 |
| 1028 | 2.94 | 34.43 | 0.63 | 3.17 | 27.46 | 300 | 5.10 | 33.97 | 26.87 | 119 | 0.51 |
| 1226 | 2.64 | 34.45 | 0.54 | 3.09 | 27.50 | 400 | 4.42 | 34.00 | 26.97 | 110 | 0.63 |
| | | | | | | 500 | 4.22 | 34.10 | 27.07 | 100 | 0.74 |
| | | | | | | 600 | 3.95 | 34.19 | 27.17 | 91 | 0.84 |
| | | | | | | 700 | 3.69 | 34.25 | 27.24 | 84 | 0.93 |
| | | | | | | 800 | 3.44 | 34.31 | 27.32 | 77 | 1.02 |
| | | | | | | 1000 | 3.00 | 34.41 | 27.44 | 65 | 1.17 |
| | | | | | | 1200 | 2.68 | 34.44 | 27.49 | 60 | 1.31 |
| **44** | HUGH M. SMITH; August 5, 1958; 1734 GCT; 46°06'N, 159°40'W; wind, 290°, 19 kt; weather, overcast; sea, moderate; wire angle, 23°. | | | | | | | | | | |
| 0 | 10.68 | 33.07 | 6.25 | 0.83 | 25.35 | 0 | 10.68 | 33.07 | 25.35 | 263 | 0.00 |
| 13 | 10.70 | 33.08 | 6.22 | 0.70 | 25.36 | 10 | 10.70 | 33.07 | 25.35 | 264 | 0.03 |
| 32 | 10.68 | 33.11 | 6.26 | 0.59 | 25.38 | 20 | 10.70 | 33.07 | 25.35 | 264 | 0.05 |
| 45 | 7.90 | 33.33 | 6.77 | 0.59 | 26.00 | 30 | 10.80 | 33.09 | 25.35 | 264 | 0.08 |
| 87 | 6.57 | 33.43 | 6.58 | 0.76 | 26.26 | 50 | 7.41 | 33.36 | 26.09 | 193 | 0.12 |
| 173 | 6.38 | 33.63 | 6.04a) | 0.50 | 26.44 | 75 | 6.70 | 33.42 | 26.24 | 179 | 0.17 |
| 276 | 5.33 | 33.92 | 3.94 | 1.64 | 26.80 | 100 | 6.45 | 33.45 | 26.29 | 174 | 0.22 |
| 373 | 4.34 | 34.00 | 2.80 | 2.41 | 26.98 | 125 | 6.10 | 33.51 | 26.39 | 165 | 0.26 |
| 467 | 4.03 | 34.05 | 0.22b) | 2.82 | 27.05 | 150 | 6.15 | 33.57 | 26.43 | 161 | 0.30 |
| 569 | 3.84 | 34.13 | 1.32 | 2.00 | 27.13 | 200 | 6.35 | 33.71 | 26.51 | 153 | 0.38 |
| 772 | 3.45 | 34.32 | 0.81 | 2.82 | 27.32 | 250 | 5.80 | 33.85 | 26.69 | 136 | 0.45 |
| 952 | 3.04 | 34.40 | 0.66 | 3.32 | 27.42 | 300 | 5.05 | 33.95 | 26.86 | 120 | 0.52 |
| 1141 | 2.74 | 34.45 | 0.72 | 3.17c) | 27.49 | 400 | 4.21 | 34.01 | 27.00 | 107 | 0.64 |
| | | | | | | 500 | 3.96 | 34.07 | 27.07 | 100 | 0.74 |
| | | | | | | 600 | 3.78 | 34.16 | 27.16 | 91 | 0.84 |
| | | | | | | 700 | 3.59 | 34.25 | 27.25 | 83 | 0.93 |
| | | | | | | 800 | 3.38 | 34.33 | 27.34 | 75 | 1.02 |
| | | | | | | 1000 | 2.96 | 34.41 | 27.44 | 65 | 1.17 |

a) Value uncertain; used in interpolation.
b) Value uncertain; not used in interpolation.
c) Alternate value, 2.63 µg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

45

HUGH M. SMITH; August 6, 1958; 0140 GCT; 47°04'N, 159°44'W; wind, 300°, 12 kt; weather, overcast; sea, moderate; wire angle, 23°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.40 | 32.99 | 6.39 | 1.48 | 25.34 | 0 | 10.40 | 32.99 | 25.34 | 265 | 0.00 |
| 13 | 10.36 | 32.98 | 6.40 | 1.00 | 25.34 | 10 | 10.37 | 32.98 | 25.33 | 265 | 0.03 |
| 31 | 10.30 | 33.03 | 6.38 | 0.83 | 25.39 | 20 | 10.35 | 32.99 | 25.35 | 264 | 0.05 |
| 44 | 6.91 | 33.09 | 6.94 | 1.48 | 25.95 | 30 | 10.37 | 33.02 | 25.37 | 262 | 0.08 |
| 85 | 5.41 | 33.19 | 6.75 | 1.48 | 26.22 | 50 | 6.22 | 33.10 | 26.05 | 197 | 0.13 |
| 170 | 5.38 | 33.80 | 4.51 | 1.82 | 26.70 | 75 | 5.50 | 33.16 | 26.18 | 184 | 0.17 |
| 273 | 3.94 | 33.86 | 3.04 | 2.82 | 26.91 | 100 | 5.29 | 33.29 | 26.31 | 172 | 0.22 |
| 368 | 3.72 | 34.00 | 2.03 | 2.63 | 27.04 | 125 | 5.20 | 33.47 | 26.46 | 158 | 0.26 |
| 460 | 3.78 | 34.08 | 1.37 | 2.82 | 27.10 | 150 | 5.60 | 33.65 | 26.56 | 149 | 0.30 |
| 557 | 3.70 | 34.20 | 1.00 | 3.32 | 27.20 | 200 | 4.98 | 33.85 | 26.79 | 127 | 0.37 |
| 748 | 3.32 | 34.33 | 0.72 | 3.00 | 27.34 | 250 | 4.27 | 33.87 | 26.88 | 118 | 0.43 |
| 936 | 2.93 | 34.38 | 0.63 | 3.17 | 27.42 | 300 | 3.81 | 33.89 | 26.95 | 112 | 0.49 |
| 1132 | 2.66 | 34.42 | 0.64 | 3.32 | 27.47 | 400 | 3.73 | 34.02 | 27.06 | 101 | 0.60 |
| | | | | | | 500 | 3.76 | 34.12 | 27.13 | 94 | 0.70 |
| | | | | | | 600 | 3.63 | 34.23 | 27.23 | 85 | 0.79 |
| | | | | | | 700 | 3.43 | 34.30 | 27.31 | 77 | 0.88 |
| | | | | | | 800 | 3.21 | 34.34 | 27.36 | 72 | 0.96 |
| | | | | | | 1000 | 2.84 | 34.39 | 27.43 | 65 | 1.11 |

46

HUGH M. SMITH; August 6, 1958; 0956 GCT; 48°04'N, 159°42'W; wind, 280°, 13 kt; weather, overcast; sea, slight; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.57 | 32.94 | 6.41 | 1.16 | 25.44 | 0 | 9.57 | 32.94 | 25.44 | 255 | 0.00 |
| 19 | 9.54 | 32.93 | 6.45 | 1.00 | 25.43 | 10 | 9.55 | 32.93 | 25.44 | 255 | 0.03 |
| 34 | 7.24 | 33.19 | 6.92 | 1.24 | 25.98 | 20 | 9.40 | 32.94 | 25.47 | 252 | 0.05 |
| 48 | 6.42 | 33.20 | 6.89 | 1.16 | 26.10 | 30 | 7.88 | 33.12 | 25.84 | 217 | 0.07 |
| 91 | 5.63 | 33.22 | 6.65 | 1.00 | 26.21 | 50 | 6.35 | 33.19 | 26.11 | 192 | 0.12 |
| 183 | 4.51 | 33.84 | 3.74 | 2.42 | 26.83 | 75 | 5.76 | 33.20 | 26.19 | 185 | 0.16 |
| 295 | 3.84 | 33.97 | 2.20 | 3.09 | 27.01 | 100 | 5.49 | 33.27 | 26.27 | 177 | 0.21 |
| 398 | 3.76 | 34.07 | 1.40 | 3.40 | 27.09 | 125 | 5.14 | 33.43 | 26.44 | 161 | 0.25 |
| 497 | 3.68 | 34.16 | 1.01 | 2.42 | 27.17 | 150 | 4.84 | 33.59 | 26.61 | 146 | 0.29 |
| 601 | 3.52 | 34.26 | 0.79 | 3.17 | 27.27 | 200 | 4.36 | 33.88 | 26.88 | 120 | 0.35 |
| 804 | 3.12 | 34.35 | 0.65 | 3.17 | 27.38 | 250 | 4.03 | 33.96 | 26.98 | 111 | 0.41 |
| 999 | 2.76 | 34.44 | 0.65 | 3.32 | 27.48 | 300 | 3.83 | 33.97 | 27.01 | 108 | 0.47 |
| 1197 | 2.56 | 34.48 | 0.69 | 3.48a) | 27.53 | 400 | 3.76 | 34.07 | 27.09 | 101 | 0.57 |
| | | | | | | 500 | 3.68 | 34.16 | 27.18 | 94 | 0.67 |
| | | | | | | 600 | 3.52 | 34.25 | 27.27 | 86 | 0.76 |
| | | | | | | 700 | 3.33 | 34.31 | 27.33 | 81 | 0.84 |
| | | | | | | 800 | 3.13 | 34.34 | 27.38 | 76 | 0.92 |
| | | | | | | 1000 | 2.76 | 34.44 | 27.48 | 67 | 1.06 |

47

HUGH M. SMITH; August 6, 1958; 2159 GCT; 49°35'N, 159°45'W; wind, 280°, 10 kt; weather, overcast; sea, slight; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.28 | 32.82 | 6.48 | 1.82 | 25.39 | 0 | 9.28 | 32.82 | 25.39 | 260 | 0.00 |
| 15 | 9.22 | 32.84 | 6.50 | 1.82 | 25.42 | 10 | 9.24 | 32.83 | 25.40 | 258 | 0.03 |
| 35 | 9.17 | 32.82 | 6.45 | 1.40 | 25.41 | 20 | 9.22 | 32.82 | 25.40 | 259 | 0.05 |
| 49 | 6.14 | 32.92 | 7.05 | 1.48 | 25.92 | 30 | 9.18 | 32.81 | 25.40 | 259 | 0.08 |
| 93 | 4.29 | 33.06 | 6.35 | 2.00 | 26.24 | 50 | 6.03 | 32.92 | 25.93 | 208 | 0.12 |
| 188 | 3.54 | 33.87 | 2.39 | 3.32 | 26.96 | 75 | 5.00 | 33.01 | 26.12 | 190 | 0.17 |
| 305 | 3.57 | 34.01 | 1.24 | 3.81 | 27.06 | 100 | 4.15 | 33.11 | 26.29 | 174 | 0.22 |
| 412 | 3.58 | 34.15 | 0.79 | 4.00 | 27.17 | 125 | 3.75 | 33.32 | 26.50 | 154 | 0.26 |
| 512 | 3.49 | 34.21 | 0.61 | 3.40 | 27.23 | 150 | 3.53 | 33.54 | 26.69 | 136 | 0.30 |
| 619 | 3.33 | 34.28 | 0.56 | 3.25 | 27.30 | 200 | 3.52 | 33.90 | 26.98 | 108 | 0.36 |
| 825 | 2.95 | 34.37 | 0.63 | 3.64 | 27.41 | 250 | 3.49 | 34.00 | 27.06 | 101 | 0.41 |
| 1024 | 2.68 | 34.44 | 0.65 | 4.25 | 27.49 | 300 | 3.56 | 34.01 | 27.07 | 100 | 0.46 |
| 1222 | 2.44 | 34.48 | 0.77 | 3.72 | 27.54 | 400 | 3.58 | 34.13 | 27.16 | 92 | 0.56 |
| | | | | | | 500 | 3.50 | 34.20 | 27.22 | 86 | 0.65 |
| | | | | | | 600 | 3.36 | 34.26 | 27.28 | 80 | 0.74 |
| | | | | | | 700 | 3.18 | 34.32 | 27.35 | 74 | 0.82 |
| | | | | | | 800 | 3.00 | 34.36 | 27.40 | 69 | 0.90 |
| | | | | | | 1000 | 2.71 | 34.43 | 27.48 | 61 | 1.04 |
| | | | | | | 1200 | 2.47 | 34.47 | 27.53 | 56 | 1.17 |

a) Alternate value, 2.82 µg at/L.

48

HUGH M. SMITH; August 7, 1958; 0755 GCT; 50°56'N, 159°48'W; wind, 320°, 14 kt; weather, overcast; sea, slight; wire angle, 07°.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 9.20 | 32.72 | 6.47 | 1.64 | 25.33 | 0 | 9.20 | 32.72 | 25.32 | 266 | 0.00 |
| 14 | 9.18 | 32.69 | 6.56 | 1.16 | 25.30 | 10 | 9.19 | 32.69 | 25.30 | 268 | 0.03 |
| 34 | 9.03 | 32.71 | 6.60 | 1.48 | 25.34 | 20 | 9.15 | 32.68 | 25.30 | 268 | 0.05 |
| 48 | 5.69 | 32.82 | 7.16 | 1.32 | 25.89 | 30 | 9.08 | 32.69 | 25.32 | 266 | 0.08 |
| 92 | 3.98 | 33.74 | 2.30 | 2.42 | 26.81 | 50 | 5.46 | 32.85 | 25.94 | 207 | 0.13 |
| 186 | 3.92 | 33.99 | 0.66 | 3.00 | 27.01 | 75 | 4.15 | 33.36 | 26.49 | 155 | 0.17 |
| 301 | 3.72 | 34.12 | 0.53 | 3.48 | 27.14 | 100 | 3.92 | 33.80 | 26.86 | 120 | 0.21 |
| 408 | 3.58 | 34.25 | 0.53 | 3.81 | 27.25 | 125 | 3.91 | 33.96 | 26.99 | 108 | 0.24 |
| 510 | 3.42 | 34.26 | 0.53 | 3.25 | 27.28 | 150 | 3.91 | 34.04 | 27.05 | 102 | 0.26 |
| 616 | 3.24 | 34.28 | 0.47 | 3.32 | 27.31 | 200 | 3.90 | 34.01 | 27.03 | 104 | 0.31 |
| 823 | 2.87 | 34.36 | 0.57 | 3.48 | 27.41 | 250 | 3.81 | 34.07 | 27.09 | 98 | 0.37 |
| 1023 | 2.60 | 34.43 | 0.63 | 3.40 | 27.49 | 300 | 3.72 | 34.11 | 27.13 | 94 | 0.42 |
| 1226 | 2.40 | 34.49 | 0.73 | 3.56 | 27.55 | 400 | 3.59 | 34.24 | 27.25 | 83 | 0.51 |
| | | | | | | 500 | 3.44 | 34.26 | 27.28 | 81 | 0.59 |
| | | | | | | 600 | 3.27 | 34.27 | 27.30 | 78 | 0.68 |
| | | | | | | 700 | 3.09 | 34.31 | 27.35 | 74 | 0.76 |
| | | | | | | 800 | 2.91 | 34.35 | 27.40 | 69 | 0.83 |
| | | | | | | 1000 | 2.63 | 34.42 | 27.48 | 61 | 0.97 |
| | | | | | | 1200 | 2.43 | 34.48 | 27.54 | 55 | 1.10 |

49

HUGH M. SMITH; August 7, 1958; 2016 GCT; 52°35'N, 159°56'W; wind, 320°, 20 kt; weather, overcast; sea, rough; wire angle, 31°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.48 | 32.67 | 6.47 | 0.83 | 25.24 | 0 | 9.48 | 32.67 | 25.24 | 274 | 0.00 |
| 13 | 9.48 | 32.70 | 6.46 | 0.64 | 25.26 | 10 | 9.48 | 32.69 | 25.26 | 272 | 0.03 |
| 30 | 9.42 | 32.68 | 6.46 | 0.70 | 25.26 | 20 | 9.46 | 32.68 | 25.25 | 273 | 0.05 |
| 40 | 9.02 | 32.72 | 6.53 | 0.70 | 25.35 | 30 | 9.42 | 32.68 | 25.26 | 272 | 0.08 |
| 70 | 4.70 | 32.96 | 6.09 | 1.64 | 26.12 | 50 | 7.70 | 32.78 | 25.60 | 240 | 0.13 |
| 139 | 4.02 | 33.94 | 0.68 | 2.63 | 26.96 | 75 | 4.42 | 33.03 | 26.20 | 183 | 0.19 |
| 192 | 3.93 | 34.06 | 0.44 | 3.64 | 27.07 | 100 | 3.94 | 33.40 | 26.54 | 150 | 0.23 |
| 288 | 3.79 | 34.13 | 0.48 | 3.48 | 27.14 | 125 | 3.98 | 33.75 | 26.82 | 124 | 0.26 |
| 391 | 3.64 | 34.22 | 0.41 | 3.48 | 27.22 | 150 | 3.99 | 33.99 | 27.01 | 106 | 0.29 |
| 589 | 3.28 | 34.32 | 0.36 | 3.64 | 27.34 | 200 | 3.93 | 34.06 | 27.07 | 100 | 0.34 |
| 788 | 2.93 | 34.39 | 0.48 | 3.64 | 27.43 | 250 | 3.90 | 34.11 | 27.11 | 96 | 0.39 |
| 1023 | 2.58 | 34.47 | 0.54 | 3.48 | 27.52 | 300 | 3.80 | 34.14 | 27.14 | 93 | 0.44 |
| 1226 | 2.34 | 34.53 | 0.78 | 3.35 | 27.59 | 400 | 3.64 | 34.22 | 27.22 | 85 | 0.53 |
| | | | | | | 500 | 3.48 | 34.28 | 27.29 | 79 | 0.62 |
| | | | | | | 600 | 3.27 | 34.32 | 27.34 | 74 | 0.70 |
| | | | | | | 700 | 3.14 | 34.36 | 27.38 | 70 | 0.78 |
| | | | | | | 800 | 2.91 | 34.39 | 27.43 | 66 | 0.85 |
| | | | | | | 1000 | 2.61 | 34.46 | 27.51 | 58 | 0.99 |
| | | | | | | 1200 | 2.37 | 34.52 | 27.58 | 52 | 1.11 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

50

HUGH M. SMITH; August 8, 1958; 0654 GCT; 54°00'N, 159°55'W; wind, 290°, 14 kt; weather, overcast; sea, slight; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.43 | 32.38 | 6.65 | 0.32 | 24.68 | 0 | 11.43 | 32.38 | 24.68 | 327 | 0.00 |
| 20 | 11.41 | 32.48 | 6.52 | 0.42 | 24.76 | 10 | 11.42 | 32.43 | 24.72 | 323 | 0.03 |
| 29 | 8.80 | 32.75 | 6.53 | 1.48 | 25.41 | 20 | 11.41 | 32.48 | 24.76 | 319 | 0.06 |
| 54 | 5.11 | 32.91 | 6.60 | 1.91 | 26.03 | 30 | 8.58 | 32.76 | 25.45 | 254 | 0.09 |
| 107 | 4.04 | 33.69 | 2.26 | 3.17 | 26.76 | 50 | 5.46 | 32.90 | 25.98 | 203 | 0.14 |
| 216 | 4.02 | 34.05 | 0.44 | 3.32 | 27.05 | 75 | 4.10 | 33.20 | 26.37 | 167 | 0.19 |
| 326 | 3.83 | 34.17 | 0.40 | 3.00 | 27.17 | 100 | 4.00 | 33.58 | 26.68 | 137 | 0.22 |
| 444 | 3.63 | 34.21 | 0.48 | 3.09 | 27.22 | 125 | 4.03 | 33.81 | 26.86 | 120 | 0.26 |
| 557 | 3.46 | 34.32 | 0.40 | 2.62 | 27.32 | 150 | 4.03 | 33.94 | 26.96 | 110 | 0.29 |
| 670 | 3.24 | 34.34 | 0.39 | 3.32 | 27.36 | 200 | 4.03 | 34.05 | 27.05 | 102 | 0.34 |
| 889 | 2.90 | 34.42 | 0.39 | 3.81 | 27.45 | 250 | 3.97 | 34.10 | 27.10 | 98 | 0.39 |
| 1104 | 2.58 | 34.48 | 0.53 | 3.48 | 27.53 | 300 | 3.88 | 34.15 | 27.14 | 93 | 0.44 |
| 1304 | 2.37 | 34.53 | 0.71 | 3.00a) | 27.59 | 400 | 3.70 | 34.19 | 27.19 | 88 | 0.53 |
| | | | | | | 500 | 3.55 | 34.26 | 27.27 | 82 | 0.62 |
| | | | | | | 600 | 3.38 | 34.33 | 27.34 | 75 | 0.70 |
| | | | | | | 700 | 3.19 | 34.35 | 27.37 | 72 | 0.78 |
| | | | | | | 800 | 3.03 | 34.38 | 27.41 | 68 | 0.86 |
| | | | | | | 1000 | 2.73 | 34.45 | 27.49 | 60 | 0.99 |
| | | | | | | 1200 | 2.48 | 34.50 | 27.55 | 54 | 1.12 |

51

HUGH M. SMITH; August 11, 1958; 1944 GCT; 50°00.5'N, 174°03'W; wind, 250°, 24 kt; weather, partly cloudy; sea, rough; wire angle, 22°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.70 | 32.51 | 6.48 | 0.91 | 25.08 | 0 | 9.70 | 32.51 | 25.08 | 289 | 0.00 |
| 9 | 9.72 | 32.52 | 6.45 | 0.83 | 25.09 | 10 | 9.75 | 32.52 | 25.08 | 289 | 0.03 |
| 18 | 9.71 | 32.54 | 6.48 | 0.91 | 25.10 | 20 | 9.45 | 32.56 | 25.16 | 281 | 0.06 |
| 31 | 7.58 | 32.74 | 6.68 | 1.48 | 25.58 | 30 | 7.78 | 32.72 | 25.54 | 245 | 0.08 |
| 90 | 3.69 | 33.46 | 4.67 | 2.82 | 26.62 | 50 | 5.00 | 33.00 | 26.11 | 191 | 0.13 |
| 199 | 4.03 | 34.00 | 0.80 | 3.32 | 27.01 | 75 | 4.09 | 33.30 | 26.45 | 159 | 0.17 |
| 300 | 3.81 | 34.12 | 0.58 | 3.48 | 27.13 | 100 | 3.65 | 33.54 | 26.68 | 137 | 0.21 |
| 405 | 3.62 | 34.23 | 0.60 | 3.72 | 27.23 | 125 | 4.15 | 33.71 | 26.77 | 129 | 0.24 |
| 508 | 3.39 | 34.31 | 0.59 | 3.64 | 27.32 | 150 | 4.15 | 33.84 | 26.87 | 119 | 0.27 |
| 611 | 3.32 | 34.32 | 0.47 | 3.64 | 27.34 | 200 | 4.03 | 34.00 | 27.01 | 106 | 0.33 |
| 817 | 2.96 | 34.41 | 0.50 | 0.50b) | 27.44 | 250 | 3.95 | 34.08 | 27.08 | 99 | 0.38 |
| 1019 | 2.66 | 34.46 | 0.58 | 3.48 | 27.51 | 300 | 3.81 | 34.12 | 27.13 | 95 | 0.43 |
| 1213 | 2.44 | 34.50 | 0.76 | 3.85 | 27.56 | 400 | 3.63 | 34.22 | 27.23 | 85 | 0.52 |
| | | | | | | 500 | 3.41 | 34.30 | 27.31 | 77 | 0.61 |
| | | | | | | 600 | 3.33 | 34.32 | 27.33 | 75 | 0.69 |
| | | | | | | 700 | 3.18 | 34.35 | 27.37 | 71 | 0.77 |
| | | | | | | 800 | 2.99 | 34.40 | 27.43 | 66 | 0.84 |
| | | | | | | 1000 | 2.69 | 34.45 | 27.50 | 60 | 0.98 |
| | | | | | | 1200 | 2.45 | 34.49 | 27.55 | 55 | 1.10 |

a) Alternate value, 3.81 µg at/L.
b) Value uncertain; not used in interpolation.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 52 | HUGH M. SMITH; August 12, 1958; 0405 GCT; 49°02.5'N, 174°36.5'W; wind, 280°, 20 kt; weather, fog; sea, rough; wire angle, 20°. | | | | | | | | | | |
| 0 | 9.94 | 32.74 | 6.45 | 1.16 | 25.22 | 0 | 9.94 | 32.74 | 25.22 | 276 | 0.00 |
| 9 | 9.96 | 32.68 | 6.48 | 1.16 | 25.17 | 10 | 9.97 | 32.68 | 25.17 | 281 | 0.03 |
| 19 | 9.96 | 32.70 | 6.49 | 1.08 | 25.19 | 20 | 9.92 | 32.70 | 25.19 | 278 | 0.06 |
| 32 | 9.22 | 32.70 | 6.58 | 1.48 | 25.31 | 30 | 9.37 | 32.70 | 25.28 | 270 | 0.08 |
| 93 | 3.36 | 33.18 | 6.83 | 1.82 | 26.42 | 50 | 5.00 | 32.80 | 25.96 | 206 | 0.13 |
| 205 | 3.48 | 33.82 | 2.36 | 3.32 | 26.92 | 75 | 3.70 | 33.00 | 26.25 | 178 | 0.18 |
| 310 | 3.61 | 34.03 | 1.04 | 3.81 | 27.08 | 100 | 3.30 | 33.23 | 26.47 | 157 | 0.22 |
| 421 | 3.55 | 34.10 | 0.80 | 3.81 | 27.14 | 125 | 3.40 | 33.40 | 26.60 | 145 | 0.26 |
| 528 | 3.41 | 34.22 | 0.64 | 3.48 | 27.25 | 150 | 3.50 | 33.55 | 26.71 | 135 | 0.29 |
| 637 | 3.22 | 34.26 | 0.60 | 3.48 | 27.30 | 200 | 3.50 | 33.79 | 26.90 | 117 | 0.36 |
| 851 | 2.90 | 34.35 | 0.59 | 3.48 | 27.40 | 250 | 3.55 | 33.94 | 27.01 | 106 | 0.41 |
| 1063 | 2.60 | 34.44 | 0.68 | 3.48 | 27.50 | 300 | 3.60 | 34.02 | 27.07 | 100 | 0.47 |
| 1261 | 2.36 | 34.50 | 0.81 | 3.40 | 27.56 | 400 | 3.57 | 34.09 | 27.13 | 95 | 0.57 |
| | | | | | | 500 | 3.45 | 34.19 | 27.22 | 86 | 0.66 |
| | | | | | | 600 | 3.29 | 34.25 | 27.28 | 80 | 0.75 |
| | | | | | | 700 | 3.12 | 34.28 | 27.32 | 76 | 0.83 |
| | | | | | | 800 | 2.97 | 34.32 | 27.37 | 72 | 0.91 |
| | | | | | | 1000 | 2.69 | 34.41 | 27.46 | 63 | 1.05 |
| | | | | | | 1200 | 2.43 | 34.48 | 27.54 | 55 | 1.18 |
| 53 | HUGH M. SMITH; August 12, 1958; 1127 GCT; 48°03'N, 174°45'W; wind, 290°, 18 kt; weather, fog; sea, moderate; wire angle, 18°. | | | | | | | | | | |
| 0 | 10.72 | 33.00 | 6.41 | 1.16 | 25.29 | 0 | 10.72 | 33.00 | 25.29 | 269 | 0.00 |
| 14 | 10.72 | 33.00 | 6.53 | 1.32 | 25.29 | 10 | 10.72 | 33.00 | 25.29 | 269 | 0.03 |
| 24 | 8.66 | 33.04 | 6.83 | 1.48 | 25.66 | 20 | 9.56 | 33.02 | 25.50 | 249 | 0.05 |
| 52 | 5.06 | 33.11 | 7.01 | 1.64 | 26.19 | 30 | 7.67 | 33.05 | 25.81 | 219 | 0.08 |
| 104 | 3.68 | 33.20 | 6.92 | 1.82 | 26.41 | 50 | 5.23 | 33.10 | 26.17 | 186 | 0.12 |
| 208 | 3.40 | 33.77 | 3.12 | 3.00 | 26.89 | 75 | 3.97 | 33.14 | 26.33 | 170 | 0.16 |
| 314 | 3.42 | 33.96 | 1.83 | 3.48 | 27.04 | 100 | 3.70 | 33.19 | 26.40 | 164 | 0.20 |
| 425 | 3.46 | 34.06 | 1.78 | 3.48 | 27.11 | 125 | 3.48 | 33.30 | 26.51 | 153 | 0.24 |
| 531 | 3.38 | 34.13 | 1.03 | 3.64 | 27.18 | 150 | 3.45 | 33.44 | 26.62 | 142 | 0.28 |
| 638 | 3.23 | 34.24 | 0.75 | 3.64 | 27.28 | 200 | 3.40 | 33.72 | 26.85 | 121 | 0.35 |
| 845 | 2.92 | 34.36 | 0.71 | 3.64 | 27.40 | 250 | 3.39 | 33.87 | 26.97 | 109 | 0.41 |
| 1051 | 2.66 | 34.40 | 0.72 | 3.81 | 27.46 | 300 | 3.41 | 33.94 | 27.02 | 104 | 0.46 |
| 1246 | 2.42 | 34.49 | 0.81 | 3.90 | 27.55 | 400 | 3.46 | 34.04 | 27.10 | 97 | 0.56 |
| | | | | | | 500 | 3.41 | 34.10 | 27.15 | 92 | 0.66 |
| | | | | | | 600 | 3.29 | 34.20 | 27.24 | 84 | 0.75 |
| | | | | | | 700 | 3.14 | 34.28 | 27.32 | 76 | 0.84 |
| | | | | | | 800 | 2.99 | 34.34 | 27.38 | 71 | 0.92 |
| | | | | | | 1000 | 2.72 | 34.39 | 27.45 | 64 | 1.06 |
| | | | | | | 1200 | 2.48 | 34.46 | 27.52 | 57 | 1.20 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

54

HUGH M. SMITH; August 12, 1958; 1936 GCT; 47°14.5'N, 174°56'W; wind, 280°, 10 kt; weather, partly cloudy; sea, slight; wire angle, 00°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.05 | 32.99 | 6.35 | 1.40 | 25.22 | 0 | 11.05 | 32.99 | 25.22 | 275 | 0.00 |
| 20 | 11.01 | 33.00 | 6.45 | 1.24 | 25.24 | 10 | 11.03 | 32.99 | 25.23 | 275 | 0.03 |
| 36 | 8.10 | 33.01 | 6.80 | 1.56 | 25.72 | 20 | 11.01 | 33.00 | 25.24 | 274 | 0.06 |
| 80 | 4.42 | 33.13 | 6.95 | 1.82 | 26.28 | 30 | 9.29 | 33.00 | 25.53 | 246 | 0.08 |
| 136 | 3.67 | 33.22 | 6.83 | 2.00 | 26.43 | 50 | 6.44 | 33.04 | 25.97 | 204 | 0.13 |
| 205 | 3.61 | 33.77 | 3.47 | 3.09 | 26.87 | 75 | 4.61 | 33.11 | 26.24 | 178 | 0.17 |
| 306 | 3.43 | 33.93 | 2.27 | 3.48 | 27.01 | 100 | 3.86 | 33.14 | 26.34 | 169 | 0.22 |
| 412 | 3.42 | 34.05 | 1.49 | 3.25 | 27.11 | 125 | 3.62 | 33.19 | 26.41 | 163 | 0.26 |
| 513 | 3.46 | 34.19 | 1.09 | 3.48 | 27.22 | 150 | 3.90 | 33.32 | 26.48 | 156 | 0.30 |
| 622 | 3.27 | 34.27 | 0.83 | 3.56 | 27.30 | 200 | 3.60 | 33.72 | 26.83 | 123 | 0.37 |
| 833 | 2.96 | 34.42 | 0.72 | 3.52 | 27.45 | 250 | 3.53 | 33.89 | 26.97 | 109 | 0.43 |
| 1037 | 2.66 | 34.43 | 0.80 | 3.56 | 27.48 | 300 | 3.44 | 33.93 | 27.01 | 105 | 0.48 |
| 1237 | 2.44 | 34.51 | 0.89 | 3.64 | 27.57 | 400 | 3.42 | 34.03 | 27.09 | 98 | 0.59 |
| | | | | | | 500 | 3.46 | 34.17 | 27.20 | 88 | 0.68 |
| | | | | | | 600 | 3.32 | 34.25 | 27.28 | 80 | 0.77 |
| | | | | | | 700 | 3.15 | 34.33 | 27.36 | 73 | 0.85 |
| | | | | | | 800 | 3.01 | 34.40 | 27.43 | 66 | 0.93 |
| | | | | | | 1000 | 2.71 | 34.43 | 27.48 | 61 | 1.07 |
| | | | | | | 1200 | 2.48 | 34.49 | 27.55 | 55 | 1.19 |

56

HUGH M. SMITH; August 13, 1958; 0555 GCT; 46°12'N, 174°56'W; wind, 280°, 10 kt; weather, fog; sea, slight; wire angle, 04°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.38 | 32.97 | 6.21 | 1.48 | 24.96 | 0 | 12.38 | 32.97 | 24.96 | 300 | 0.00 |
| 10 | 11.88 | 33.03 | 6.26 | 1.32 | 25.10 | 10 | 11.88 | 33.03 | 25.10 | 287 | 0.03 |
| 25 | 10.22 | 33.05 | 6.57 | 1.32 | 25.41 | 20 | 10.86 | 33.04 | 25.30 | 268 | 0.06 |
| 50 | 6.43 | 33.23 | 7.03 | 1.48 | 26.12 | 30 | 9.44 | 33.08 | 25.57 | 243 | 0.08 |
| 100 | 4.60 | 33.26 | 6.79 | 1.64 | 26.36 | 50 | 6.43 | 33.23 | 26.12 | 190 | 0.13 |
| 205 | 4.76 | 33.84 | 4.37 | 2.63 | 26.81 | 75 | 4.96 | 33.26 | 26.32 | 171 | 0.17 |
| 306 | 3.71 | 33.87 | 2.87 | 3.17 | 26.94 | 100 | 4.60 | 33.26 | 26.36 | 167 | 0.21 |
| 413 | 3.61 | 34.00 | 1.93 | 3.81 | 27.05 | 125 | 4.45 | 33.39 | 26.48 | 156 | 0.25 |
| 516 | 3.58 | 34.13 | 1.27 | 3.81 | 27.16 | 150 | 4.90 | 33.52 | 26.54 | 151 | 0.29 |
| 625 | 3.41 | 34.25 | 0.96 | 4.25 | 27.27 | 200 | 4.90 | 33.81 | 26.77 | 129 | 0.36 |
| 835 | 3.06 | 34.35 | 0.79 | 3.64 | 27.38 | 250 | 4.31 | 33.88 | 26.89 | 117 | 0.43 |
| 1035 | 2.78 | 34.44 | 0.73 | 3.81 | 27.48 | 300 | 3.78 | 33.87 | 26.93 | 113 | 0.49 |
| 1234 | 2.50 | 34.47 | 0.83 | 3.56 | 27.53 | 400 | 3.59 | 33.98 | 27.04 | 103 | 0.60 |
| | | | | | | 500 | 3.59 | 34.11 | 27.14 | 93 | 0.70 |
| | | | | | | 600 | 3.46 | 34.22 | 27.24 | 84 | 0.79 |
| | | | | | | 700 | 3.28 | 34.29 | 27.31 | 77 | 0.88 |
| | | | | | | 800 | 3.12 | 34.34 | 27.37 | 72 | 0.95 |
| | | | | | | 1000 | 2.83 | 34.42 | 27.46 | 63 | 1.10 |
| | | | | | | 1200 | 2.55 | 34.46 | 27.52 | 58 | 1.23 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 60 | HUGH M. SMITH; August 14, 1958; 0604 GCT; 45°12'N, 174°53.5'W; wind, 320°, 6 kt; weather, distant fog higher than observer; sea, slight; wire angle, 16°. | | | | | | | | | | |
| 0 | 13.18 | 33.06 | 6.08 | 1.32 | 24.88 | 0 | 13.18 | 33.06 | 24.88 | 308 | 0.00 |
| 9 | 12.87 | 33.04 | 6.11 | 1.40 | 24.92 | 10 | 12.75 | 33.04 | 24.95 | 302 | 0.03 |
| 19 | 11.40 | 33.14 | 6.44 | 1.48 | 25.28 | 20 | 11.20 | 33.14 | 25.31 | 267 | 0.06 |
| 42 | 7.12 | 33.28 | 6.92 | 1.64 | 26.07 | 30 | 9.29 | 33.21 | 25.69 | 231 | 0.08 |
| 95 | 5.88 | 33.58 | 6.60 | 1.48 | 26.47 | 50 | 6.52 | 33.33 | 26.19 | 184 | 0.13 |
| 195 | 5.84 | 33.82 | 5.33 | 2.00 | 26.66 | 75 | 5.78 | 33.47 | 26.39 | 164 | 0.17 |
| 290 | 4.39 | 33.86 | 3.49 | 3.00 | 26.86 | 100 | 5.86 | 33.59 | 26.48 | 156 | 0.21 |
| 391 | 3.92 | 34.21u | 2.81 | 3.32 | 27.19 | 125 | 6.35 | 33.68 | 26.49 | 155 | 0.25 |
| 488 | 3.71 | 34.06 | 1.81 | 3.64 | 27.09 | 150 | 6.50 | 33.75 | 26.52 | 152 | 0.29 |
| 591 | 3.58 | 34.14 | 1.28 | 3.90 | 27.17 | 200 | 5.77 | 33.82 | 26.67 | 138 | 0.36 |
| 790 | 3.27 | 34.30 | 0.87 | 3.81 | 27.32 | 250 | 5.02 | 33.83 | 26.77 | 129 | 0.43 |
| 985 | 2.95 | 34.39 | 0.73 | 4.25 | 27.43 | 300 | 4.31 | 33.89 | 26.89 | 117 | 0.49 |
| 1184 | 2.65 | 34.45 | 0.71 | 4.10 | 27.50 | 400 | 3.89 | 34.20 | 27.18 | 89 | 0.60 |
| | | | | | | 500 | 3.69 | 34.06 | 27.09 | 98 | 0.70 |
| | | | | | | 600 | 3.57 | 34.14 | 27.17 | 91 | 0.79 |
| | | | | | | 700 | 3.42 | 34.23 | 27.25 | 83 | 0.89 |
| | | | | | | 800 | 3.25 | 34.30 | 27.33 | 76 | 0.97 |
| | | | | | | 1000 | 2.93 | 34.39 | 27.43 | 66 | 1.12 |
| 62 | HUGH M. SMITH; August 15, 1958; 2040 GCT; 44°23'N, 174°40.5'W; wind, 010°, 22 kt; weather, fog; sea, moderate; wire angle, 32°. | | | | | | | | | | |
| 0 | 13.75 | 33.10 | 6.06 | 1.00 | 24.79 | 0 | 13.75 | 33.10 | 24.79 | 316 | 0.00 |
| 12 | 13.18 | 33.17 | 6.30 | 0.83 | 24.96 | 10 | 13.27 | 33.15 | 24.93 | 303 | 0.03 |
| 20 | 11.18 | 33.37 | 6.92 | 0.83 | 25.50 | 20 | 11.18 | 33.37 | 25.50 | 250 | 0.06 |
| 47 | 7.64 | 33.58 | 6.63 | 1.32 | 26.23 | 30 | 9.43 | 33.49 | 25.89 | 212 | 0.08 |
| 89 | 7.31 | 33.68 | 6.38 | 1.48 | 26.36 | 50 | 7.51 | 33.59 | 26.26 | 178 | 0.12 |
| 177 | 6.56 | 33.71 | 6.26 | 1.32 | 26.48 | 75 | 7.07 | 33.66 | 26.38 | 167 | 0.16 |
| 267 | 6.03 | 33.92 | 4.22 | 2.41 | 26.72 | 100 | 7.21 | 33.68 | 26.38 | 167 | 0.21 |
| 361 | 4.73 | 33.95 | 3.56 | 2.62 | 26.90 | 125 | 6.99 | 33.69 | 26.42 | 164 | 0.25 |
| 451 | 4.14 | 34.00 | 2.44 | 3.48 | 27.00 | 150 | 6.78 | 33.70 | 26.45 | 161 | 0.29 |
| 543 | 3.88 | 34.05 | 1.73 | 3.64 | 27.07 | 200 | 6.45 | 33.76 | 26.54 | 153 | 0.37 |
| 724 | 3.50 | 34.23 | 1.02 | 3.64 | 27.25 | 250 | 6.15 | 33.88 | 26.67 | 141 | 0.44 |
| 916 | 3.20 | 34.36 | 0.80 | 4.00 | 27.38 | 300 | 5.58 | 33.94 | 26.79 | 130 | 0.51 |
| 1105 | 2.83 | 34.43 | 0.68 | 4.10 | 27.47 | 400 | 4.41 | 33.97 | 26.95 | 116 | 0.63 |
| | | | | | | 500 | 3.98 | 34.02 | 27.04 | 108 | 0.74 |
| | | | | | | 600 | 3.75 | 34.10 | 27.12 | 100 | 0.85 |
| | | | | | | 700 | 3.54 | 34.20 | 27.22 | 91 | 0.94 |
| | | | | | | 800 | 3.38 | 34.28 | 27.30 | 84 | 1.03 |
| | | | | | | 1000 | 3.04 | 34.39 | 27.42 | 74 | 1.19 |
| 63 | HUGH M. SMITH; August 16, 1958; 0554 GCT; 43°29'N, 174°48.5'W; wind, 310°, 17 kt; weather, distant fog higher than observer; sea, moderate; wire angle, 01°. | | | | | | | | | | |
| 0 | 14.80 | 33.31 | 5.93 | 0.83 | 24.73 | 0 | 14.80 | 33.31 | 24.73 | 322 | 0.00 |
| 9 | 14.80 | 33.28 | 6.11 | 0.83 | 24.71 | 10 | 14.59 | 33.28 | 24.76 | 320 | 0.03 |
| 24 | 10.86 | 33.41 | 6.58 | 1.00 | 25.58 | 20 | 12.06 | 33.36 | 25.33 | 266 | 0.06 |
| 59 | 8.60 | 33.79 | 6.30 | 1.32 | 26.25 | 30 | 10.09 | 33.48 | 25.77 | 223 | 0.09 |
| 109 | 7.42 | 33.77 | 6.26 | 1.32 | 26.41 | 50 | 8.66 | 33.79 | 26.25 | 178 | 0.13 |
| 220 | 7.07 | 33.87 | 5.38 | 1.48 | 26.54 | 75 | 8.06 | 33.75 | 26.31 | 173 | 0.17 |
| 333 | 5.49 | 33.95 | 3.71 | 2.82 | 26.81 | 100 | 7.52 | 33.79 | 26.42 | 162 | 0.21 |
| 452 | 4.29 | 33.98 | 2.81 | 3.17 | 26.97 | 125 | 7.50 | 33.77 | 26.40 | 163 | 0.25 |
| 565 | 4.00 | 34.18 | 1.76 | 3.48 | 27.16 | 150 | 7.52 | 33.79 | 26.42 | 162 | 0.29 |
| 678 | 3.76 | 34.19 | 1.16 | 3.48 | 27.19 | 200 | 7.30 | 33.84 | 26.49 | 155 | 0.38 |
| 895 | 3.24 | 34.33 | 0.79 | 4.25 | 27.35 | 250 | 6.69 | 33.89 | 26.61 | 144 | 0.45 |
| 1111 | 2.86 | 34.39 | 0.68 | 4.25 | 27.43 | 300 | 5.99 | 33.93 | 26.73 | 132 | 0.52 |
| 1314 | 2.58 | 34.47 | 0.65 | 3.48 | 27.52 | 400 | 4.73 | 33.95 | 26.90 | 117 | 0.65 |
| | | | | | | 500 | 4.11 | 34.06 | 27.05 | 102 | 0.76 |
| | | | | | | 600 | 3.92 | 34.19 | 27.17 | 90 | 0.87 |
| | | | | | | 700 | 3.71 | 34.20 | 27.20 | 88 | 0.96 |
| | | | | | | 800 | 3.46 | 34.26 | 27.27 | 81 | 1.05 |
| | | | | | | 1000 | 3.04 | 34.36 | 27.39 | 69 | 1.21 |
| | | | | | | 1200 | 2.74 | 34.42 | 27.47 | 62 | 1.36 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; August 18, 1958; 0529 GCT; 42°47'N, 175°08'W; wind, 290°, 18 kt; weather, distant fog higher than observer; sea, moderate; wire angle, 29°. 67

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.94 | 33.41 | 5.81 | 0.50 | 24.56 | 0 | 15.94 | 33.41 | 24.56 | 339 | 0.00 |
| 8 | 15.96 | 33.45 | 5.81 | 0.59 | 24.59 | 10 | 15.98 | 33.44 | 24.57 | 337 | 0.03 |
| 13 | 15.86 | 33.44 | 5.87 | 0.50 | 24.60 | 20 | 13.80 | 33.54 | 25.12 | 285 | 0.06 |
| 25 | 12.00 | 33.66 | 6.72 | 0.70 | 25.57 | 30 | 11.21 | 33.74 | 25.78 | 223 | 0.09 |
| 47 | 9.98 | 33.98 | 6.17 | 1.00 | 26.18 | 50 | 9.84 | 33.99 | 26.21 | 182 | 0.13 |
| 93 | 8.97 | 34.01 | 5.93 | 1.32 | 26.37 | 75 | 8.80 | 34.05 | 26.43 | 161 | 0.17 |
| 187 | 7.63 | 33.88 | 5.94 | 1.16 | 26.47 | 100 | 8.84 | 34.00 | 26.38 | 165 | 0.22 |
| 283 | 6.89 | 33.99 | 4.73 | 1.91 | 26.66 | 125 | 8.43 | 33.96 | 26.41 | 162 | 0.26 |
| 382 | 5.22 | 33.95 | 3.47 | 2.63 | 26.84 | 150 | 8.06 | 33.93 | 26.45 | 159 | 0.30 |
| 577 | 3.98 | 34.07 | 1.70 | 3.32 | 27.07 | 200 | 7.54 | 33.89 | 26.49 | 155 | 0.38 |
| 773 | 3.56 | 34.25 | 0.94 | 3.64 | 27.26 | 250 | 7.16 | 33.94 | 26.58 | 146 | 0.45 |
| 970 | 3.12 | 34.37 | 0.75 | 4.00 | 27.39 | 300 | 6.61 | 33.98 | 26.69 | 136 | 0.53 |
| 1160 | 2.80 | 34.43 | 0.68 | 3.81 | 27.47 | 400 | 5.03 | 33.95 | 26.86 | 120 | 0.66 |
| | | | | | | 500 | 4.26 | 34.00 | 26.99 | 108 | 0.78 |
| | | | | | | 600 | 3.91 | 34.09 | 27.09 | 98 | 0.89 |
| | | | | | | 700 | 3.67 | 34.18 | 27.19 | 89 | 0.98 |
| | | | | | | 800 | 3.50 | 34.27 | 27.28 | 80 | 1.07 |
| | | | | | | 1000 | 3.07 | 34.37 | 27.40 | 69 | 1.24 |

HUGH M. SMITH; August 20, 1958; 0556 GCT; 41°35'N, 175°08.5'W; wind, 360°, 18 kt; weather, overcast; sea, rough; wire angle, 27°. 69

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.41 | 33.70 | 5.81 | 0.32 | 24.67 | 0 | 16.41 | 33.70 | 24.67 | 328 | 0.00 |
| 13 | 16.41 | 33.75 | 5.78 | 0.00 | 24.71 | 10 | 16.41 | 33.73 | 24.70 | 325 | 0.03 |
| 22 | 13.32 | 33.77 | 6.52 | 0.20 | 25.40 | 20 | 14.07 | 33.76 | 25.23 | 274 | 0.06 |
| 52 | 10.08 | 34.02 | 6.18 | 0.50 | 26.19 | 30 | 11.82 | 33.83 | 25.73 | 227 | 0.09 |
| 96 | 9.14 | 33.97 | 6.07 | 0.50 | 26.31 | 50 | 10.09 | 34.00 | 26.18 | 185 | 0.13 |
| 197 | 8.36 | 34.01 | 5.71 | 1.00 | 26.46 | 75 | 9.28 | 34.02 | 26.33 | 171 | 0.17 |
| 300 | 7.25 | 34.04 | 4.61 | 1.32 | 26.65 | 100 | 9.25 | 33.97 | 26.29 | 174 | 0.22 |
| 410 | 5.43 | 33.97 | 3.51 | 2.00 | 26.83 | 125 | 9.50 | 33.97 | 26.25 | 178 | 0.26 |
| 516 | 4.45 | 33.99 | 2.54 | 2.41 | 26.96 | 150 | 9.15 | 33.97 | 26.31 | 172 | 0.31 |
| 624 | 4.07 | 34.10 | 1.77 | 2.63 | 27.09 | 200 | 8.33 | 34.01 | 26.47 | 157 | 0.39 |
| 832 | 3.53 | 34.31 | 0.95 | 2.82 | 27.31 | 250 | 7.84 | 34.03 | 26.56 | 149 | 0.47 |
| 1039 | 3.07 | 34.35 | 0.73 | 2.82 | 27.38 | 300 | 7.25 | 34.04 | 26.65 | 140 | 0.54 |
| 1234 | 2.72 | 34.45 | 0.64 | 3.48 | 27.49 | 400 | 5.59 | 33.97 | 26.81 | 125 | 0.68 |
| | | | | | | 500 | 4.55 | 33.98 | 26.94 | 112 | 0.80 |
| | | | | | | 600 | 4.12 | 34.07 | 27.06 | 101 | 0.92 |
| | | | | | | 700 | 3.85 | 34.18 | 27.17 | 90 | 1.02 |
| | | | | | | 800 | 3.60 | 34.28 | 27.28 | 81 | 1.11 |
| | | | | | | 1000 | 3.15 | 34.34 | 27.37 | 72 | 1.27 |
| | | | | | | 1200 | 2.78 | 34.43 | 27.47 | 62 | 1.42 |

HUGH M. SMITH; August 22, 1958; 2236 GCT; 41°33'N, 175°01.5'W; wind, calm; weather, cloudy; sea, slight; wire angle, 22°. 71

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.83 | 34.14 | 5.62 | 0.50 | 24.68 | 0 | 17.83 | 34.14 | 24.68 | 328 | 0.00 |
| 9 | 17.78 | 34.14 | 5.54 | 0.42 | 24.69 | 10 | 17.78 | 34.14 | 24.69 | 326 | 0.03 |
| 18 | 17.76 | 34.15 | 5.53 | 0.42 | 24.70 | 20 | 17.39 | 34.14 | 24.78 | 317 | 0.06 |
| 31 | 14.78 | 34.12 | 6.15 | 0.32 | 25.36 | 30 | 15.06 | 34.12 | 25.30 | 268 | 0.09 |
| 88 | 10.38 | 34.19 | 5.73 | 0.83 | 26.27 | 50 | 10.84 | 34.12 | 26.14 | 188 | 0.14 |
| 194 | 9.16 | 34.14 | 5.64 | 1.16 | 26.44 | 75 | 10.50 | 34.16 | 26.23 | 180 | 0.19 |
| 294 | 7.62 | 34.07 | 4.46 | 1.82 | 26.62 | 100 | 10.20 | 34.19 | 26.31 | 173 | 0.23 |
| 436 | 5.32 | 34.02 | 3.36 | 2.62 | 26.88 | 125 | 9.90 | 34.18 | 26.35 | 168 | 0.27 |
| 530 | 4.57 | 34.04 | 2.45 | 3.00 | 26.98 | 150 | 9.70 | 34.17 | 26.37 | 166 | 0.32 |
| 629 | 4.14 | 34.18 | 1.71 | 3.17 | 27.14 | 200 | 9.07 | 34.13 | 26.45 | 159 | 0.40 |
| 824 | 3.58 | 34.31 | 0.92 | 3.24 | 27.30 | 250 | 8.32 | 34.10 | 26.54 | 150 | 0.48 |
| 1013 | 3.11 | 34.42 | 0.70 | 3.81 | 27.43 | 300 | 7.51 | 34.06 | 26.63 | 142 | 0.55 |
| 1206 | 2.77 | 34.45 | 0.65 | 3.72 | 27.49 | 400 | 5.84 | 34.02 | 26.82 | 124 | 0.69 |
| | | | | | | 500 | 4.76 | 34.02 | 26.95 | 112 | 0.81 |
| | | | | | | 600 | 4.24 | 34.13 | 27.09 | 98 | 0.93 |
| | | | | | | 700 | 3.91 | 34.23 | 27.21 | 87 | 1.02 |
| | | | | | | 800 | 3.64 | 34.30 | 27.29 | 79 | 1.11 |
| | | | | | | 1000 | 3.14 | 34.41 | 27.42 | 67 | 1.27 |
| | | | | | | 1200 | 2.78 | 34.44 | 27.48 | 61 | 1.41 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **74** | HUGH M. SMITH; August 23, 1958; 0342 GCT; 41°52'N, 175°16.5'W; wind, 030°, 3 kt; weather, overcast; sea, slight; wire angle, 22°. | | | | | | | | | | |
| 0 | 14.83 | 33.72 | 6.01 | 0.64 | 25.04 | 0 | 14.83 | 33.72 | 25.04 | 293 | 0.00 |
| 19 | 14.65 | 33.69 | 6.04 | 0.83 | 25.06 | 10 | 14.74 | 33.70 | 25.05 | 292 | 0.03 |
| 28 | 13.54 | 33.71 | 6.30 | 0.59 | 25.31 | 20 | 14.55 | 33.69 | 25.08 | 289 | 0.06 |
| 51 | 9.93 | 34.05 | 6.09 | 1.32 | 26.24 | 30 | 13.21 | 33.73 | 25.39 | 260 | 0.09 |
| 102 | 8.91 | 34.00 | 0.74a) | 0.59 | 26.37 | 50 | 10.08 | 34.03 | 26.20 | 182 | 0.13 |
| 202 | 7.61 | 33.88 | 6.10 | 1.24 | 26.47 | 75 | 9.40 | 34.04 | 26.32 | 171 | 0.17 |
| 303 | 6.71 | 34.02 | 4.63 | 2.30b) | 26.71 | 100 | 8.86 | 34.01 | 26.39 | 165 | 0.22 |
| 412 | 5.14 | 33.97 | 3.53 | 2.63 | 26.87 | 125 | 8.90 | 33.96 | 26.34 | 169 | 0.26 |
| 518 | 4.28 | 34.00 | 2.53 | 1.82b) | 26.98 | 150 | 8.55 | 33.92 | 26.36 | 167 | 0.30 |
| 625 | 4.02 | 34.11 | 1.66 | 3.32 | 27.10 | 200 | 7.63 | 33.88 | 26.47 | 157 | 0.38 |
| 832 | 3.48 | 34.30 | 6.06a) | 3.64 | 27.30 | 250 | 7.60 | 33.94 | 26.52 | 152 | 0.46 |
| 1036 | 3.04 | 34.42 | 0.94 | 3.81 | 27.44 | 300 | 6.74 | 34.01 | 26.70 | 135 | 0.54 |
| 1229 | 2.73 | 34.48 | 0.66 | 3.81 | 27.52 | 400 | 5.31 | 33.97 | 26.85 | 121 | 0.67 |
| | | | | | | 500 | 4.38 | 33.98 | 26.96 | 111 | 0.79 |
| | | | | | | 600 | 4.05 | 34.08 | 27.07 | 100 | 0.90 |
| | | | | | | 700 | 3.82 | 34.18 | 27.17 | 90 | 1.00 |
| | | | | | | 800 | 3.56 | 34.27 | 27.27 | 81 | 1.09 |
| | | | | | | 1000 | 3.11 | 34.40 | 27.42 | 67 | 1.25 |
| | | | | | | 1200 | 2.78 | 34.47 | 27.50 | 59 | 1.39 |
| **79** | HUGH M. SMITH; August 24, 1958; 0436 GCT; 40°29'N, 175°11'W; wind, 110°, 19 kt; weather, moderate drizzle; sea, moderate; wire angle, 35°. | | | | | | | | | | |
| 0 | 17.62 | 34.02 | 5.54 | 0.12 | 24.63 | 0 | 17.62 | 34.02 | 24.63 | 331 | 0.00 |
| 8 | 17.62 | 33.96 | 5.56 | 0.12 | 24.59 | 10 | 17.62 | 33.96 | 24.59 | 336 | 0.03 |
| 15 | 17.61 | 33.98 | 5.55 | 0.37 | 24.61 | 20 | 16.28 | 34.02 | 24.95 | 301 | 0.07 |
| 26 | 14.25 | 34.09 | 6.10 | 0.26 | 25.45 | 30 | 13.53 | 34.10 | 25.61 | 239 | 0.09 |
| 76 | 10.10 | 34.07 | 5.90 | 0.64 | 26.23 | 50 | 11.20 | 34.17 | 26.11 | 191 | 0.14 |
| 169 | 9.34 | 34.14 | 5.59 | 0.91 | 26.41 | 75 | 10.08 | 34.07 | 26.23 | 179 | 0.18 |
| 255 | 7.91 | 34.05 | 5.39 | 1.08 | 26.56 | 100 | 9.56 | 34.09 | 26.34 | 170 | 0.23 |
| 349 | 6.63 | 34.01 | 4.34 | 1.56 | 26.71 | 125 | 9.80 | 34.10 | 26.30 | 173 | 0.27 |
| 439 | 5.30 | 34.04 | 3.44 | 2.30 | 26.90 | 150 | 9.80 | 34.12 | 26.32 | 171 | 0.31 |
| 532 | 4.50 | 34.07 | 2.52 | 2.73 | 27.02 | 200 | 8.85 | 34.11 | 26.47 | 157 | 0.40 |
| 719 | 3.86 | 34.20 | 1.29 | 3.24 | 27.19 | 250 | 8.00 | 34.05 | 26.55 | 149 | 0.48 |
| 911 | 3.38 | 34.33 | 0.88 | 3.56 | 27.34 | 300 | 7.29 | 34.02 | 26.63 | 142 | 0.55 |
| 1100 | 2.98 | 34.44 | 0.70 | 3.72c) | 27.46 | 400 | 5.85 | 34.02 | 26.82 | 124 | 0.69 |
| | | | | | | 500 | 4.72 | 34.05 | 26.98 | 109 | 0.81 |
| | | | | | | 600 | 4.18 | 34.11 | 27.08 | 99 | 0.92 |
| | | | | | | 700 | 3.89 | 34.18 | 27.17 | 91 | 1.02 |
| | | | | | | 800 | 3.64 | 34.25 | 27.25 | 83 | 1.11 |
| | | | | | | 1000 | 3.19 | 34.38 | 27.39 | 69 | 1.28 |

a) These two sample bottles may have been interchanged.
b) Value uncertain, not used in interpolation.
c) Alternate value, 3.24 μg at/L.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

80

HUGH M. SMITH; August 24, 1958; 1547 GCT; 39°14.5'N, 175°10'W; wind, 200°, 19 kt; weather, missing; sea, moderate; wire angle, 17°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.80 | 34.25 | 5.22 | 0.00 | 24.26 | 0 | 19.80 | 34.25 | 24.26 | 367 | 0.00 |
| 9 | 19.77 | 34.25 | 5.22 | 0.20 | 24.27 | 10 | 19.80 | 34.24 | 24.25 | 368 | 0.04 |
| 24 | 19.62 | 34.22 | 5.26 | 0.20 | 24.29 | 20 | 19.80 | 34.22 | 24.24 | 369 | 0.07 |
| 38 | 16.70 | 34.26 | 6.31 | 0.20 | 25.04 | 30 | 18.49 | 34.23 | 24.58 | 337 | 0.11 |
| 106 | 13.06 | 34.40 | 5.18 | 0.83 | 25.94 | 50 | 15.35 | 34.29 | 25.37 | 262 | 0.17 |
| 211 | 11.37 | 34.30 | 4.94 | 1.16 | 26.18 | 75 | 14.00 | 34.35 | 25.70 | 230 | 0.23 |
| 317 | 9.34 | 34.13 | 5.38 | 1.32 | 26.40 | 100 | 13.20 | 34.39 | 25.90 | 211 | 0.29 |
| 428 | 7.23 | 34.03 | 4.31 | 1.82 | 26.64 | 125 | 12.59 | 34.39 | 26.02 | 200 | 0.34 |
| 535 | 5.44 | 33.96 | 3.36 | 2.19 | 26.82 | 150 | 12.08 | 34.38 | 26.11 | 191 | 0.39 |
| 642 | 4.31 | 33.96 | 2.46 | 3.17 | 26.95 | 200 | 11.44 | 34.32 | 26.19 | 184 | 0.48 |
| 853 | 3.72 | 34.20 | 1.16 | 3.48 | 27.20 | 250 | 10.64 | 34.23 | 26.26 | 177 | 0.58 |
| 1063 | 3.16 | 34.31 | 0.73 | 3.64 | 27.34 | 300 | 9.68 | 34.15 | 26.36 | 167 | 0.67 |
| 1259 | 2.82 | 34.40 | 0.66 | 3.81 | 27.44 | 400 | 7.75 | 34.05 | 26.59 | 146 | 0.83 |
| | | | | | | 500 | 5.98 | 33.97 | 26.76 | 129 | 0.97 |
| | | | | | | 600 | 4.68 | 33.95 | 26.90 | 116 | 1.10 |
| | | | | | | 700 | 4.04 | 34.01 | 27.02 | 105 | 1.22 |
| | | | | | | 800 | 3.76 | 34.13 | 27.14 | 93 | 1.32 |
| | | | | | | 1000 | 3.32 | 34.28 | 27.30 | 78 | 1.51 |
| | | | | | | 1200 | 2.92 | 34.37 | 27.41 | 68 | 1.67 |

82

HUGH M. SMITH; August 25, 1958; 0102 GCT; 37°58'N, 174°59'W; wind, 210°, 22 kt; weather, cloudy; sea, moderate; wire angle, 16°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 21.82 | 34.34 | 4.98 | 0.20 | 23.79 | 0 | 21.82 | 34.34 | 23.79 | 412 | 0.00 |
| 9 | 21.76 | 34.33 | 5.05 | 0.20 | 23.80 | 10 | 21.82 | 34.33 | 23.78 | 413 | 0.04 |
| 24 | 21.28 | 34.37 | 5.16 | 0.00 | 23.96 | 20 | 21.81 | 34.35 | 23.80 | 411 | 0.08 |
| 33 | 17.24 | 34.38 | 6.17 | 0.00 | 25.00 | 30 | 18.61 | 34.37 | 24.66 | 329 | 0.12 |
| 47 | 15.65 | 34.51 | 5.85 | 0.00 | 25.47 | 50 | 15.45 | 34.52 | 25.52 | 247 | 0.18 |
| 104 | 13.88 | 34.50 | 5.07 | 0.42 | 25.84 | 75 | 14.40 | 34.52 | 25.75 | 225 | 0.24 |
| 209 | 12.51 | 34.38 | 4.94 | 0.70 | 26.03 | 100 | 13.87 | 34.51 | 25.85 | 215 | 0.29 |
| 315 | 10.71 | 34.25 | 4.90 | 1.00 | 26.26 | 125 | 13.52 | 34.48 | 25.90 | 211 | 0.35 |
| 427 | 8.56 | 34.07 | 4.80 | 1.40 | 26.48 | 150 | 13.15 | 34.45 | 25.96 | 206 | 0.40 |
| 640 | 4.95 | 33.97 | 2.88 | 2.73 | 26.89 | 200 | 12.59 | 34.39 | 26.02 | 200 | 0.50 |
| 848 | 3.96 | 34.12 | 1.33 | 3.17 | 27.11 | 250 | 11.85 | 34.33 | 26.12 | 190 | 0.60 |
| 1054 | 3.30 | 34.29 | 0.76 | 3.64 | 27.31 | 300 | 10.98 | 34.27 | 26.23 | 180 | 0.70 |
| 1251 | 2.89 | 34.39 | 0.64 | 3.81 | 27.43 | 400 | 9.08 | 34.11 | 26.43 | 161 | 0.88 |
| | | | | | | 500 | 7.14 | 34.00 | 26.63 | 141 | 1.04 |
| | | | | | | 600 | 5.50 | 33.96 | 26.81 | 124 | 1.18 |
| | | | | | | 700 | 4.52 | 34.00 | 26.96 | 111 | 1.30 |
| | | | | | | 800 | 4.06 | 34.07 | 27.06 | 101 | 1.41 |
| | | | | | | 1000 | 3.45 | 34.24 | 27.26 | 82 | 1.61 |
| | | | | | | 1200 | 3.00 | 34.36 | 27.40 | 69 | 1.78 |

83

HUGH M. SMITH; August 25, 1958; 2154 GCT; 39°25'N, 170°58.5'W; wind, 220°, 15 kt; weather, overcast; sea, slight; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 19.64 | 34.39 | 5.25 | 0.00 | 24.41 | 0 | 19.64 | 34.39 | 24.41 | 353 | 0.00 |
| 9 | 19.58 | 34.41 | 5.31 | 0.00 | 24.44 | 10 | 19.63 | 34.41 | 24.43 | 351 | 0.04 |
| 24 | 19.54 | 34.41 | 5.31 | 0.00 | 24.45 | 20 | 19.56 | 34.41 | 24.45 | 349 | 0.07 |
| 43 | 14.98 | 34.39 | 6.55 | 0.00 | 25.53 | 30 | 18.27 | 34.40 | 24.77 | 319 | 0.10 |
| 97 | 12.62 | 34.36 | 5.40 | 0.50 | 25.99 | 50 | 14.20 | 34.38 | 25.69 | 231 | 0.16 |
| 200 | 10.95 | 34.24 | 5.47 | 0.70 | 26.21 | 75 | 13.00 | 34.37 | 25.92 | 209 | 0.21 |
| 298 | 9.54 | 34.12 | 5.34 | 0.70 | 26.36 | 100 | 12.54 | 34.35 | 26.00 | 202 | 0.27 |
| 402 | 7.85 | 34.03 | 4.52 | 1.08 | 26.56 | 125 | 11.97 | 34.33 | 26.09 | 193 | 0.32 |
| 502 | 5.94 | 33.95 | 3.58 | 1.48 | 26.75 | 150 | 11.52 | 34.30 | 26.16 | 187 | 0.36 |
| 609 | 4.71 | 33.97 | 2.70 | 1.82 | 26.91 | 200 | 10.95 | 34.24 | 26.21 | 181 | 0.46 |
| 817 | 3.90 | 34.15 | 1.25 | 2.63 | 27.14 | 250 | 10.23 | 34.17 | 26.28 | 175 | 0.55 |
| 1017 | 3.35 | 34.31 | 0.73 | 2.63 | 27.32 | 300 | 9.51 | 34.11 | 26.36 | 167 | 0.64 |
| 1217 | 2.91 | 34.38 | 0.59 | 3.00 | 27.42 | 400 | 7.88 | 34.03 | 26.55 | 149 | 0.80 |
| | | | | | | 500 | 5.98 | 33.95 | 26.75 | 131 | 0.95 |
| | | | | | | 600 | 4.79 | 33.96 | 26.90 | 116 | 1.08 |
| | | | | | | 700 | 4.21 | 34.03 | 27.02 | 105 | 1.20 |
| | | | | | | 800 | 3.92 | 34.13 | 27.12 | 95 | 1.30 |
| | | | | | | 1000 | 3.39 | 34.29 | 27.30 | 78 | 1.49 |
| | | | | | | 1200 | 2.95 | 34.37 | 27.41 | 68 | 1.65 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 87 | HUGH M. SMITH; August 26, 1958; 2345 GCT; 40°28.5'N, 170°32.5'W; wind, 200°, 19 kt; weather, fog; sea, slight; wire angle, 22°. | | | | | | | | | | |
| 0 | 16.02 | 33.85 | 5.81 | 0.20 | 24.88 | 0 | 16.02 | 33.85 | 24.88 | 308 | 0.00 |
| 19 | 15.75 | 33.87 | 5.90 | 0.00 | 24.96 | 10 | 15.88 | 33.86 | 24.92 | 305 | 0.03 |
| 33 | 13.44 | 34.18 | 6.37 | 0.32 | 25.69 | 20 | 15.60 | 33.89 | 25.01 | 297 | 0.06 |
| 52 | 11.66 | 34.19 | 5.87 | 0.42 | 26.04 | 30 | 13.97 | 34.11 | 25.53 | 247 | 0.09 |
| 102 | 10.52 | 34.17 | 5.65 | 0.70 | 26.23 | 50 | 11.79 | 34.20 | 26.03 | 200 | 0.13 |
| 202 | 9.03 | 34.04 | 5.81 | 0.83 | 26.38 | 75 | 10.80 | 34.18 | 26.20 | 184 | 0.18 |
| 301 | 8.26 | 34.05 | 4.78 | 1.32 | 26.51 | 100 | 10.51 | 34.17 | 26.24 | 181 | 0.23 |
| 409 | 6.08 | 33.97 | 4.05 | 2.20 | 26.75 | 125 | 10.10 | 34.13 | 26.28 | 177 | 0.27 |
| 514 | 4.84 | 33.95 | 3.02 | 3.00 | 26.88 | 150 | 9.69 | 34.10 | 26.33 | 174 | 0.32 |
| 621 | 4.26 | 34.08 | 1.97 | 3.00 | 27.05 | 200 | 9.05 | 34.04 | 26.38 | 169 | 0.40 |
| 829 | 3.69 | 34.22 | 1.02 | 3.32 | 27.22 | 250 | 8.69 | 34.04 | 26.44 | 165 | 0.48 |
| 1035 | 3.14 | 34.34 | 0.70 | 3.48 | 27.37 | 300 | 8.27 | 34.05 | 26.51 | 158 | 0.57 |
| 1231 | 2.77 | 34.40 | 0.70 | 3.32 | 27.45 | 400 | 6.27 | 33.97 | 26.73 | 137 | 0.71 |
| | | | | | | 500 | 4.96 | 33.94 | 26.87 | 124 | 0.84 |
| | | | | | | 600 | 4.34 | 34.05 | 27.02 | 110 | 0.96 |
| | | | | | | 700 | 4.00 | 34.14 | 27.13 | 101 | 1.07 |
| | | | | | | 800 | 3.75 | 34.20 | 27.20 | 94 | 1.16 |
| | | | | | | 1000 | 3.23 | 34.32 | 27.35 | 81 | 1.34 |
| | | | | | | 1200 | 2.83 | 34.39 | 27.44 | 73 | 1.49 |
| 89 | HUGH M. SMITH; August 28, 1958; 2016 GCT; 41°26'N, 170°39'W; wind, direction missing, 12 kt; weather, sky obscured; sea, rough; wire angle, 30°. | | | | | | | | | | |
| 0 | 15.42 | 33.69 | 5.76 | 0.70 | 24.89 | 0 | 15.42 | 33.69 | 24.89 | 307 | 0.00 |
| 8 | 15.44 | 33.69 | 5.69 | 0.70 | 24.89 | 10 | 15.44 | 33.68 | 24.88 | 308 | 0.03 |
| 22 | 15.26 | 33.74 | 5.84 | 0.59 | 24.96 | 20 | 15.35 | 33.72 | 24.93 | 303 | 0.06 |
| 40 | 12.51 | 34.16 | 6.27 | 0.83 | 25.86 | 30 | 14.15 | 33.91 | 25.33 | 265 | 0.09 |
| 96 | 10.40 | 34.09 | 5.84 | 1.16 | 26.19 | 50 | 11.73 | 34.14 | 25.99 | 202 | 0.14 |
| 191 | 9.49 | 34.10 | 5.91 | 1.16 | 26.36 | 75 | 11.00 | 34.10 | 26.09 | 193 | 0.19 |
| 288 | 8.51 | 34.04 | 4.99 | 1.64 | 26.46 | 100 | 10.33 | 34.08 | 26.20 | 183 | 0.23 |
| 389 | 6.67 | 33.97 | 4.12 | 1.82 | 26.67 | 125 | 9.95 | 34.08 | 26.26 | 177 | 0.28 |
| 488 | 5.00 | 33.91 | 3.36 | 2.00 | 26.83 | 150 | 9.68 | 34.09 | 26.32 | 172 | 0.32 |
| 587 | 4.33 | 34.02 | 2.27 | 2.82 | 26.99 | 200 | 9.42 | 34.09 | 26.36 | 168 | 0.41 |
| 784 | 3.74 | 34.32 | 1.07 | 3.00 | 27.29 | 250 | 8.94 | 34.06 | 26.41 | 162 | 0.49 |
| 983 | 3.22 | 34.30 | 0.76 | 3.17 | 27.33 | 300 | 8.31 | 34.03 | 26.49 | 155 | 0.58 |
| 1176 | 2.84 | 34.39 | 0.58 | 2.82 | 27.43 | 400 | 6.46 | 33.95 | 26.69 | 136 | 0.73 |
| | | | | | | 500 | 4.89 | 33.91 | 26.85 | 121 | 0.86 |
| | | | | | | 600 | 4.27 | 34.04 | 27.02 | 105 | 0.98 |
| | | | | | | 700 | 3.93 | 34.20 | 27.18 | 90 | 1.08 |
| | | | | | | 800 | 3.69 | 34.32 | 27.30 | 78 | 1.17 |
| | | | | | | 1000 | 3.19 | 34.30 | 27.33 | 75 | 1.34 |
| 90 | HUGH M. SMITH; August 29, 1958; 0538 GCT; 42°21'N, 170°12'W; wind, 270°, 4 kt; weather, cloudy; sea, slight; wire angle, 33°. | | | | | | | | | | |
| 0 | 15.73 | 33.87 | 5.78 | 0.70 | 24.96 | 0 | 15.73 | 33.87 | 24.96 | 301 | 0.00 |
| 8 | 15.71 | 33.86 | 5.72 | 0.70 | 24.96 | 10 | 15.73 | 33.85 | 24.94 | 302 | 0.03 |
| 20 | 15.60 | 33.85 | 5.81 | 0.70 | 24.97 | 20 | 15.60 | 33.85 | 24.97 | 299 | 0.06 |
| 36 | 14.00 | 33.96 | 6.14 | 0.76 | 25.40 | 30 | 14.68 | 33.91 | 25.22 | 276 | 0.09 |
| 87 | 10.40 | 34.08 | 5.90 | 1.16 | 26.19 | 50 | 12.78 | 34.01 | 25.69 | 231 | 0.14 |
| 173 | 9.49 | 34.10 | 5.92 | 1.32 | 26.36 | 75 | 11.04 | 34.07 | 26.06 | 195 | 0.19 |
| 262 | 8.58 | 34.05 | 5.22 | 1.32 | 26.46 | 100 | 10.21 | 34.09 | 26.23 | 180 | 0.24 |
| 354 | 7.07 | 33.98 | 4.69 | 1.73 | 26.63 | 125 | 9.90 | 34.10 | 26.29 | 174 | 0.29 |
| 445 | 5.68 | 33.94 | 3.64 | 2.52 | 26.78 | 150 | 9.67 | 34.10 | 26.33 | 171 | 0.33 |
| 534 | 4.67 | 33.97 | 2.84 | 2.73 | 26.92 | 200 | 9.24 | 34.09 | 26.39 | 165 | 0.42 |
| 715 | 4.00 | 34.12 | 1.36 | 3.00 | 27.11 | 250 | 8.72 | 34.05 | 26.44 | 160 | 0.50 |
| 903 | 3.46 | 34.27 | 0.83 | 3.24 | 27.28 | 300 | 7.99 | 34.02 | 26.53 | 152 | 0.58 |
| 1093 | 3.08 | 34.35 | 0.60 | 3.24 | 27.38 | 400 | 6.34 | 33.95 | 26.70 | 135 | 0.73 |
| | | | | | | 500 | 5.01 | 33.95 | 26.86 | 120 | 0.86 |
| | | | | | | 600 | 4.31 | 34.01 | 26.99 | 108 | 0.98 |
| | | | | | | 700 | 4.02 | 34.10 | 27.09 | 98 | 1.09 |
| | | | | | | 800 | 3.74 | 34.19 | 27.19 | 89 | 1.19 |
| | | | | | | 1000 | 3.27 | 34.31 | 27.33 | 75 | 1.36 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; August 30, 1958; 2336 GCT; 43°18'N, 169°39'W; wind, 080°, 18 kt; weather, cloudy; sea, slight; wire angle, 12°. | | | | | | | | | | | 93 |
| 0 | 13.92 | 33.32 | 5.93 | 0.59 | 24.93 | 0 | 13.92 | 33.32 | 24.93 | 304 | 0.00 |
| 9 | 13.94 | 33.33 | 5.97 | 0.59 | 24.93 | 10 | 13.97 | 33.32 | 24.92 | 305 | 0.03 |
| 24 | 13.57 | 33.41 | 6.12 | 0.59 | 25.07 | 20 | 13.83 | 33.36 | 24.98 | 299 | 0.06 |
| 39 | 10.44 | 34.00 | 6.46 | 0.64 | 26.12 | 30 | 12.42 | 33.62 | 25.46 | 253 | 0.09 |
| 106 | 9.08 | 34.10 | 5.86 | 0.91 | 26.42 | 50 | 9.90 | 34.07 | 26.26 | 177 | 0.13 |
| 216 | 8.14 | 34.03 | 5.76 | 1.08 | 26.51 | 75 | 9.37 | 34.10 | 26.37 | 166 | 0.17 |
| 326 | 6.45 | 33.96 | 4.17 | 1.56 | 26.70 | 100 | 9.10 | 34.10 | 26.42 | 162 | 0.22 |
| 442 | 4.91 | 33.96 | 3.55 | 2.00 | 26.88 | 125 | 8.89 | 34.09 | 26.44 | 159 | 0.26 |
| 554 | 4.18 | 34.03 | 2.17 | 2.30 | 27.02 | 150 | 8.65 | 34.08 | 26.47 | 157 | 0.30 |
| 667 | 3.91 | 34.16 | 1.44 | 2.63 | 27.15 | 200 | 8.25 | 34.04 | 26.50 | 154 | 0.38 |
| 885 | 3.42 | 34.36 | 0.85 | 2.63 | 27.36 | 250 | 7.65 | 34.00 | 26.56 | 148 | 0.45 |
| 1100 | 2.96 | 34.47 | 0.70 | 2.73 | 27.49 | 300 | 6.87 | 33.97 | 26.65 | 140 | 0.53 |
| 1302 | 2.64 | 34.44 | 0.60 | 2.92 | 27.49 | 400 | 5.41 | 33.95 | 26.82 | 124 | 0.66 |
| | | | | | | 500 | 4.46 | 33.98 | 26.95 | 111 | 0.79 |
| | | | | | | 600 | 4.04 | 34.08 | 27.07 | 100 | 0.90 |
| | | | | | | 700 | 3.83 | 34.19 | 27.18 | 89 | 1.00 |
| | | | | | | 800 | 3.61 | 34.29 | 27.28 | 80 | 1.09 |
| | | | | | | 1000 | 3.16 | 34.43 | 27.44 | 65 | 1.25 |
| | | | | | | 1200 | 2.80 | 34.45 | 27.49 | 61 | 1.39 |
| HUGH M. SMITH; August 31, 1958; 0740 GCT; 44°06'N, 169°20.5'W; wind, 100°, 18 kt; weather, intermittent slight drizzle; sea, moderate; wire angle, 15°. | | | | | | | | | | | 95 |
| 0 | 12.51 | 32.90 | 6.12 | 0.83 | 24.88 | 0 | 12.51 | 32.90 | 24.88 | 308 | 0.00 |
| 9 | 12.58u | 32.92 | 6.15 | 0.83 | 24.89 | 10 | 12.57 | 32.92 | 24.89 | 307 | 0.03 |
| 29 | 11.50 | 33.00 | 6.32 | 0.83 | 25.15 | 20 | 12.22 | 32.95 | 24.98 | 299 | 0.06 |
| 54 | 7.18 | 33.27 | 6.89 | 1.00 | 26.05 | 30 | 11.34 | 33.01 | 25.19 | 279 | 0.09 |
| 106 | 5.61 | 33.36 | 6.61 | 1.16 | 26.33 | 50 | 7.90 | 33.22 | 25.91 | 210 | 0.14 |
| 214 | 6.29 | 33.84 | 5.14 | 1.48 | 26.62 | 75 | 5.87 | 33.33 | 26.27 | 176 | 0.19 |
| 322 | 4.68 | 33.92 | 3.36 | 1.82 | 26.88 | 100 | 5.60 | 33.36 | 26.33 | 170 | 0.23 |
| 437 | 3.88 | 33.93 | 2.44 | 2.20 | 26.97 | 125 | 5.80 | 33.44 | 26.37 | 167 | 0.27 |
| 548 | 3.74 | 34.07 | 1.57 | 2.30 | 27.10 | 150 | 6.30 | 33.55 | 26.39 | 164 | 0.32 |
| 658 | 3.67 | 34.18 | 1.16 | 2.42 | 27.19 | 200 | 6.62 | 33.77 | 26.52 | 152 | 0.40 |
| 874 | 3.12 | 34.36 | 0.73 | 2.91 | 27.39 | 250 | 5.83 | 33.89 | 26.72 | 133 | 0.47 |
| 1088 | 2.79 | 34.39 | 0.73 | 3.00 | 27.44 | 300 | 5.07 | 33.92 | 26.83 | 122 | 0.53 |
| 1288 | 2.51 | 34.45 | 0.71 | 3.00 | 27.51 | 400 | 4.05 | 33.92 | 26.94 | 112 | 0.65 |
| | | | | | | 500 | 3.76 | 34.00 | 27.04 | 103 | 0.77 |
| | | | | | | 600 | 3.71 | 34.12 | 27.14 | 94 | 0.87 |
| | | | | | | 700 | 3.58 | 34.22 | 27.23 | 85 | 0.96 |
| | | | | | | 800 | 3.33 | 34.30 | 27.32 | 77 | 1.05 |
| | | | | | | 1000 | 2.91 | 34.38 | 27.42 | 67 | 1.20 |
| | | | | | | 1200 | 2.63 | 34.42 | 27.48 | 61 | 1.35 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | ΔD |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 96 | HUGH M. SMITH; September 1, 1958; 0534 GCT; 45°45.5'N, 168°46.5'W; wind, 160°, 13 kt; weather, thick drizzle; sea, slight; wire angle, 04°. | | | | | | | | | | |
| 0 | 12.38 | 32.86 | 6.15 | 1.16 | 24.88 | 0 | 12.38 | 32.86 | 24.88 | 308 | 0.00 |
| 11 | 12.38 | 32.89 | 6.14 | 1.00 | 24.90 | 10 | 12.38 | 32.88 | 24.89 | 307 | 0.03 |
| 26 | 12.26 | 32.91 | 6.15 | 1.00 | 24.94 | 20 | 12.38 | 32.89 | 24.90 | 306 | 0.06 |
| 47 | 7.32 | 33.14 | 6.90 | 1.16 | 25.93 | 30 | 11.45 | 32.94 | 25.11 | 286 | 0.09 |
| 112 | 5.00 | 33.30 | 6.61 | 1.32 | 26.35 | 50 | 6.98 | 33.15 | 25.99 | 203 | 0.14 |
| 223 | 4.60 | 33.84 | 3.64 | 1.82 | 26.82 | 75 | 5.60 | 33.25 | 26.24 | 179 | 0.19 |
| 336 | 3.92 | 33.90 | 2.51 | 2.20 | 26.94 | 100 | 5.02 | 33.29 | 26.34 | 169 | 0.23 |
| 454 | 3.75 | 34.03 | 2.06 | 2.41 | 27.06 | 125 | 5.12 | 33.36 | 26.39 | 165 | 0.27 |
| 567 | 3.61 | 34.16 | 1.22 | 1.82a) | 27.18 | 150 | 5.44 | 33.49 | 26.45 | 159 | 0.31 |
| 678 | 3.41 | 34.21 | 0.98 | 2.82 | 27.24 | 200 | 4.81 | 33.73 | 26.71 | 134 | 0.39 |
| 898 | 3.06 | 34.32 | 0.73 | 3.00 | 27.36 | 250 | 4.43 | 33.87 | 26.87 | 119 | 0.45 |
| 1113 | 2.72 | 34.43 | 0.71 | 3.00 | 27.48 | 300 | 4.12 | 33.90 | 26.92 | 114 | 0.51 |
| 1314 | 2.48 | 34.47 | 0.76 | 2.91 | 27.53 | 400 | 3.79 | 33.96 | 27.00 | 106 | 0.63 |
| | | | | | | 500 | 3.70 | 34.08 | 27.11 | 97 | 0.73 |
| | | | | | | 600 | 3.55 | 34.17 | 27.19 | 88 | 0.83 |
| | | | | | | 700 | 3.37 | 34.22 | 27.25 | 83 | 0.92 |
| | | | | | | 800 | 3.21 | 34.27 | 27.31 | 78 | 1.00 |
| | | | | | | 1000 | 2.89 | 34.37 | 27.41 | 67 | 1.16 |
| | | | | | | 1200 | 2.62 | 34.44 | 27.49 | 60 | 1.30 |
| 98 | HUGH M. SMITH; September 2, 1958; 0420 GCT; 46°34'N, 164°44'W; wind, 240°, 14 kt; weather, fog; sea, moderate; wire angle, 27°. | | | | | | | | | | |
| 0 | 11.38 | 32.76 | 6.21 | 1.32 | 24.99 | 0 | 11.38 | 32.76 | 24.99 | 298 | 0.00 |
| 13 | 11.40 | 32.77 | 6.26 | 1.32 | 24.99 | 10 | 11.40 | 32.76 | 24.98 | 298 | 0.03 |
| 26 | 10.80 | 32.89 | 6.36 | 1.32 | 25.19 | 20 | 11.22 | 32.82 | 25.06 | 291 | 0.06 |
| 47 | 6.32 | 33.13 | 6.98 | 1.32 | 26.06 | 30 | 10.02 | 32.93 | 25.36 | 263 | 0.09 |
| 94 | 5.22 | 33.26 | 6.69 | 1.49 | 26.29 | 50 | 6.06 | 33.14 | 26.10 | 192 | 0.13 |
| 189 | 5.01 | 33.93u | 4.13b) | 2.30 | 26.85 | 75 | 5.50 | 33.23 | 26.24 | 179 | 0.18 |
| 284 | 3.99 | 33.90 | 2.78 | 1.82 | 26.94 | 100 | 5.18 | 33.30 | 26.33 | 170 | 0.22 |
| 383 | 3.72 | 33.96 | 2.01 | 2.10 | 27.01 | 125 | 5.05 | 33.48 | 26.49 | 155 | 0.26 |
| 479 | 3.64 | 34.08 | 1.22 | 2.82 | 27.11 | 150 | 5.40 | 33.66 | 26.59 | 146 | 0.30 |
| 577 | 3.52 | 34.17 | 1.04 | 2.41 | 27.20 | 200 | 4.89 | 33.94 | 26.87 | 119 | 0.37 |
| 769 | 3.24 | 34.29 | 0.75 | 3.00 | 27.32 | 250 | 4.36 | 33.94 | 26.93 | 113 | 0.43 |
| 967 | 2.89 | 34.40 | 0.63 | 2.82 | 27.44 | 300 | 3.91 | 33.90 | 26.94 | 112 | 0.49 |
| 1160 | 2.63 | 34.45 | 0.71 | 2.14 | 27.50 | 400 | 3.70 | 33.98 | 27.03 | 104 | 0.60 |
| | | | | | | 500 | 3.62 | 34.10 | 27.13 | 94 | 0.70 |
| | | | | | | 600 | 3.49 | 34.18 | 27.21 | 87 | 0.79 |
| | | | | | | 700 | 3.35 | 34.25 | 27.28 | 80 | 0.88 |
| | | | | | | 800 | 3.18 | 34.31 | 27.34 | 74 | 0.97 |
| | | | | | | 1000 | 2.85 | 34.40 | 27.44 | 65 | 1.12 |

a) Value uncertain; not used in interpolation.
b) Value uncertain; used in interpolation.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta_T$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

99

HUGH M. SMITH; September 3, 1958; 0853 GCT; 45°37.5'N, 164°47'W; wind, 230°, 22 kt; weather, heavy rain; sea, moderate; wire angle, 25°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.01 | 32.68 | 6.23 | 1.16 | 24.81 | 0 | 12.01 | 32.68 | 24.81 | 315 | 0.00 |
| 13 | 12.00 | 32.71 | 6.32 | 0.70 | 24.83 | 10 | 12.00 | 32.70 | 24.83 | 313 | 0.03 |
| 32 | 11.52 | 32.86 | 6.24 | 1.00 | 25.04 | 20 | 12.00 | 32.74 | 24.86 | 310 | 0.06 |
| 50 | 6.82 | 33.22 | 6.92 | 1.08 | 26.06 | 30 | 11.69 | 32.83 | 24.98 | 298 | 0.09 |
| 100 | 5.71 | 33.31 | 6.68 | 1.32 | 26.28 | 50 | 6.82 | 33.22 | 26.06 | 195 | 0.14 |
| 201 | 5.88 | 33.87 | 5.13 | 1.48 | 26.70 | 75 | 5.80 | 33.34 | 26.29 | 174 | 0.19 |
| 302 | 4.43 | 33.88 | 3.32 | 1.82 | 26.87 | 100 | 5.71 | 33.31 | 26.28 | 175 | 0.23 |
| 409 | 3.85 | 33.99 | 2.27 | 2.20 | 27.02 | 125 | 5.68 | 33.45 | 26.39 | 165 | 0.28 |
| 512 | 3.82 | 34.08 | 1.49 | 2.30 | 27.10 | 150 | 5.69 | 33.59 | 26.50 | 154 | 0.32 |
| 614 | 3.70 | 34.17 | 1.04 | 2.73 | 27.18 | 200 | 5.87 | 33.86 | 26.69 | 136 | 0.39 |
| 816 | 3.24 | 34.32 | 0.75 | 2.82 | 27.34 | 250 | 5.22 | 33.90 | 26.80 | 126 | 0.46 |
| 1018 | 2.89 | 34.38 | 0.71 | 2.82 | 27.42 | 300 | 4.46 | 33.88 | 26.87 | 119 | 0.52 |
| 1211 | 2.63 | 34.44 | 0.69 | 2.91 | 27.49 | 400 | 3.87 | 33.97 | 27.00 | 106 | 0.63 |
| | | | | | | 500 | 3.81 | 34.07 | 27.09 | 98 | 0.74 |
| | | | | | | 600 | 3.72 | 34.15 | 27.16 | 91 | 0.84 |
| | | | | | | 700 | 3.52 | 34.24 | 27.25 | 83 | 0.93 |
| | | | | | | 800 | 3.28 | 34.31 | 27.33 | 75 | 1.02 |
| | | | | | | 1000 | 2.92 | 34.37 | 27.41 | 68 | 1.17 |
| | | | | | | 1200 | 2.64 | 34.43 | 27.48 | 61 | 1.31 |

101

HUGH M. SMITH; September 3, 1958; 2211 GCT; 44°42.5'N, 165°04.5'W; wind, 200°, 22 kt; weather, cloudy; sea, rough; wire angle, 05°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.94 | 32.98 | 6.02 | 1.00 | 24.86 | 0 | 12.94 | 32.98 | 24.86 | 310 | 0.00 |
| 25 | 12.81 | 33.02 | 6.23 | 1.00 | 24.92 | 10 | 12.89 | 32.99 | 24.88 | 308 | 0.03 |
| 45 | 9.52 | 33.39 | 6.35 | 1.32 | 25.80 | 20 | 12.84 | 33.01 | 24.90 | 306 | 0.06 |
| 66 | 8.96 | 33.77 | 6.15 | 1.32 | 26.18 | 30 | 12.60 | 33.09 | 25.01 | 295 | 0.09 |
| 96 | 8.35 | 33.88 | 6.02 | 1.48 | 26.36 | 50 | 9.25 | 33.49 | 25.92 | 209 | 0.14 |
| 223 | 7.10 | 33.95 | 4.97 | 1.48 | 26.60 | 75 | 8.90 | 33.83 | 26.24 | 179 | 0.19 |
| 335 | 5.27 | 33.91 | 3.64 | 1.56 | 26.80 | 100 | 8.30 | 33.88 | 26.37 | 166 | 0.23 |
| 452 | 4.25 | 33.95 | 2.57 | 2.82 | 26.95 | 125 | 8.01 | 33.93 | 26.45 | 159 | 0.28 |
| 563 | 4.00 | 34.08 | 1.65 | 1.82 | 27.08 | 150 | 7.12 | 33.95 | 26.60 | 145 | 0.31 |
| 675 | 3.81 | 34.19 | 1.13 | 3.17 | 27.18 | 200 | 7.50 | 33.96 | 26.55 | 149 | 0.39 |
| 891 | 3.25 | 34.35 | 0.75 | 3.00 | 27.37 | 250 | 6.65 | 33.94 | 26.65 | 140 | 0.46 |
| 1103 | 2.86 | 34.38 | 0.68 | 3.17 | 27.43 | 300 | 5.83 | 33.92 | 26.74 | 131 | 0.53 |
| 1302 | 2.59 | 34.45 | 0.60 | 3.09 | 27.50 | 400 | 4.60 | 33.92 | 26.89 | 117 | 0.66 |
| | | | | | | 500 | 4.10 | 34.00 | 27.00 | 106 | 0.78 |
| | | | | | | 600 | 3.94 | 34.11 | 27.11 | 97 | 0.88 |
| | | | | | | 700 | 3.75 | 34.21 | 27.21 | 87 | 0.98 |
| | | | | | | 800 | 3.49 | 34.29 | 27.29 | 79 | 1.07 |
| | | | | | | 1000 | 3.03 | 34.37 | 27.40 | 69 | 1.23 |
| | | | | | | 1200 | 2.73 | 34.41 | 27.46 | 63 | 1.37 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CHARLES H. GILBERT; January 22, 1958; 0854 GCT; 21°10'N, 158°18'W; wind, 180°, 12 kt; weather, missing; wire angle, 16°. 15

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.46 | 34.81 | 4.79 | 0.12 | 23.38 | 0 | 24.46 | 34.81 | 23.38 | 451 | 0.00 |
| 23 | 24.32 | 34.85 | 4.58 | 0.12 | 23.45 | 10 | 24.40 | 34.83 | 23.41 | 448 | 0.04 |
| 47 | 24.23 | 34.88 | 4.58 | 0.11 | 23.50 | 20 | 24.34 | 34.84 | 23.44 | 446 | 0.09 |
| 72 | 23.14 | 35.16 | 4.66 | 0.14 | 24.03 | 30 | 24.34 | 34.85 | 23.45 | 446 | 0.13 |
| 95 | 21.54 | 35.12 | 4.65 | 0.16 | 24.46 | 50 | 24.14 | 34.92 | 23.56 | 436 | 0.22 |
| 134 | 20.04 | 35.07 | 4.24 | 0.13 | 24.82 | 75 | 22.93 | 35.16 | 24.10 | 386 | 0.32 |
| 179 | 17.63 | 34.83 | 4.25 | 0.33 | 25.25 | 100 | 21.32 | 35.12 | 24.51 | 346 | 0.42 |
| 219 | 15.87 | 34.60 | 4.30 | 0.43 | 25.49 | 125 | 20.34 | 35.09 | 24.76 | 324 | 0.50 |
| 259 | 13.70 | 34.38 | 4.27 | 0.43 | 25.79 | 150 | 19.20 | 35.00 | 24.99 | 303 | 0.58 |
| 298 | 11.58 | 34.31 | 4.28 | 0.96 | 26.15 | 200 | 16.71 | 34.71 | 25.38 | 267 | 0.72 |
| 400 | 8.21 | 34.14 | 2.75 | 1.67 | 26.59 | 250 | 14.21 | 34.42 | 25.72 | 235 | 0.85 |
| 499 | 7.13 | 34.99 | 1.55 | 1.38 | 27.41 | 300 | 11.49 | 34.30 | 26.16 | 193 | 0.95 |
| | | | | | | 400 | 8.21 | 34.14 | 26.59 | 153 | 1.13 |

CHARLES H. GILBERT; January 22, 1958; 1536 GCT; 21°11'N, 158°19'W; wind, 210°, 13 kt; weather, missing; wire angle, 11-17°. 16

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.45 | 34.85 | 4.69 | 0.13 | 23.41 | 0 | 24.45 | 34.85 | 23.41 | 448 | 0.00 |
| 24 | 24.47 | 34.87 | 4.60 | 0.16 | 23.42 | 10 | 24.46 | 34.86 | 23.42 | 448 | 0.04 |
| 48 | 24.24 | 34.97 | 4.62 | 0.16 | 23.57 | 20 | 24.47 | 34.87 | 23.42 | 448 | 0.09 |
| 74 | 23.87 | 35.16 | 4.62 | 0.12 | 23.82 | 30 | 24.43 | 34.89 | 23.45 | 446 | 0.13 |
| 98 | 22.17 | 35.14 | 4.70 | 0.12 | 24.30 | 50 | 24.24 | 34.99 | 23.58 | 434 | 0.22 |
| 138 | 20.52 | 35.17 | 4.41 | 0.16 | 24.77 | 75 | 23.81 | 35.16 | 23.84 | 410 | 0.33 |
| 182 | 18.77 | 35.01 | 4.37 | 0.30 | 25.11 | 100 | 22.07 | 35.14 | 24.33 | 365 | 0.42 |
| 222 | 15.72 | 34.63 | 4.33 | 0.50 | 25.55 | 125 | 20.97 | 35.16 | 24.65 | 335 | 0.51 |
| 262 | 13.06 | 34.31 | 4.15 | 0.67 | 25.87 | 150 | 20.12 | 35.15 | 24.86 | 315 | 0.59 |
| 301 | 11.34 | 34.22 | 4.05 | 1.07 | 26.13 | 200 | 17.46 | 34.85 | 25.31 | 274 | 0.74 |
| 403 | 7.98 | 34.20 | 2.66 | 1.91 | 26.67 | 250 | 13.79 | 34.39 | 25.78 | 229 | 0.87 |
| 500 | 6.52 | 34.27 | 1.48 | 1.38 | 26.93 | 300 | 11.38 | 34.22 | 26.12 | 197 | 0.97 |
| | | | | | | 400 | 8.05 | 34.20 | 26.66 | 146 | 1.14 |
| | | | | | | 500 | 6.52 | 34.27 | 26.93 | 120 | 1.28 |

HUGH M. SMITH; February 28, 1958; 0230 GCT; 21°10'N, 158°19'W; wind, 160°, 10 kt; weather, partly cloudy; wire angle, 05°. 17

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.44 | 35.03 | 4.85 | 0.22 | 23.55 | 0 | 24.44 | 35.03 | 23.55 | 434 | 0.00 |
| 24 | 23.87 | 34.96 | 4.81 | 0.18 | 23.67 | 10 | 24.20 | 35.00 | 23.60 | 430 | 0.04 |
| 55 | 23.52 | 35.03 | 4.86 | 0.17 | 23.83 | 20 | 23.96 | 34.97 | 23.65 | 426 | 0.09 |
| 80 | 22.88 | 35.14 | 4.89 | 0.23 | 24.09 | 30 | 23.80 | 34.96 | 23.69 | 422 | 0.13 |
| 106 | 22.16 | 35.14 | 4.74 | 0.18 | 24.30 | 50 | 23.58 | 35.01 | 23.79 | 414 | 0.21 |
| 163 | 19.10 | 34.99 | 4.31 | 0.52 | 25.01 | 75 | 23.02 | 35.12 | 24.04 | 391 | 0.31 |
| 207 | 16.74 | 34.78 | 4.32 | 0.61 | 25.43 | 100 | 22.35 | 35.15 | 24.25 | 372 | 0.41 |
| 270 | 13.03 | 34.33 | 4.22 | 0.93 | 25.89 | 125 | 21.25 | 35.11 | 24.53 | 346 | 0.50 |
| 321 | 10.84 | 34.16 | 3.92 | 1.27 | 26.17 | 150 | 19.89 | 35.04 | 24.84 | 317 | 0.58 |
| 377 | 9.08 | 34.18 | 2.90 | 1.20 | 26.48 | 200 | 17.12 | 34.82 | 25.37 | 268 | 0.73 |
| 427 | 8.07 | 34.23 | 2.24 | 2.43 | 26.68 | 250 | 14.17 | 34.47 | 25.76 | 231 | 0.85 |
| 528 | 6.51 | 34.27 | 1.16 | 2.99 | 26.93 | 300 | 11.66 | 34.21 | 26.06 | 203 | 0.96 |
| | | | | | | 400 | 8.57 | 34.20 | 26.58 | 154 | 1.14 |
| | | | | | | 500 | 6.94 | 34.26 | 26.86 | 127 | 1.28 |

HUGH M. SMITH; February 28, 1958; 1000 GCT; 21°10'N, 158°19'W; wind, 180°, 17 kt; weather, cloudy; wire angle, 28°. 18

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.46 | 35.05 | 4.84 | 0.20 | 23.86 | 0 | 23.46 | 35.05 | 23.86 | 405 | 0.00 |
| 22 | 23.46 | 35.03 | 4.81 | 0.21 | 23.84 | 10 | 23.46 | 35.04 | 23.85 | 406 | 0.04 |
| 42 | 23.45 | 35.09 | 4.83 | 0.18 | 23.89 | 20 | 23.46 | 35.03 | 23.84 | 408 | 0.08 |
| 63 | 23.27 | 35.12 | 4.85 | 0.32 | 23.97 | 30 | 23.47 | 35.05 | 23.86 | 407 | 0.12 |
| 83 | 23.08 | 35.12 | 4.88 | 0.18 | 24.02 | 50 | 23.39 | 35.10 | 23.92 | 402 | 0.20 |
| 126 | 22.40 | 35.21 | 4.86 | 0.27 | 24.28 | 75 | 23.16 | 35.12 | 24.00 | 395 | 0.30 |
| 173 | 20.14 | 35.12 | 4.44 | 0.32 | 24.84 | 100 | 22.91 | 35.16 | 24.10 | 386 | 0.40 |
| 216 | 18.22 | 34.83 | 4.25 | 0.61 | 25.11 | 125 | 22.43 | 35.21 | 24.28 | 370 | 0.50 |
| 257 | 15.37 | 34.56 | 4.26 | 0.53 | 25.57 | 150 | 21.33 | 35.19 | 24.57 | 343 | 0.58 |
| 300 | 12.08 | 34.27 | 4.13 | 0.92 | 26.03 | 200 | 18.99 | 34.95 | 25.00 | 303 | 0.75 |
| 343 | 10.09 | 34.18 | 3.44 | 1.49 | 26.32 | 250 | 15.90 | 34.61 | 25.49 | 258 | 0.89 |
| 432 | 7.53 | 34.18 | 2.58 | 1.97 | 26.72 | 300 | 12.08 | 34.27 | 26.03 | 206 | 1.00 |
| | | | | | | 400 | 8.45 | 34.18 | 26.58 | 153 | 1.18 |

| | OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 19 | HUGH M. SMITH; March 24, 1958; 2154 GCT; 21°10'N, 158°21'W; wind, 320°, 2 kt; weather, partly cloudy; wire angle, 05°. | | | | | | | | | | | |
| | 0 | 23.88 | 34.94 | 4.60 | 0.64 | 23.65 | 0 | 23.88 | 34.94 | 23.65 | 425 | 0.00 |
| | 25 | 23.75 | 34.90 | 4.60 | 0.68 | 23.66 | 10 | 23.83 | 34.92 | 23.66 | 425 | 0.04 |
| | 55 | 23.66 | 34.96 | 4.61 | 3.60 | 23.73 | 20 | 23.78 | 34.91 | 23.66 | 425 | 0.08 |
| | 80 | 23.56 | 35.03 | 4.55 | 1.79 | 23.81 | 30 | 23.73 | 34.90 | 23.67 | 425 | 0.13 |
| | 105 | 23.08 | 35.14 | 4.55 | 1.65 | 24.04 | 50 | 23.67 | 34.94 | 23.72 | 421 | 0.21 |
| | 159 | 20.06 | 35.07 | 4.25 | 2.37 | 24.82 | 75 | 23.60 | 35.01 | 23.79 | 415 | 0.32 |
| | 209 | 17.84 | 34.87 | 4.30 | 1.93 | 25.23 | 100 | 23.21 | 35.12 | 23.98 | 397 | 0.42 |
| | 267 | 11.56 | 34.25 | 3.84 | 1.26 | 26.11 | 125 | 22.08 | 35.15 | 24.33 | 366 | 0.51 |
| | 318 | 9.76 | 34.25 | 3.31 | 1.46 | 26.43 | 150 | 20.64 | 35.10 | 24.69 | 332 | 0.60 |
| | 374 | 8.45 | 34.20 | 2.98 | 0.83 | 26.60 | 200 | 18.33 | 34.92 | 25.15 | 289 | 0.76 |
| | 426 | 7.63 | 34.18 | 2.62 | 1.67 | 26.71 | 250 | 13.37 | 34.42 | 25.89 | 219 | 0.88 |
| | 532 | 6.53 | 34.25 | 1.53 | 0.94 | 26.91 | 300 | 10.16 | 34.22 | 26.34 | 176 | 0.98 |
| | | | | | | | 400 | 8.00 | 34.19 | 26.66 | 146 | 1.14 |
| | | | | | | | 500 | 6.86 | 34.23 | 26.85 | 128 | 1.28 |
| 20 | HUGH M. SMITH; March 25, 1958; 0500 GCT; 21°10'N, 158°18'W; wind, 130°, 10 kt; weather, partly cloudy; wire angle, 25°. | | | | | | | | | | | |
| | 0 | 24.14 | 34.96 | 4.66 | 1.60 | 23.59 | 0 | 24.14 | 34.96 | 23.59 | 431 | 0.00 |
| | 22 | 23.78 | 34.90 | 4.59 | 0.98 | 23.65 | 10 | 23.98 | 34.93 | 23.62 | 429 | 0.04 |
| | 49 | 23.74 | 34.97 | 4.68 | 2.42 | 23.72 | 20 | 23.81 | 34.90 | 23.65 | 426 | 0.09 |
| | 72 | 23.56 | 35.07 | 4.53 | 1.61 | 23.84 | 30 | 23.75 | 34.91 | 23.67 | 425 | 0.13 |
| | 93 | 23.22 | 35.08 | 4.63 | 0.56 | 23.95 | 50 | 23.74 | 34.98 | 23.72 | 420 | 0.21 |
| | 142 | 21.32 | 35.08 | 4.52 | 0.76 | 24.49 | 75 | 23.53 | 35.07 | 23.86 | 408 | 0.32 |
| | 187 | 18.62 | 34.94 | 4.31 | - | 25.09 | 100 | 23.03 | 35.09 | 24.01 | 395 | 0.42 |
| | 237 | 16.61 | 34.74 | 4.14 | 1.03 | 25.43 | 125 | 22.13 | 35.09 | 24.27 | 371 | 0.51 |
| | 283 | 13.32 | 34.34 | 3.08 | 0.59 | 25.84 | 150 | 20.84 | 35.06 | 24.60 | 340 | 0.60 |
| | 331 | 10.98 | 34.23 | - | - | 26.20 | 200 | 18.13 | 34.90 | 25.18 | 286 | 0.76 |
| | 376 | 8.96 | 34.22 | 2.38 | - | 26.53 | 250 | 15.70 | 34.62 | 25.54 | 252 | 0.89 |
| | | | | | | | 300 | 12.42 | 34.28 | 25.97 | 212 | 1.01 |
| 21 | MAKUA; April 21, 1958; 2130 GCT; 21°10'N, 158°19'W; wind, 330°, 13 kt; weather, partly cloudy; wire angle, 00°. | | | | | | | | | | | |
| | 0 | 23.32 | 35.10 | | | 23.94 | 0 | 23.32 | 35.10 | 23.94 | 398 | 0.00 |
| | 24 | 22.83 | 35.17 | | | 24.13 | 10 | 23.12 | 35.13 | 24.02 | 391 | 0.04 |
| | 49 | 21.75 | 35.26 | | | 24.50 | 20 | 22.91 | 35.16 | 24.10 | 383 | 0.08 |
| | 74 | 20.60 | 35.25 | | | 24.81 | 30 | 22.60 | 35.20 | 24.22 | 372 | 0.12 |
| | 120 | 19.51 | 35.17 | | | 25.04 | 50 | 21.70 | 35.26 | 24.52 | 344 | 0.19 |
| | 152 | 18.71 | 35.08 | | | 25.17 | 75 | 20.57 | 35.25 | 24.82 | 317 | 0.27 |
| | 203 | 15.93 | 34.67 | | | 25.53 | 100 | 19.91 | 35.21 | 24.97 | 303 | 0.35 |
| | 254 | 13.33 | 34.43 | | | 25.90 | 125 | 19.41 | 35.16 | 25.06 | 296 | 0.42 |
| | 281 | 12.46 | 34.27 | | | 25.95 | 150 | 18.77 | 35.09 | 25.17 | 286 | 0.50 |
| | 305 | 11.20 | 34.20 | | | 26.14 | 200 | 16.12 | 34.70 | 25.51 | 255 | 0.63 |
| | 411 | 8.05 | 34.11 | | | 26.59 | 250 | 13.51 | 34.45 | 25.88 | 220 | 0.75 |
| | 523 | 6.64 | 34.22 | | | 26.87 | 300 | 11.47 | 34.21 | 26.09 | 200 | 0.85 |
| | | | | | | | 400 | 8.24 | 34.11 | 26.56 | 156 | 1.03 |
| | | | | | | | 500 | 6.93 | 34.20 | 26.82 | 131 | 1.18 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

MAKUA; April 22, 1958; 0412 GCT; 21°10'N, 158°19'W; wind, 330°, 10 kt; weather, partly cloudy; wire angle, 00°. 22

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 23.39 | 35.07 | 23.89 | 0 | 23.39 | 35.07 | 23.89 | 402 | 0.00 |
| 26 | 23.02 | 35.10 | 24.02 | 10 | 23.25 | 35.08 | 23.94 | 398 | 0.04 |
| 48 | 22.68 | 34.92 | 23.99 | 20 | 23.11 | 35.09 | 23.99 | 393 | 0.08 |
| 73 | 21.26 | 35.21 | 24.60 | 30 | 22.99 | 35.06 | 24.00 | 393 | 0.12 |
| 118 | 19.55 | 35.07 | 24.95 | 50 | 22.58 | 34.94 | 24.03 | 391 | 0.20 |
| 150 | 19.30 | 35.17 | 25.09 | 75 | 21.16 | 35.21 | 24.63 | 335 | 0.29 |
| 200 | 17.53 | 34.83 | 25.28 | 100 | 20.07 | 35.16 | 24.88 | 312 | 0.37 |
| 252 | 14.18 | 34.47 | 25.76 | 125 | 19.49 | 35.10 | 24.99 | 302 | 0.45 |
| 277 | 12.93 | 34.38 | 25.95 | 150 | 19.30 | 35.17 | 25.09 | 293 | 0.52 |
| 303 | 11.83 | 34.29 | 26.09 | 200 | 17.53 | 34.83 | 25.28 | 277 | 0.66 |
| 412 | 8.90 | 34.20 | 26.53 | 250 | 14.31 | 34.48 | 25.74 | 233 | 0.79 |
| 519 | 6.78 | 34.29 | 26.91 | 300 | 11.95 | 34.30 | 26.07 | 202 | 0.90 |
| | | | | 400 | 9.14 | 34.19 | 26.49 | 163 | 1.08 |
| | | | | 500 | 7.16 | 34.27 | 26.85 | 129 | 1.23 |

CHARLES H. GILBERT; May 30, 1958; 2130 GCT; 21°10'N, 158°18'W; wind, 080°, 13 kt; weather, partly cloudy; wire angle, 17°. 24

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.76 | 34.81 | 23.29 | 0 | 24.76 | 34.81 | 23.29 | 460 | 0.00 |
| 35 | 24.64 | 34.78 | 23.31 | 10 | 24.73 | 34.80 | 23.30 | 460 | 0.05 |
| 74 | 23.52 | 34.99 | 23.80 | 20 | 24.69 | 34.79 | 23.30 | 460 | 0.09 |
| 114 | 22.14 | 35.13 | 24.30 | 30 | 24.66 | 34.78 | 23.30 | 460 | 0.14 |
| 168 | 19.40 | 35.06 | 24.98 | 50 | 24.28 | 34.85 | 23.46 | 445 | 0.23 |
| 225 | 16.37 | 34.70 | 25.45 | 75 | 23.49 | 35.00 | 23.81 | 413 | 0.34 |
| 281 | 12.28 | 34.32 | 26.03 | 100 | 22.67 | 35.10 | 24.12 | 384 | 0.44 |
| 335 | 10.00 | 34.19 | 26.34 | 125 | 21.63 | 35.14 | 24.45 | 354 | 0.53 |
| | | | | 150 | 20.38 | 35.12 | 24.77 | 324 | 0.61 |
| | | | | 200 | 17.78 | 34.88 | 25.25 | 279 | 0.76 |
| | | | | 250 | 14.50 | 34.52 | 25.73 | 235 | 0.89 |
| | | | | 300 | 11.48 | 34.27 | 26.14 | 195 | 1.00 |

CHARLES H. GILBERT; May 30, 1958; 2300 GCT; 21°10'N, 158°19'W; wind, 080°, 13 kt; weather, partly cloudy; wire angle, 16-22°. 25

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.85 | 34.85 | 23.29 | 0 | 24.85 | 34.85 | 23.29 | 459 | 0.00 |
| 32 | 25.10 | 34.79 | 23.17 | 10 | 24.93 | 34.83 | 23.26 | 463 | 0.05 |
| 67 | 24.09 | 34.88 | 23.54 | 20 | 25.01 | 34.81 | 23.22 | 467 | 0.09 |
| 102 | 22.54 | 35.13 | 24.18 | 30 | 25.08 | 34.79 | 23.18 | 471 | 0.14 |
| 154 | 20.70 | 35.11 | 24.68 | 50 | 24.70 | 34.82 | 23.31 | 459 | 0.23 |
| 205 | 17.60 | 34.82 | 25.25 | 75 | 23.75 | 34.94 | 23.69 | 424 | 0.34 |
| 258 | 14.07 | 34.39 | 25.72 | 100 | 22.63 | 35.12 | 24.15 | 382 | 0.44 |
| 308 | 11.05 | 34.20 | 26.16 | 125 | 21.77 | 35.17 | 24.43 | 356 | 0.54 |
| | | | | 150 | 20.86 | 35.12 | 24.65 | 336 | 0.62 |
| | | | | 200 | 17.94 | 34.86 | 25.20 | 284 | 0.78 |
| | | | | 250 | 14.60 | 34.45 | 25.65 | 242 | 0.91 |
| | | | | 300 | 11.53 | 34.23 | 26.10 | 199 | 1.02 |

CHARLES H. GILBERT; May 31, 1958; 0106 GCT; 21°10'N, 158°19'W; wind, 060°, 19 kt; weather, cloudy; wire angle, 40°. 26

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.79 | 34.77 | 4.62 | 0.62 | 23.25 | 0 | 24.79 | 34.77 | 23.25 | 463 | 0.00 |
| 27 | 24.64 | 34.76 | 4.65 | 0.29 | 23.29 | 10 | 24.73 | 34.77 | 23.27 | 462 | 0.05 |
| 56 | 24.39 | 34.80 | 4.64 | 0.34 | 23.40 | 20 | 24.68 | 34.76 | 23.28 | 461 | 0.09 |
| 79 | 22.92 | 35.11 | 4.63 | 0.23 | 24.06 | 30 | 24.66 | 34.75 | 23.28 | 462 | 0.14 |
| 121 | 21.67 | 35.17 | 4.76 | 0.11 | 24.46 | 50 | 24.52 | 34.77 | 23.34 | 457 | 0.23 |
| 162 | 18.92 | 35.04 | 4.48 | 0.39 | 25.09 | 75 | 23.20 | 35.05 | 23.94 | 401 | 0.34 |
| 203 | 16.70 | 34.80 | 4.41 | 2.30 | 25.45 | 100 | 22.28 | 35.19 | 24.31 | 366 | 0.43 |
| 245 | 14.31 | 34.47 | 4.32 | 0.15 | 25.73 | 125 | 21.42 | 35.16 | 24.52 | 347 | 0.52 |
| 288 | 11.83 | 34.23 | 4.28 | 0.78 | 26.04 | 150 | 19.78 | 35.09 | 24.91 | 310 | 0.60 |
| 332 | 10.26 | 34.17 | 4.25 | 1.33 | 26.28 | 200 | 16.86 | 34.82 | 25.43 | 262 | 0.75 |
| 377 | 8.59 | 34.12 | 3.20 | 1.24 | 26.51 | 250 | 14.00 | 34.44 | 25.77 | 230 | 0.87 |
| 422 | 7.66 | 34.14 | 2.34 | 2.78 | 26.67 | 300 | 11.36 | 34.20 | 26.11 | 198 | 0.98 |
| | | | | | | 400 | 8.11 | 34.13 | 26.59 | 152 | 1.15 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

27 CHARLES H. GILBERT; June 22, 1958; 0530 GCT; 21°11'N, 158°18'W; wind, 080°, 17 kt; weather, partly cloudy; wire angle, 11°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.90 | 34.82 | 4.18 | 22.95 | 0 | 25.90 | 34.82 | 22.95 | 492 | 0.00 |
| 33 | 25.58 | 34.84 | 4.14 | 23.06 | 10 | 25.80 | 34.83 | 22.98 | 489 | 0.05 |
| 51 | 24.76 | 34.93 | 4.29 | 23.38 | 20 | 25.71 | 34.83 | 23.02 | 486 | 0.10 |
| 105 | 22.53 | 35.08 | 4.22 | 24.15 | 30 | 25.61 | 34.84 | 23.05 | 484 | 0.15 |
| 154 | 20.44 | 35.17 | 4.03 | 24.79 | 50 | 24.81 | 34.92 | 23.36 | 455 | 0.24 |
| 208 | 17.67 | 34.84 | 3.85 | 25.25 | 75 | 23.75 | 35.01 | 23.74 | 419 | 0.35 |
| 256 | 14.79 | 34.48 | 3.86 | 25.64 | 100 | 22.73 | 35.07 | 24.08 | 388 | 0.45 |
| 310 | 10.73 | 34.16 | 3.54 | 26.19 | 125 | 21.71 | 35.14 | 24.43 | 356 | 0.54 |
| 359 | 9.17 | 34.14 | 2.98 | 26.44 | 150 | 20.62 | 35.17 | 24.75 | 326 | 0.63 |
| 408 | 8.08 | 34.12 | 2.48 | 26.59 | 200 | 18.11 | 34.91 | 25.19 | 285 | 0.78 |
| 462 | 7.41 | 34.16 | 1.75 | 26.72 | 250 | 15.18 | 34.52 | 25.59 | 248 | 0.92 |
| 512 | 6.76 | 34.22 | 1.48 | 26.86 | 300 | 11.42 | 34.20 | 26.10 | 199 | 1.03 |
| | | | | | 400 | 8.23 | 34.12 | 26.57 | 154 | 1.20 |
| | | | | | 500 | 6.92 | 34.21 | 26.83 | 131 | 1.35 |

28 CHARLES H. GILBERT; June 22, 1958; 1254 GCT; 21°11'N, 158°19'W; wind, 040°, 10 kt; weather, partly cloudy; wire angle, 02°.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.89 | 34.90 | 4.08 | 23.01 | 0 | 25.89 | 34.90 | 23.01 | 486 | 0.00 |
| 32 | 25.15 | 34.88 | 4.20 | 23.23 | 10 | 25.66 | 34.89 | 23.08 | 480 | 0.05 |
| 51 | 23.97 | 35.05 | 4.27 | 23.71 | 20 | 25.43 | 34.89 | 23.15 | 474 | 0.10 |
| 103 | 21.00 | 35.16 | 4.13 | 24.64 | 30 | 25.20 | 34.88 | 23.21 | 468 | 0.14 |
| 153 | 19.28 | 35.07 | 3.94 | 25.02 | 50 | 24.04 | 35.04 | 23.68 | 424 | 0.23 |
| 205 | 16.14 | 34.67 | 3.87 | 25.48 | 75 | 22.50 | 35.15 | 24.21 | 375 | 0.33 |
| 258 | 12.62 | 34.28 | 4.08 | 25.93 | 100 | 21.15 | 35.16 | 24.60 | 339 | 0.42 |
| 311 | 10.02 | 34.16 | 3.34 | 26.31 | 125 | 20.25 | 35.15 | 24.83 | 318 | 0.50 |
| 365 | 8.22 | 34.13 | 2.58 | 26.58 | 150 | 19.39 | 35.08 | 25.00 | 302 | 0.58 |
| 416 | 7.66 | 34.17 | 1.93 | 26.69 | 200 | 16.48 | 34.72 | 25.44 | 261 | 0.72 |
| 469 | 6.98 | 34.20 | 1.46 | 26.81 | 250 | 13.13 | 34.33 | 25.87 | 221 | 0.84 |
| 524 | 6.49 | 34.28 | 1.32 | 26.94 | 300 | 10.49 | 34.17 | 26.24 | 185 | 0.94 |
| | | | | | 400 | 7.78 | 34.15 | 26.66 | 145 | 1.11 |
| | | | | | 500 | 6.70 | 34.24 | 26.89 | 125 | 1.24 |

29 HUGH M. SMITH; July 22, 1958; 0536 GCT; 21°11'N, 158°19'W; wind, 120°, 18 kt; weather, partly cloudy; wire angle, 08°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.10 | 34.80 | 4.80 | 0.70 | 22.87 | 0 | 26.10 | 34.80 | 22.87 | 500 | 0.00 |
| 25 | 25.88 | 34.83 | 4.78 | 0.35 | 22.96 | 10 | 26.01 | 34.81 | 22.91 | 496 | 0.05 |
| 50 | 25.86 | 34.80 | 4.80 | 0.36 | 22.95 | 20 | 25.92 | 34.82 | 22.95 | 493 | 0.10 |
| 73 | 25.84 | 34.79 | 4.80 | 0.40 | 22.95 | 30 | 25.87 | 34.83 | 22.96 | 492 | 0.15 |
| 98 | 23.92 | 34.98 | 5.05 | 0.22 | 23.67 | 50 | 25.86 | 34.80 | 22.95 | 494 | 0.25 |
| 148 | 21.51 | 35.15 | 4.95 | 0.23 | 24.49 | 75 | 25.71 | 34.80 | 22.99 | 491 | 0.37 |
| 194 | 17.82 | 34.73 | 4.33 | 0.46 | 25.13 | 100 | 23.82 | 35.00 | 23.71 | 423 | 0.48 |
| 292 | 12.28 | 34.24 | 4.47 | 0.94 | 25.97 | 125 | 22.60 | 35.13 | 24.17 | 381 | 0.58 |
| 390 | 9.42 | 34.11 | 4.05 | 1.51 | 26.37 | 150 | 21.36 | 35.14 | 24.52 | 348 | 0.68 |
| 486 | 7.17 | 34.18 | 1.81 | 3.01 | 26.77 | 200 | 17.40 | 34.69 | 25.20 | 284 | 0.83 |
| 584 | 6.12 | 34.25 | 1.09 | 3.18 | 26.97 | 250 | 14.30 | 34.39 | 25.68 | 239 | 0.96 |
| 680 | 5.42 | 34.33 | 0.82 | - | 27.12 | 300 | 11.99 | 34.22 | 26.00 | 208 | 1.08 |
| 777 | 4.98 | 34.40 | 0.89 | 3.51 | 27.22 | 400 | 9.14 | 34.11 | 26.42 | 169 | 1.27 |
| 969 | 4.18 | 34.47 | 1.13 | 3.54 | 27.37 | 500 | 6.97 | 34.19 | 26.81 | 133 | 1.42 |
| 1350 | 3.20 | 34.55 | 1.51 | 3.37 | 27.53 | 600 | 5.98 | 34.26 | 26.99 | 115 | 1.54 |
| | | | | | | 700 | 5.32 | 34.35 | 27.14 | 102 | 1.65 |
| | | | | | | 800 | 4.88 | 34.41 | 27.24 | 92 | 1.75 |
| | | | | | | 1000 | 4.10 | 34.48 | 27.38 | 80 | 1.92 |
| | | | | | | 1200 | 3.59 | 34.52 | 27.47 | 72 | 2.07 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; July 22, 1958; 1236 GCT; 21°11'N, 158°19'W; wind, 080°, 12 kt; weather, missing; wire angle, 01°. | | | | | | | | | | | 30 |
| 0 | 25.93 | 34.81 | 4.77 | 0.49 | 22.93 | 0 | 25.93 | 34.81 | 22.93 | 494 | 0.00 |
| 26 | 25.93 | 34.81 | 4.78 | 0.50 | 22.93 | 10 | 25.93 | 34.81 | 22.93 | 494 | 0.05 |
| 51 | 24.64 | 34.91 | 5.03 | 0.49 | 23.40 | 20 | 25.93 | 34.81 | 22.93 | 495 | 0.10 |
| 75 | 22.82 | 35.06 | 5.01 | 0.32 | 24.05 | 30 | 25.79 | 34.82 | 22.99 | 490 | 0.15 |
| 101 | 21.99 | 35.17 | 4.99 | 0.43 | 24.37 | 50 | 24.71 | 34.90 | 23.38 | 453 | 0.24 |
| 146 | 20.07 | 35.11 | 4.65 | 0.51 | 24.85 | 75 | 22.82 | 35.06 | 24.05 | 390 | 0.35 |
| 198 | 17.86 | 34.86 | 4.49 | 0.58 | 25.22 | 100 | 22.01 | 35.17 | 24.36 | 361 | 0.44 |
| 300 | 11.48 | 34.26 | 4.52 | 1.46 | 26.13 | 125 | 21.00 | 35.17 | 24.64 | 336 | 0.53 |
| 406 | 8.17 | 34.15 | 2.60 | 2.40 | 26.60 | 150 | 19.91 | 35.10 | 24.88 | 314 | 0.61 |
| 504 | 6.64 | 34.24 | 1.43 | 2.01 | 26.89 | 200 | 17.73 | 34.85 | 25.24 | 280 | 0.76 |
| | | | | | | 250 | 14.58 | 34.53 | 25.72 | 235 | 0.89 |
| | | | | | | 300 | 11.48 | 34.26 | 26.13 | 196 | 1.00 |
| | | | | | | 400 | 8.29 | 34.15 | 26.58 | 153 | 1.17 |
| | | | | | | 500 | 6.70 | 34.24 | 26.88 | 125 | 1.31 |
| CHARLES H. GILBERT; August 20, 1958; 1200 GCT; 21°10'N, 158°19'W; wind, 080°, 12 kt; weather, partly cloudy; wire angle, 12-15°. | | | | | | | | | | | 31 |
| 0 | 26.70 | 34.91 | 4.43 | 0.39 | 22.77 | 0 | 26.70 | 34.91 | 22.77 | 510 | 0.00 |
| 23 | 26.75 | 34.88 | 4.44 | 0.14 | 22.73 | 10 | 26.72 | 34.90 | 22.75 | 512 | 0.05 |
| 48 | 26.61 | 34.87 | 4.48 | 0.16 | 22.77 | 20 | 26.74 | 34.88 | 22.73 | 514 | 0.10 |
| 72 | 24.45 | 34.89 | 4.69 | 0.15 | 23.45 | 30 | 26.83 | 34.87 | 22.70 | 517 | 0.15 |
| 95 | 23.36 | 35.04 | 4.70 | 0.13 | 23.88 | 50 | 26.45 | 34.87 | 22.82 | 507 | 0.26 |
| 199 | 17.23 | 34.75 | 4.16 | 0.61 | 25.29 | 75 | 24.28 | 34.91 | 23.51 | 442 | 0.38 |
| 297 | 10.66 | 34.19 | 3.92 | 0.61 | 26.23 | 100 | 23.10 | 35.05 | 23.96 | 399 | 0.48 |
| 338 | 9.13 | 34.14 | 3.67 | 0.81 | 26.44 | 125 | 21.74 | 35.05 | 24.35 | 363 | 0.58 |
| 401 | 7.56 | 34.11 | 2.70 | 0.98 | 26.66 | 150 | 20.29 | 35.00 | 24.71 | 330 | 0.66 |
| 499 | 6.54 | 34.24 | 1.14 | 1.49 | 26.90 | 200 | 17.15 | 34.74 | 25.30 | 274 | 0.81 |
| | | | | | | 250 | 13.60 | 34.44 | 25.85 | 222 | 0.94 |
| | | | | | | 300 | 10.53 | 34.18 | 26.24 | 185 | 1.04 |
| | | | | | | 400 | 7.58 | 34.11 | 26.66 | 146 | 1.20 |
| CHARLES H. GILBERT; August 20, 1958; 1912 GCT; 21°10'N, 158°18'W; wind, 080°, 11 kt; weather, partly cloudy; wire angle, 25°. | | | | | | | | | | | 32 |
| 0 | 26.71 | 34.89 | 4.55 | 0.22 | 22.75 | 0 | 26.71 | 34.89 | 22.75 | 511 | 0.00 |
| 21 | 26.72 | 34.91 | 4.59 | 0.22 | 22.76 | 10 | 26.71 | 34.90 | 22.75 | 511 | 0.05 |
| 42 | 26.38 | 34.88 | 4.71 | 0.27 | 22.85 | 20 | 26.72 | 34.91 | 22.76 | 511 | 0.10 |
| 64 | 24.72 | 34.90 | 4.84 | 0.24 | 23.37 | 30 | 26.67 | 34.90 | 22.77 | 511 | 0.15 |
| 86 | 23.82 | 35.05 | 4.89 | 0.20 | 23.75 | 50 | 25.81 | 34.88 | 23.02 | 487 | 0.25 |
| 129 | 21.25 | 35.01 | 4.63 | 0.27 | 24.45 | 75 | 24.24 | 34.97 | 23.57 | 436 | 0.37 |
| 177 | 19.44 | 34.97 | 4.35 | 0.61 | 24.90 | 100 | 22.99 | 35.06 | 24.00 | 396 | 0.47 |
| 263 | 15.52 | 34.58 | 4.21 | 0.78 | 25.55 | 125 | 21.49 | 35.02 | 24.40 | 359 | 0.57 |
| 357 | 10.84 | 34.22 | 4.12 | 0.65 | 26.22 | 150 | 20.41 | 35.00 | 24.67 | 333 | 0.65 |
| 447 | 7.96 | 34.11 | 3.12 | 0.99 | 26.60 | 200 | 18.45 | 34.88 | 25.09 | 295 | 0.81 |
| | | | | | | 250 | 16.15 | 34.65 | 25.46 | 260 | 0.95 |
| | | | | | | 300 | 13.60 | 34.42 | 25.84 | 225 | 1.07 |
| | | | | | | 400 | 9.46 | 34.17 | 26.41 | 170 | 1.27 |
| CHARLES H. GILBERT; September 26, 1958; 0112 GCT; 21°10'N, 158°18'W; wind, 090°, 8 kt; weather, partly cloudy; wire angle, 27°. | | | | | | | | | | | 33 |
| 0 | 26.86 | 34.87 | 4.64 | | 22.69 | 0 | 26.86 | 34.87 | 22.69 | 517 | 0.00 |
| 22 | 26.66 | 34.86 | 4.77 | | 22.74 | 10 | 26.77 | 34.86 | 22.71 | 515 | 0.05 |
| 47 | 26.70 | 34.87 | 4.65 | | 22.74 | 20 | 26.68 | 34.86 | 22.74 | 513 | 0.10 |
| 69 | 26.62 | 34.87 | 4.58 | | 22.76 | 30 | 26.66 | 34.86 | 22.74 | 513 | 0.15 |
| 95 | 23.94 | 34.95 | 4.73 | | 23.64 | 50 | 26.75 | 34.87 | 22.72 | 516 | 0.26 |
| 143 | 20.50 | 35.02 | 4.56 | | 24.66 | 75 | 26.10 | 34.89 | 22.94 | 496 | 0.38 |
| 191 | 18.20 | 34.82 | 4.39 | | 25.10 | 100 | 23.51 | 34.97 | 23.78 | 417 | 0.50 |
| 286 | 13.12 | 34.24 | 4.32 | | 25.80 | 125 | 21.61 | 35.02 | 24.36 | 362 | 0.60 |
| 387 | 9.31 | 34.04 | 3.80 | | 26.34 | 150 | 20.13 | 35.00 | 24.75 | 326 | 0.68 |
| 484 | 7.16 | 34.12 | 2.13 | | 26.73 | 200 | 17.70 | 34.76 | 25.18 | 286 | 0.83 |
| | | | | | | 250 | 15.00 | 34.45 | 25.57 | 250 | 0.97 |
| | | | | | | 300 | 12.50 | 34.19 | 25.89 | 220 | 1.09 |
| | | | | | | 400 | 9.02 | 34.05 | 26.39 | 172 | 1.28 |

34 CHARLES H. GILBERT; September 26, 1958; 0718 GCT; 21°10'N, 158°19'W; wind, 070°, 8 kt; weather, partly cloudy; wire angle, 03°.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 0 | 26.63 | 34.86 | 4.55 | | 22.75 | 0 | 26.63 | 34.86 | 22.75 | 511 | 0.00 |
| 25 | 26.64 | 34.93 | 4.59 | | 22.80 | 10 | 26.63 | 34.89 | 22.77 | 510 | 0.05 |
| 54 | 26.62 | 34.91 | 4.61 | | 22.79 | 20 | 26.64 | 34.92 | 22.79 | 508 | 0.10 |
| 78 | 24.58 | 34.90 | 4.82 | | 23.41 | 30 | 26.73 | 34.93 | 22.77 | 510 | 0.15 |
| 163 | 19.00 | 34.95 | 4.53 | | 25.00 | 50 | 26.70 | 34.92 | 22.77 | 511 | 0.26 |
| 218 | 16.14 | 34.61 | 4.43 | | 25.43 | 75 | 24.88 | 34.90 | 23.32 | 459 | 0.38 |
| 329 | 10.96 | 34.23 | 4.30 | | 26.20 | 100 | 22.95 | 34.94 | 23.92 | 403 | 0.48 |
| 553 | 6.03 | 34.29 | 0.97 | | 27.01 | 125 | 21.25 | 34.96 | 24.42 | 357 | 0.58 |
| | | | | | | 150 | 19.72 | 34.96 | 24.82 | 319 | 0.66 |
| | | | | | | 200 | 17.03 | 34.73 | 25.32 | 273 | 0.81 |
| | | | | | | 250 | 14.51 | 34.47 | 25.68 | 239 | 0.94 |
| | | | | | | 300 | 12.19 | 34.30 | 26.03 | 206 | 1.05 |
| | | | | | | 400 | 9.40 | 34.25 | 26.49 | 163 | 1.24 |
| | | | | | | 500 | 7.20 | 34.28 | 26.84 | 129 | 1.38 |

35 MAKUA; October 21, 1958; 2200 GCT; 21°10'N, 158°19'W; wind, 090°, 12 kt; weather, cloudy; wire angle, 07°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 26.02 | 34.96 | 4.40 | 0.23 | 23.02 | 0 | 26.02 | 34.96 | 23.02 | 486 | 0.00 |
| 25 | 26.00 | 34.93 | 4.47 | 0.21 | 23.00 | 10 | 26.01 | 34.95 | 23.01 | 487 | 0.05 |
| 56 | 25.94 | 34.92 | 4.55 | 0.22 | 23.01 | 20 | 26.00 | 34.94 | 23.01 | 488 | 0.10 |
| 81 | 25.99 | 34.93 | 4.52 | 0.27 | 23.01 | 30 | 25.99 | 34.93 | 23.00 | 488 | 0.15 |
| 112 | 23.27 | 34.92 | 4.70 | 0.27 | 23.82 | 50 | 25.95 | 34.92 | 23.01 | 488 | 0.24 |
| 162 | 20.49 | 34.97 | 4.43 | 0.34 | 24.63 | 75 | 26.07 | 34.93 | 22.98 | 492 | 0.37 |
| 217 | 17.68 | 34.76 | 4.28 | 0.61 | 25.19 | 100 | 24.46 | 34.92 | 23.47 | 447 | 0.48 |
| 272 | 14.35 | 34.32 | 3.93 | 0.86 | 25.61 | 125 | 22.44 | 34.94 | 24.07 | 390 | 0.59 |
| 297 | 13.27 | 34.30 | 3.91 | 0.92 | 25.82 | 150 | 21.06 | 34.96 | 24.47 | 352 | 0.68 |
| 327 | 11.45 | 34.15 | 3.62 | 1.29 | 26.05 | 200 | 18.56 | 34.85 | 25.04 | 300 | 0.84 |
| 429 | 7.91 | 34.11 | 2.77 | 2.36 | 26.61 | 250 | 15.63 | 34.48 | 25.45 | 262 | 0.98 |
| 534 | 6.85 | 34.20 | 1.29 | 1.90 | 26.83 | 300 | 13.09 | 34.29 | 25.84 | 224 | 1.11 |
| | | | | | | 400 | 8.58 | 34.08 | 26.48 | 163 | 1.30 |
| | | | | | | 500 | 7.19 | 34.17 | 26.76 | 137 | 1.45 |

36 MAKUA; October 22, 1958; 0454 GCT; 21°10'N, 158°19'W; wind, 090°, 12 kt; weather, cloudy; wire angle, 12°.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.97 | 34.94 | | 0.21 | 23.02 | 0 | 25.97 | 34.94 | 23.02 | 486 | 0.00 |
| 20 | 26.00 | 34.91 | | 0.17 | 22.99 | 10 | 25.98 | 34.92 | 23.00 | 488 | 0.05 |
| 44 | 25.98 | 35.00 | | 0.18 | 23.06 | 20 | 26.00 | 34.91 | 22.99 | 490 | 0.10 |
| 70 | 25.98 | 34.92 | | 0.19 | 23.00 | 30 | 25.99 | 34.95 | 23.02 | 487 | 0.15 |
| 100 | 23.94 | 34.87 | | 0.26 | 23.58 | 50 | 26.05 | 34.99 | 23.03 | 487 | 0.24 |
| 149 | 21.39 | 35.04 | | 0.30 | 24.44 | 75 | 25.70 | 34.91 | 23.08 | 483 | 0.36 |
| 199 | 18.81 | 34.86 | | 0.43 | 24.98 | 100 | 23.94 | 34.87 | 23.58 | 436 | 0.48 |
| 253 | 14.00 | 34.35 | | 0.86 | 25.70 | 125 | 22.58 | 34.96 | 24.04 | 392 | 0.58 |
| 278 | 12.87 | 34.56 | | 0.89 | 26.10 | 150 | 21.35 | 35.04 | 24.45 | 355 | 0.68 |
| 303 | 11.27 | 34.16 | | 1.11 | 26.09 | 200 | 18.72 | 34.85 | 24.99 | 304 | 0.84 |
| 401 | 7.98 | 34.17 | | 1.93 | 26.65 | 250 | 14.25 | 34.36 | 25.66 | 240 | 0.98 |
| 503 | 6.70 | 34.19 | | 0.85 | 26.84 | 300 | 11.47 | 34.22 | 26.10 | 199 | 1.09 |
| | | | | | | 400 | 8.00 | 34.16 | 26.64 | 148 | 1.26 |
| | | | | | | 500 | 6.74 | 34.19 | 26.84 | 129 | 1.40 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HUGH M. SMITH; November 21, 1958; 0430, 0518 GCT; 21°12'N, 158°20'W; wind, 030°, 19 kt; weather, cloudy; wire angle, 16°, 27°. 37

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.98 | 34.96 | 0.11 | 23.03 | 0 | 25.98 | 34.96 | 23.03 | 484 | 0.00 |
| 24 | 25.97 | 34.97 | 0.04 | 23.04 | 10 | 25.98 | 34.96 | 23.04 | 484 | 0.05 |
| 48 | 25.76 | 34.97 | 0.02 | 23.11 | 20 | 25.97 | 34.97 | 23.04 | 484 | 0.10 |
| 73 | 25.44 | 34.99 | 0.06 | 23.22 | 30 | 25.93 | 34.97 | 23.05 | 484 | 0.14 |
| 97 | 23.47 | 35.01 | - | 23.83 | 50 | 25.77 | 34.97 | 23.10 | 479 | 0.24 |
| 150 | 20.66 | 35.06 | 0.06 | 24.65 | 75 | 25.30 | 34.99 | 23.26 | 465 | 0.36 |
| 198 | 18.02 | 34.85 | 0.35 | 25.17 | 100 | 23.28 | 35.02 | 23.88 | 407 | 0.47 |
| 247 | 15.09 | 34.50 | 0.62 | 25.59 | 125 | 21.86 | 35.05 | 24.32 | 366 | 0.56 |
| 271 | 13.55 | 34.37 | 0.80 | 25.81 | 150 | 20.66 | 35.06 | 24.65 | 335 | 0.65 |
| 295 | 11.68 | 34.24 | 0.62 | 26.08 | 200 | 17.91 | 34.84 | 25.19 | 285 | 0.81 |
| 396 | 8.48 | 34.17 | 1.79 | 26.57 | 250 | 14.91 | 34.48 | 25.61 | 246 | 0.94 |
| 492 | 7.00 | 34.22 | 0.80 | 26.83 | 300 | 11.42 | 34.23 | 26.12 | 198 | 1.05 |
| | | | | | 400 | 8.35 | 34.17 | 26.59 | 153 | 1.23 |
| 452a) | 7.12 | 34.19 | 0.97 | 26.79 | 500 | 6.94 | 34.23 | 26.84 | 129 | 1.37 |
| 645 | 5.62 | 34.34 | 0.79 | 27.10 | 600 | 6.07 | 34.30 | 27.02 | 113 | 1.49 |
| 838 | 4.66 | 34.47 | 0.88 | 27.32 | 700 | 5.33 | 34.38 | 27.17 | 99 | 1.60 |
| 920 | 4.10 | 34.49 | 0.86 | 27.39 | 800 | 4.83 | 34.45 | 27.28 | 89 | 1.69 |
| 936 | 3.95 | 34.49 | 0.86 | 27.41 | 1000 | 3.67 | 34.50 | 27.44 | 73 | 1.85 |
| 1317 | 3.42 | 34.57 | 0.82 | 27.52 | 1200 | 3.30 | 34.54 | 27.51 | 67 | 1.99 |
| 1607 | 2.70 | 34.58 | 1.59 | 27.60 | 1500 | 2.97 | 34.58 | 27.57 | 62 | 2.18 |
| 1883 | 2.26 | 34.64 | 0.87 | 27.68 | | | | | | |
| 1893 | 2.18 | 34.66 | 1.20 | 27.71 | | | | | | |

HUGH M. SMITH; November 21, 1958; 1124 GCT; 21°10'N, 158°20'W; wind, 360°, 28 kt; weather, missing; wire angle, 34°. 38

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 25.81 | 34.94 | 0.10 | 23.07 | 0 | 25.81 | 34.94 | 23.07 | 481 | 0.00 |
| 20 | 25.84 | 34.97 | 0.08 | 23.08 | 10 | 25.82 | 34.96 | 23.08 | 481 | 0.05 |
| 42 | 25.80 | 34.97 | 0.12 | 23.09 | 20 | 25.84 | 34.97 | 23.08 | 480 | 0.10 |
| 64 | 25.72 | 34.96 | 0.11 | 23.11 | 30 | 25.83 | 34.97 | 23.09 | 480 | 0.14 |
| 85 | 24.46 | 35.02 | 0.13 | 23.54 | 50 | 25.85 | 34.96 | 23.07 | 482 | 0.24 |
| 132 | 21.28 | 35.05 | - | 24.48 | 75 | 25.14 | 34.99 | 23.31 | 461 | 0.36 |
| 174 | 19.06 | 34.51 | 0.30 | 24.65 | 100 | 23.43 | 35.07 | 23.88 | 407 | 0.47 |
| 219 | 16.80 | 34.67 | 0.46 | 25.33 | 125 | 21.75 | 35.07 | 24.36 | 362 | 0.56 |
| 239 | 15.69 | 34.35 | 0.52 | 25.34 | 150 | 20.29 | 34.81 | 24.56 | 344 | 0.65 |
| 261 | 13.82 | 34.16 | 0.48 | 25.60 | 200 | 17.77 | 34.63 | 25.07 | 297 | 0.81 |
| 352 | 10.44 | 34.19 | 1.25 | 26.26 | 250 | 14.77 | 34.24 | 25.45 | 260 | 0.95 |
| 439 | 7.60 | 34.95 | 2.20 | 27.31 | 300 | 11.92 | 34.04 | 25.88 | 220 | 1.07 |
| | | | | | 400 | 8.87 | 34.61 | 26.85 | 128 | 1.24 |

HUGH M. SMITH; December 19, 1958; 0300 GCT; 21°10'N, 158°19'W; wind, 070°, 14 kt; weather, partly cloudy; wire angle, 20°. 39

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 24.84 | 34.94 | 23.37 | 0 | 24.84 | 34.94 | 23.37 | 452 | 0.00 |
| 7 | 24.81 | 34.94 | 23.37 | 10 | 24.56 | 34.95 | 23.46 | 444 | 0.04 |
| 13 | 24.28 | 34.96 | 23.55 | 20 | 24.01 | 35.03 | 23.68 | 423 | 0.09 |
| 22 | 24.02 | 35.04 | 23.69 | 30 | 24.58 | 34.95 | 23.45 | 446 | 0.13 |
| 30 | 24.58 | 34.95 | 23.45 | 50 | 23.95 | 34.99 | 23.67 | 425 | 0.22 |
| 50 | 23.95 | 34.99 | 23.67 | 75 | 23.16 | 35.10 | 23.98 | 396 | 0.32 |
| 63 | 23.40 | 35.09 | 23.91 | 100 | 22.68 | 35.05 | 24.09 | 388 | 0.42 |
| 108 | 22.54 | 35.02 | 24.10 | 125 | 21.79 | 35.02 | 24.31 | 367 | 0.51 |
| 138 | 21.22 | 35.02 | 24.47 | 150 | 21.00 | 35.02 | 24.53 | 347 | 0.60 |
| 193 | 20.39 | 35.01 | 24.69 | 200 | 20.16 | 35.00 | 24.74 | 328 | 0.77 |
| 289 | 16.24 | 34.81 | 25.56 | 250 | 18.17 | 34.92 | 25.19 | 287 | 0.93 |
| 362 | 12.65 | 34.45 | 26.06 | 300 | 15.56 | 34.74 | 25.67 | 242 | 1.06 |
| 380 | 12.50 | 34.45 | 26.08 | | | | | | |

a) Overlapping cast.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | μg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 40 | HUGH M. SMITH; December 19, 1958; 0500 GCT; 21°10'N, 158°20'W; wind, 060°, 15 kt; weather, partly cloudy; wire angle, 26°. | | | | | | | | | | |
| 0 | 24.63 | 34.99 | | | 23.47 | 0 | 24.63 | 34.99 | 23.47 | 443 | 0.00 |
| 20 | 24.52 | 35.01 | | | 23.51 | 10 | 24.57 | 35.00 | 23.49 | 441 | 0.04 |
| 40 | 24.04 | 35.05 | | | 23.69 | 20 | 24.52 | 35.01 | 23.51 | 439 | 0.09 |
| 60 | 23.96 | 35.12 | | | 23.76 | 30 | 24.28 | 35.03 | 23.60 | 431 | 0.13 |
| 80 | 23.67 | 35.11 | | | 23.84 | 50 | 23.99 | 35.09 | 23.73 | 419 | 0.22 |
| 121 | 22.00 | 35.05 | | | 24.28 | 75 | 23.77 | 35.12 | 23.82 | 412 | 0.32 |
| 165 | 19.92 | 35.05 | | | 24.84 | 100 | 22.96 | 35.08 | 24.03 | 393 | 0.42 |
| 206 | 18.03 | 34.88 | | | 25.19 | 125 | 21.82 | 35.05 | 24.33 | 365 | 0.52 |
| 227 | 15.82 | 34.56 | | | 25.47 | 150 | 20.64 | 35.06 | 24.65 | 335 | 0.60 |
| 248 | 14.53 | 34.48 | | | 25.69 | 200 | 18.41 | 34.93 | 25.14 | 290 | 0.76 |
| 335 | 10.56 | 34.16 | | | 26.22 | 250 | 14.42 | 34.47 | 25.71 | 236 | 0.89 |
| 420 | 8.16 | 34.11 | | | 26.57 | 300 | 11.93 | 34.27 | 26.06 | 204 | 1.00 |
| | | | | | | 400 | 8.72 | 34.12 | 26.49 | 162 | 1.18 |
| 41 | HUGH M. SMITH; December 19, 1958; 0700 GCT; 21°10'N, 158°21'W; wind, 060°, 16 kt; weather, partly cloudy; wire angle, 25°. | | | | | | | | | | |
| 0 | 24.68 | 35.04 | | | 23.49 | 0 | 24.68 | 35.04 | 23.49 | 441 | 0.00 |
| 23 | 24.30 | 35.07 | | | 23.63 | 10 | 24.51 | 35.05 | 23.55 | 435 | 0.04 |
| 49 | 24.02 | 35.06 | | | 23.70 | 20 | 24.35 | 35.07 | 23.61 | 430 | 0.09 |
| 71 | 23.86 | 35.16 | | | 23.82 | 30 | 24.21 | 35.06 | 23.65 | 427 | 0.13 |
| 97 | 22.83 | 35.08 | | | 24.06 | 50 | 24.02 | 35.06 | 23.71 | 422 | 0.22 |
| 145 | 20.74 | 35.08 | | | 24.64 | 75 | 23.73 | 35.15 | 23.86 | 409 | 0.32 |
| 194 | 17.87 | 34.82 | | | 25.19 | 100 | 22.71 | 35.08 | 24.10 | 386 | 0.42 |
| 243 | 14.78 | 34.44 | | | 25.61 | 125 | 21.67 | 35.08 | 24.39 | 359 | 0.51 |
| 265 | 14.43 | 34.47 | | | 25.71 | 150 | 20.47 | 35.06 | 24.70 | 330 | 0.60 |
| 292 | 12.98 | 34.34 | | | 25.91 | 200 | 17.41 | 34.76 | 25.25 | 279 | 0.75 |
| 396 | 8.97 | 34.16 | | | 26.49 | 250 | 14.67 | 34.45 | 25.64 | 243 | 0.88 |
| 495 | 6.98 | 34.21 | | | 26.82 | 300 | 12.59 | 34.31 | 25.96 | 213 | 0.99 |
| | | | | | | 400 | 8.89 | 34.16 | 26.50 | 162 | 1.18 |
| 42 | HUGH M. SMITH; December 19, 1958; 0830 GCT; 21°10'N, 158°20'W; wind, 060°, 16 kt; weather, partly cloudy; wire angle, 25°. | | | | | | | | | | |
| 0 | 24.39 | 35.04 | | | 23.58 | 0 | 24.39 | 35.04 | 23.58 | 432 | 0.00 |
| 23 | 24.22 | 35.06 | | | 23.64 | 10 | 24.32 | 35.05 | 23.61 | 430 | 0.04 |
| 50 | 23.92 | 35.10 | | | 23.76 | 20 | 24.24 | 35.06 | 23.63 | 428 | 0.09 |
| 72 | 23.51 | 35.13 | | | 23.90 | 30 | 24.16 | 35.07 | 23.67 | 425 | 0.13 |
| 99 | 22.76 | 35.06 | | | 24.07 | 50 | 23.92 | 35.10 | 23.76 | 417 | 0.21 |
| 149 | 20.86 | 35.09 | | | 24.62 | 75 | 23.44 | 35.12 | 23.92 | 402 | 0.32 |
| 199 | 18.88 | 35.02 | | | 25.09 | 100 | 22.73 | 35.06 | 24.08 | 388 | 0.41 |
| 249 | 15.62 | 34.60 | | | 25.54 | 125 | 21.82 | 35.07 | 24.34 | 364 | 0.51 |
| 271 | 13.80 | 34.42 | | | 25.80 | 150 | 20.83 | 35.09 | 24.63 | 337 | 0.60 |
| 299 | 13.00 | 34.33 | | | 25.89 | 200 | 18.83 | 35.01 | 25.09 | 294 | 0.75 |
| 403 | 8.38 | 34.13 | | | 26.55 | 250 | 15.53 | 34.59 | 25.56 | 251 | 0.89 |
| 504 | 6.95 | 34.25 | | | 26.86 | 300 | 12.95 | 34.33 | 25.90 | 219 | 1.01 |
| | | | | | | 400 | 8.51 | 34.13 | 26.54 | 158 | 1.20 |
| | | | | | | 500 | 7.01 | 34.24 | 26.84 | 129 | 1.34 |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HUGH M. SMITH; December 19, 1958; 1018, 1112 GCT; 21°10'N, 158°20'W; wind, 060°, 13 kt; weather, partly cloudy; wire angle, 20°, 33°. | | | | | | | | | | | |
| 0 | 24.06 | 35.05 | 4.64 | 0.35 | 23.68 | 0 | 24.06 | 35.05 | 23.68 | 422 | 0.00 |
| 23 | 24.10 | 35.08 | 4.51 | - | 23.69 | 10 | 24.08 | 35.06 | 23.69 | 422 | 0.04 |
| 50 | 24.00 | 35.06 | 4.70 | 0.34 | 23.71 | 20 | 24.09 | 35.08 | 23.69 | 422 | 0.08 |
| 73 | 23.87 | 35.13 | 4.65 | 0.37 | 23.80 | 30 | 24.08 | 35.07 | 23.69 | 422 | 0.13 |
| 101 | 23.31 | 35.13 | 4.59 | 0.27 | 23.96 | 50 | 24.00 | 35.06 | 23.71 | 422 | 0.21 |
| 152 | 20.75 | 35.10 | 4.43 | 0.47 | 24.66 | 75 | 23.85 | 35.13 | 23.81 | 413 | 0.32 |
| 203 | 18.96 | 35.00 | 4.32 | 0.34 | 25.05 | 100 | 23.34 | 35.13 | 23.96 | 400 | 0.42 |
| 254 | 15.81 | 34.58 | 4.22 | 0.58 | 25.49 | 125 | 22.18 | 35.12 | 24.28 | 370 | 0.51 |
| 277 | 14.02 | 34.42 | 4.21 | 0.71 | 25.75 | 150 | 20.86 | 35.10 | 24.63 | 338 | 0.60 |
| 305 | 12.74 | 34.32 | 4.12 | 0.87 | 25.94 | 200 | 19.07 | 35.01 | 25.03 | 301 | 0.76 |
| 413 | 8.42 | 34.14 | 3.11 | 1.86 | 26.56 | 250 | 16.10 | 34.62 | 25.45 | 262 | 0.90 |
| 515 | 6.75 | 34.22 | 1.17 | 2.53 | 26.86 | 300 | 12.93 | 34.33 | 25.91 | 218 | 1.02 |
| | | | | | | 400 | 8.84 | 34.15 | 26.49 | 162 | 1.21 |
| 536 | 6.69 | 34.23 | 1.28 | 2.01 | 26.88 | 500 | 6.85 | 34.20 | 26.83 | 130 | 1.36 |
| 713 | 5.17 | 34.37 | 0.68 | 1.28 | 27.18 | 600 | 6.22 | 34.28 | 26.97 | 117 | 1.48 |
| 1361 | 2.99 | 34.57 | 1.28 | 1.27 | 27.56 | 700 | 5.31 | 34.36 | 27.15 | 100 | 1.59 |
| 1839 | 2.18 | 34.66 | 1.81 | 1.95 | 27.71 | 800 | 4.69 | 34.41 | 27.27 | 90 | 1.68 |
| 2143 | 1.96 | 34.48 | 1.00 | 2.37 | 27.58 | 1000 | 3.80 | 34.49 | 27.43 | 75 | 1.85 |
| 2414 | 1.80 | 34.66 | 2.26 | 2.25 | 27.74 | 1200 | 3.23 | 34.55 | 27.53 | 66 | 1.99 |
| | | | | | | 1500 | 2.69 | 34.62 | 27.63 | 56 | 2.17 |
| | | | | | | 2000 | 2.05 | 34.55 | 27.63 | 56 | 2.45 |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; May 14, 1958; 1050 GCT; 56°00'N, 149°00'W; wind, 170°, 5 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 1 |
| 0 | 5.60 | 32.65 | - | 25.77 | 0 | 5.60 | 32.65 | | 25.77 | 224 | 0.00 |
| 9 | 5.63 | 32.65 | 6.89 | 25.76 | 10 | 5.64 | 32.65 | 6.89 | 25.76 | 224 | 0.02 |
| 23 | 5.70 | 32.65 | 6.87 | 25.76 | 20 | 5.69 | 32.65 | 6.89 | 25.76 | 225 | 0.04 |
| 46 | 5.64 | 32.66 | 7.01 | 25.77 | 30 | 5.69 | 32.65 | 6.85 | 25.76 | 225 | 0.07 |
| 68 | 4.92 | 32.73 | 6.35 | 25.91 | 50 | 5.47 | 32.66 | 6.91 | 25.79 | 222 | 0.11 |
| 91 | 4.68 | 32.93 | - | 26.09 | 75 | 4.80 | 32.77 | 5.85 | 25.95 | 207 | 0.16 |
| 114 | 4.88 | 33.35 | 3.94 | 26.40 | 100 | 4.78 | 33.12 | 4.45 | 26.23 | 180 | 0.21 |
| 137 | 4.87 | 33.53 | 3.56 | 26.55 | 150 | 4.89 | 33.64 | 3.17 | 26.63 | 143 | 0.29 |
| 182 | 4.84 | 33.83 | 2.39 | 26.79 | 200 | 4.71 | 33.86 | 2.09 | 26.83 | 125 | 0.36 |
| 228 | 4.54 | 33.89 | 1.67 | 26.87 | 250 | 4.42 | 33.89 | 1.33 | 26.88 | 120 | 0.42 |
| 273 | 4.32 | 33.90 | 1.09 | 26.90 | 300 | (4.25) | (33.91) | (0.95) | (26.92) | (117) | (0.48) |
| ATTU; May 14, 1958; 1512 GCT; 56°06'N, 149°50'W; wind, 170°, 5 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 2 |
| 0 | 5.70 | 32.66 | - | 25.76 | 0 | 5.70 | 32.66 | | 25.76 | 224 | 0.00 |
| 10 | 5.66 | 32.66 | 7.09 | 25.77 | 10 | 5.66 | 32.66 | 7.09 | 25.77 | 224 | 0.02 |
| 25 | 5.70 | 32.66 | 7.01 | 25.76 | 20 | 5.70 | 32.66 | 7.01 | 25.76 | 224 | 0.04 |
| 50 | 5.58 | 32.66 | 7.02 | 25.78 | 30 | 5.70 | 32.66 | 7.01 | 25.76 | 224 | 0.07 |
| 75 | 4.70 | 32.74 | 6.76 | 25.94 | 50 | 5.58 | 32.66 | 7.02 | 25.78 | 223 | 0.11 |
| 100 | 4.63 | 32.91 | 6.20 | 26.08 | 75 | 4.70 | 32.74 | 6.76 | 25.94 | 208 | 0.16 |
| 125 | 4.70 | 33.22 | 5.31 | 26.32 | 100 | 4.63 | 32.91 | 6.20 | 26.08 | 194 | 0.22 |
| 150 | 4.86 | 33.60 | 3.82 | 26.60 | 150 | 4.86 | 33.60 | 3.82 | 26.60 | 146 | 0.30 |
| 200 | 4.35 | 33.86 | 1.68 | 26.87 | 200 | 4.35 | 33.86 | 1.68 | 26.87 | 121 | 0.37 |
| 250 | 4.11 | 33.94 | 1.05 | 26.95 | 250 | 4.11 | 33.94 | 1.05 | 26.95 | 113 | 0.43 |
| 300 | 4.14 | 33.99 | 0.81 | 26.99 | 300 | 4.14 | 33.99 | 0.81 | 26.99 | 110 | 0.48 |
| ATTU; May 14, 1958; 1920 GCT; 56°14'N, 150°45'W; wind, 170°, 5 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 3 |
| 0 | 5.90 | 32.67 | - | 25.75 | 0 | 5.90 | 32.67 | | 25.75 | 226 | 0.00 |
| 10 | 5.69 | 32.67 | 7.12 | 25.77 | 10 | 5.69 | 32.67 | 7.12 | 25.77 | 223 | 0.02 |
| 25 | 5.78 | 32.64 | 7.07 | 25.74 | 20 | 5.76 | 32.64 | 7.10 | 25.74 | 226 | 0.04 |
| 50 | 5.68 | 32.64 | 6.72 | 25.75 | 30 | 5.78 | 32.64 | 7.00 | 25.74 | 227 | 0.07 |
| 75 | 5.15 | 32.71 | 6.31 | 25.87 | 50 | 5.68 | 32.64 | 6.72 | 25.75 | 226 | 0.11 |
| 100 | 4.88 | 32.88 | 5.78 | 26.03 | 75 | 5.15 | 32.71 | 6.31 | 25.87 | 215 | 0.17 |
| 125 | 4.96 | 33.21 | 4.79 | 26.28 | 100 | 4.88 | 32.88 | 5.78 | 26.03 | 199 | 0.22 |
| 150 | 5.05 | 33.63 | 3.60 | 26.61 | 150 | 5.05 | 33.63 | 3.60 | 26.61 | 146 | 0.30 |
| 200 | 4.85 | 33.86 | 2.28 | 26.81 | 200 | 4.85 | 33.86 | 2.28 | 26.81 | 127 | 0.37 |
| 250 | 4.66 | 33.93 | 1.68 | 26.89 | 250 | 4.66 | 33.93 | 1.68 | 26.89 | 120 | 0.44 |
| 300 | 4.45 | 33.95 | 1.38 | 26.93 | 300 | 4.45 | 33.95 | 1.38 | 26.93 | 116 | 0.49 |
| ATTU; May 14, 1958; 2320 GCT; 56°20'N, 151°40'W; wind, 170°, 5 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 4 |
| 0 | 6.50 | 32.71 | - | 25.70 | 0 | 6.50 | 32.71 | | 25.70 | 230 | 0.00 |
| 10 | 6.11 | 32.66 | 6.44 | 25.71 | 10 | 6.11 | 32.66 | 6.44 | 25.71 | 229 | 0.02 |
| 25 | 6.10 | 32.66 | 6.99 | 25.72 | 20 | 6.12 | 32.66 | 6.90 | 25.71 | 229 | 0.05 |
| 50 | 5.78 | 32.66 | 5.98 | 25.75 | 30 | 6.08 | 32.66 | 6.63 | 25.72 | 229 | 0.07 |
| 75 | 4.86 | 32.69 | 6.90 | 25.88 | 50 | 5.78 | 32.66 | 5.98 | 25.75 | 225 | 0.11 |
| 100 | 4.76 | 32.93 | 5.98 | 26.09 | 75 | 4.86 | 32.69 | 6.90 | 25.88 | 213 | 0.17 |
| 125 | 4.85 | 33.31 | 4.49 | 26.38 | 100 | 4.76 | 32.93 | 5.98 | 26.09 | 194 | 0.22 |
| 150 | 4.70 | 33.56 | 3.49 | 26.59 | 150 | 4.70 | 33.56 | 3.49 | 26.59 | 147 | 0.30 |
| 200 | 4.88 | 33.85 | 2.17 | 26.80 | 200 | 4.88 | 33.85 | 2.17 | 26.80 | 128 | 0.37 |
| 250 | 4.78 | 33.90 | 1.48 | 26.85 | 250 | 4.78 | 33.90 | 1.48 | 26.85 | 123 | 0.44 |
| 300 | 4.53 | 33.96 | 1.24 | 26.93 | 300 | 4.53 | 33.96 | 1.24 | 26.93 | 117 | 0.50 |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 5 | ATTU; May 18, 1958; 2233 GCT; 53°30'N, 165°00'W; wind, 140°, 7 kt; weather, clear; sea, very rough. | | | | | | | | | | |
| 0 | 5.80 | 32.21 | - | 25.40 | 0 | 5.80 | 32.21 | | 25.40 | 259 | 0.00 |
| 9 | 5.43 | 32.20 | 7.58 | 25.43 | 10 | 5.43 | 32.20 | 7.54 | 25.43 | 256 | 0.03 |
| 23 | 5.38 | 32.19 | 7.12 | 25.43 | 20 | 5.39 | 32.19 | 7.19 | 25.43 | 256 | 0.05 |
| 47 | 5.33 | 32.20 | 7.16 | 25.44 | 30 | 5.36 | 32.19 | 7.12 | 25.43 | 256 | 0.08 |
| 71 | 5.38 | 32.19 | 7.28 | 25.43 | 50 | 5.34 | 32.19 | 7.19 | 25.44 | 256 | 0.13 |
| 95 | 5.28 | 32.30 | 7.07 | 25.53 | 75 | 5.36 | 32.20 | 7.28 | 25.44 | 255 | 0.19 |
| 119 | 5.18 | 32.59 | 6.34 | 25.77 | 100 | 5.25 | 32.35 | 6.90 | 25.57 | 243 | 0.26 |
| 142 | 5.18 | 32.98 | 5.81 | 26.08 | 150 | 5.18 | 33.04 | 5.79 | 26.13 | 191 | 0.36 |
| 190 | 5.20 | 33.33 | 5.02 | 26.35 | 200 | 5.24 | 33.43 | 4.37 | 26.43 | 163 | 0.45 |
| 237 | 5.28 | 33.70 | 2.70 | 26.64 | 250 | 5.24 | 33.73 | 2.53 | 26.66 | 141 | 0.53 |
| 285 | 5.09 | 33.80 | 2.21 | 26.74 | 300 | (5.00) | (33.82) | (2.12) | (26.76) | (132) | (0.60) |
| 6 | ATTU; May 19, 1958; 0253 GCT; 53°00'N, 165°00'W; wind, 120°, 15 kt; weather, clear; sea, rough. | | | | | | | | | | |
| 0 | 5.90 | 32.63 | - | 25.72 | 0 | 5.90 | 32.63 | | 25.72 | 228 | 0.00 |
| 9 | 5.90 | 32.63 | 8.00 | 25.72 | 10 | 5.90 | 32.63 | 7.92 | 25.72 | 229 | 0.02 |
| 23 | 5.89 | 32.63 | 7.19 | 25.72 | 20 | 5.90 | 32.63 | 7.31 | 25.72 | 229 | 0.05 |
| 47 | 5.79 | 32.63 | 7.11 | 25.73 | 30 | 5.86 | 32.63 | 7.17 | 25.72 | 228 | 0.07 |
| 70 | 4.74 | 32.84 | 6.28 | 26.02 | 50 | 5.58 | 32.65 | 7.07 | 25.77 | 224 | 0.11 |
| 94 | 4.97 | 33.18 | 4.16 | 26.26 | 75 | 4.79 | 32.91 | 5.71 | 26.07 | 196 | 0.17 |
| 117 | 5.18 | 33.54 | 3.55 | 26.52 | 100 | 5.04 | 33.29 | 3.96 | 26.34 | 170 | 0.21 |
| 140 | 5.24 | 33.71 | 3.27 | 26.65 | 150 | 4.95 | 33.73 | 2.81 | 26.70 | 137 | 0.29 |
| 188 | 4.22 | 33.82 | 1.49 | 26.85 | 200 | 4.18 | 33.86 | 1.27 | 26.88 | 120 | 0.35 |
| 235 | 4.08 | 33.94 | 0.78 | 26.96 | 250 | 4.06 | 33.96 | 0.67 | 26.98 | 111 | 0.41 |
| 282 | 4.02 | 33.99 | 0.55 | 27.00 | 300 | (4.00) | (34.00) | (0.54) | (27.01) | (108) | (0.47) |
| 7 | ATTU; May 27, 1958; 2237 GCT; 51°53'N, 179°50'W; wind, 270°, 2 kt; weather, clear; sea, moderate. | | | | | | | | | | |
| 0 | 5.10 | 33.11 | - | 26.19 | 0 | 5.10 | 33.11 | | 26.19 | 184 | 0.00 |
| 10 | 4.90 | 33.18 | 6.51 | 26.27 | 10 | 4.90 | 33.18 | 6.51 | 26.27 | 176 | 0.02 |
| 25 | 4.60 | 33.20 | 6.37 | 26.32 | 20 | 4.68 | 33.19 | 6.42 | 26.30 | 173 | 0.04 |
| 50 | 4.52 | 33.23 | 6.16 | 26.35 | 30 | 4.59 | 33.21 | 6.33 | 26.33 | 171 | 0.05 |
| 75 | 4.42 | 33.24 | 5.98 | 26.37 | 50 | 4.52 | 33.23 | 6.16 | 26.35 | 169 | 0.09 |
| 100 | 3.68 | 33.22 | 6.99 | 26.43 | 75 | 4.42 | 33.24 | 5.98 | 26.37 | 167 | 0.13 |
| 125 | - | 33.30 | 6.06 | - | 100 | 3.68 | 33.22 | 6.99 | 26.43 | 162 | 0.17 |
| 150 | 3.17 | 33.30 | 6.53 | 26.54 | 150 | 3.17 | 33.30 | 6.53 | 26.54 | 152 | 0.25 |
| 200 | 3.32 | 33.40 | 5.71 | 26.60 | 200 | 3.32 | 33.40 | 5.71 | 26.60 | 146 | 0.32 |
| 250 | 4.04 | 33.67 | 3.21 | 26.75 | 250 | 4.04 | 33.67 | 3.21 | 26.75 | 133 | 0.39 |
| 300 | 3.87 | 33.79 | 2.58 | 26.86 | 300 | 3.87 | 33.79 | 2.58 | 26.86 | 122 | 0.46 |
| 8 | ATTU; June 16, 1958; 2303, 2254 GCT; 53°17'N, 170°35'W; wind, 140°, 5 kt; weather, cloudy; sea, smooth. | | | | | | | | | | |
| 0 | 7.20 | 32.93 | - | 25.78 | 0 | 7.20 | 32.93 | | 25.78 | 222 | 0.00 |
| 10 | 6.67 | 32.91 | 7.60 | 25.84 | 10 | 6.67 | 32.91 | 7.60 | 25.84 | 217 | 0.02 |
| 25 | 5.68 | 32.96 | 7.21 | 26.00 | 20 | 5.99 | 32.94 | 7.34 | 25.95 | 207 | 0.04 |
| 50 | 4.36 | 33.13 | 6.63 | 26.29 | 30 | 5.35 | 33.00 | 7.03 | 26.07 | 195 | 0.06 |
| | | | | | 50 | 4.36 | 33.13 | 6.63 | 26.29 | 175 | 0.10 |
| 75 | 3.82 | 33.20 | 6.87 | 26.40 | 75 | 3.82 | 33.20 | 6.87 | 26.40 | 164 | 0.14 |
| 100 | 3.46 | 33.21 | 6.87 | 26.44 | 100 | 3.46 | 33.21 | 6.87 | 26.44 | 161 | 0.18 |
| 125 | 3.41 | 33.28 | 6.19 | 26.50 | 150 | 3.35 | 33.35 | 5.66 | 26.56 | 149 | 0.26 |
| 150 | 3.35 | 33.35 | 5.66 | 26.56 | 200 | 3.71 | 33.50 | 4.30 | 26.65 | 142 | 0.33 |
| 200 | 3.71 | 33.50 | 4.30 | 26.65 | 250 | 3.87 | 33.62 | 3.26 | 26.72 | 135 | 0.40 |
| 250 | 3.87 | 33.62 | 3.26 | 26.72 | 300 | 3.83 | 33.74 | 2.64 | 26.82 | 126 | 0.47 |
| 300 | 3.83 | 33.74 | 2.64 | 26.82 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; June 17, 1958; 0630, 0438 GCT; 53°30'N, 170°02'W; wind, 140°, 5 kt; weather, cloudy; sea, smooth. | | | | | | | | | | | 9 |
| 0 | 6.30 | 33.14 | - | 26.07 | 0 | 6.30 | 33.14 | | 26.07 | 195 | 0.00 |
| 10 | 6.66 | 33.12 | 7.88 | 26.01 | 10 | 6.66 | 33.12 | 7.88 | 26.01 | 201 | 0.02 |
| 25 | 5.45 | 33.12 | 6.85 | 26.16 | 20 | 5.78 | 33.12 | 7.16 | 26.12 | 191 | 0.04 |
| 50 | 4.84 | 33.18 | 5.89 | 26.27 | 30 | 5.33 | 33.13 | 6.62 | 26.18 | 185 | 0.06 |
| 75 | 4.17 | 33.30 | 5.49 | 26.44 | 50 | 4.84 | 33.18 | 5.89 | 26.27 | 176 | 0.10 |
| 100 | 4.02 | 33.31 | 5.23 | 26.46 | 75 | 4.17 | 33.30 | 5.49 | 26.44 | 160 | 0.14 |
| 125 | 3.95 | 33.36 | 5.15 | 26.51 | 100 | 4.02 | 33.31 | 5.23 | 26.46 | 158 | 0.18 |
| 150 | 3.96 | 33.43 | 4.58 | 26.57 | 150 | 3.96 | 33.43 | 4.58 | 26.57 | 149 | 0.25 |
| 200 | 3.90 | 33.60 | 3.49 | 26.71 | 200 | 3.90 | 33.60 | 3.49 | 26.71 | 136 | 0.32 |
| 250 | 3.84 | 33.68 | 3.20 | 26.78 | 250 | 3.84 | 33.68 | 3.20 | 26.78 | 130 | 0.39 |
| 300 | 3.84 | 33.75 | 2.33 | 26.83 | 300 | 3.84 | 33.75 | 2.33 | 26.83 | 125 | 0.46 |
| | | | | | 400 | 3.60 | 33.95 | 1.89 | 27.01 | 108 | 0.57 |
| 400 | 3.60 | 33.95 | 1.89 | 27.01 | 500 | 3.47 | 34.04 | 1.51 | 27.10 | 101 | 0.68 |
| 500 | 3.47 | 34.04 | 1.51 | 27.10 | 600 | 3.34 | 34.11 | 1.02 | 27.17 | 95 | 0.78 |
| 700 | 3.19 | 34.18 | 0.68 | 27.24 | 700 | 3.19 | 34.18 | 0.68 | 27.24 | 89 | 0.87 |
| 1050 | 2.58 | 34.41 | 0.71 | 27.47 | 800 | 3.03 | 34.25 | 0.49 | 27.31 | 83 | 0.95 |
| | | | | | 1000 | 2.68 | 34.38 | 0.58 | 27.44 | 71 | 1.11 |
| ATTU; June 18, 1958; 0023 GCT; 53°48'N, 168°57'W; wind, 060°, 15 kt; weather, overcast; sea, moderate. | | | | | | | | | | | 10 |
| 0 | 7.10 | 32.54 | - | 25.49 | 0 | 7.10 | 32.54 | | 25.49 | 250 | 0.00 |
| 10 | 6.39 | 32.52 | 7.20 | 25.57 | 10 | 6.39 | 32.52 | 7.20 | 25.57 | 243 | 0.02 |
| 25 | 5.88 | 32.56 | 6.55 | 25.66 | 20 | 6.02 | 32.55 | 6.73 | 25.64 | 236 | 0.05 |
| 50 | 5.65 | 32.64 | 6.32 | 25.75 | 30 | 5.83 | 32.57 | 6.52 | 25.68 | 232 | 0.07 |
| 75 | 5.46 | 32.76 | 5.90 | 25.87 | 50 | 5.65 | 32.64 | 6.32 | 25.75 | 225 | 0.12 |
| 100 | 5.16 | 33.07 | 5.62 | 26.15 | 75 | 5.46 | 32.76 | 5.90 | 25.87 | 214 | 0.17 |
| 125 | 4.69 | 33.12 | 5.38 | 26.24 | 100 | 5.16 | 33.07 | 5.62 | 26.15 | 188 | 0.22 |
| 150 | 4.11 | 33.20 | 5.49 | 26.37 | 150 | 4.11 | 33.20 | 5.49 | 26.37 | 168 | 0.31 |
| 200 | 3.80 | 33.30 | 5.34 | 26.48 | 200 | 3.80 | 33.30 | 5.34 | 26.48 | 158 | 0.39 |
| 250 | 3.65 | 33.40 | 4.78 | 26.57 | 250 | 3.65 | 33.40 | 4.78 | 26.57 | 149 | 0.47 |
| 300 | 3.84 | 33.55 | 3.71 | 26.67 | 300 | 3.84 | 33.55 | 3.71 | 26.67 | 140 | 0.54 |
| ATTU; June 18, 1958; 1030, 0848 GCT; 53°59'N, 167°32'W; wind, 060°, 15 kt; weather, overcast; sea, rough. | | | | | | | | | | | 11 |
| 0 | 7.00 | 32.67 | - | 25.61 | 0 | 7.00 | 32.67 | | 25.61 | 239 | 0.00 |
| 10 | 6.86 | 32.72 | 7.45 | 25.67 | 10 | 6.86 | 32.72 | 7.45 | 25.67 | 234 | 0.02 |
| 24 | 5.88 | 32.80 | 5.42 | 25.85 | 20 | 6.12 | 32.78 | 5.86 | 25.81 | 220 | 0.05 |
| 49 | 5.03 | 32.86 | 5.38 | 26.00 | 30 | 5.59 | 32.81 | 5.39 | 25.90 | 212 | 0.07 |
| 73 | 5.08 | 32.93 | 5.62 | 26.05 | 50 | 5.04 | 32.86 | 5.39 | 26.00 | 202 | 0.11 |
| 98 | 4.85 | 33.01 | - | 26.14 | 75 | 5.06 | 32.94 | 5.67 | 26.06 | 197 | 0.16 |
| 123 | 4.78 | 33.08 | 5.39 | 26.20 | 100 | 4.85 | 33.01 | 5.86 | 26.14 | 189 | 0.21 |
| 140 | 4.63 | 33.16 | 4.65 | 26.28 | 150 | 4.55 | 33.19 | 4.67 | 26.31 | 173 | 0.30 |
| 191 | 4.28 | 33.31 | 4.69 | 26.44 | 200 | 4.26 | 33.31 | 4.66 | 26.44 | 162 | 0.38 |
| | | | | | 250 | 4.14 | 33.35 | 4.42 | 26.48 | 158 | 0.46 |
| 395 | 3.88 | 33.58 | 3.20 | 26.69 | 300 | 4.03 | 33.41 | 4.09 | 26.54 | 152 | 0.54 |
| 494 | 3.78 | 33.85 | 1.93 | 26.92 | 400 | 3.88 | 33.60 | 3.12 | 26.71 | 137 | 0.69 |
| 692 | 3.34 | 34.15 | 0.77 | 27.20 | 500 | 3.77 | 33.86 | 1.88 | 26.93 | 118 | 0.81 |
| 1037 | 2.75 | 34.29 | 0.62 | 27.36 | 600 | 3.54 | 34.03 | 1.21 | 27.08 | 103 | 0.92 |
| | | | | | 700 | 3.32 | 34.16 | 0.74 | 27.21 | 92 | 1.02 |
| | | | | | 800 | 3.13 | 34.25 | 0.47 | 27.30 | 84 | 1.11 |
| | | | | | 1000 | 2.80 | 34.30 | 0.52 | 27.37 | 78 | 1.27 |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 12 | ATTU; June 24, 1958; 0037 GCT; 54°25'N, 166°51'W; wind, 240°, 9 kt; weather, cloudy; sea, rough. | | | | | | | | | | |
| 0 | 7.80 | 32.69 | – | 25.51 | 0 | 7.80 | 32.69 | | 25.51 | 248 | 0.00 |
| 10 | 6.78 | 32.75 | 7.32 | 25.70 | 10 | 6.78 | 32.75 | 7.32 | 25.70 | 230 | 0.02 |
| 25 | 6.45 | 32.86 | 6.97 | 25.83 | 20 | 6.63 | 32.82 | 7.10 | 25.77 | 223 | 0.05 |
| 50 | 4.55 | 33.07 | 6.09 | 26.22 | 30 | 5.95 | 32.91 | 6.74 | 25.93 | 208 | 0.07 |
| 75 | 4.10 | 33.15 | 5.88 | 26.33 | 50 | 4.55 | 33.07 | 6.09 | 26.22 | 181 | 0.11 |
| 100 | 4.06 | 33.23 | 5.35 | 26.40 | 75 | 4.10 | 33.15 | 5.88 | 26.33 | 171 | 0.15 |
| 125 | 3.91 | 33.26 | 5.47 | 26.44 | 100 | 4.06 | 33.23 | 5.35 | 26.40 | 165 | 0.19 |
| 150 | 3.70 | 33.31 | 5.43 | 26.50 | 150 | 3.70 | 33.31 | 5.43 | 26.50 | 156 | 0.27 |
| 200 | 3.60 | 33.39 | 5.01 | 26.57 | 200 | 3.60 | 33.39 | 5.01 | 26.57 | 149 | 0.35 |
| 250 | 3.80 | 33.43 | 3.89 | 26.58 | 250 | 3.80 | 33.43 | 3.89 | 26.58 | 148 | 0.42 |
| 300 | 3.85 | 33.54 | 3.34 | 26.66 | 300 | 3.85 | 33.54 | 3.34 | 26.66 | 141 | 0.50 |
| 13 | ATTU; June 24, 1958; 0623 GCT; 54°59'N, 167°22'W; wind, 240°, 5 kt; weather, cloudy; sea, slight. | | | | | | | | | | |
| 0 | 6.60 | 32.53 | – | 25.55 | 0 | 6.60 | 32.53 | | 25.55 | 244 | 0.00 |
| 10 | 6.50 | 32.91 | 7.95 | 25.86 | 10 | 6.50 | 32.91 | 7.95 | 25.86 | 215 | 0.02 |
| 30 | 5.40 | 32.95 | 6.29 | 26.03 | 20 | 5.87 | 32.94 | 6.97 | 25.96 | 205 | 0.04 |
| 50 | 4.95 | 32.95 | 5.89 | 26.08 | 30 | 5.40 | 32.95 | 6.29 | 26.03 | 199 | 0.06 |
| 70 | 4.62 | 33.04 | 5.96 | 26.19 | 50 | 4.95 | 32.95 | 5.89 | 26.08 | 194 | 0.10 |
| 90 | 4.45 | 33.08 | 5.86 | 26.24 | 75 | 4.57 | 33.05 | 5.92 | 26.20 | 183 | 0.15 |
| 110 | 4.32 | 33.10 | 5.85 | 26.27 | 100 | 4.38 | 33.09 | 5.85 | 26.25 | 178 | 0.20 |
| 130 | 4.26 | 33.12 | 5.84 | 26.29 | 150 | 4.12 | 33.14 | 5.80 | 26.32 | 172 | 0.28 |
| 150 | 4.12 | 33.14 | 5.80 | 26.32 | 200 | 3.58 | 33.55 | 5.78 | 26.70 | 137 | 0.36 |
| 170 | 4.02 | 33.25 | 5.73 | 26.42 | | | | | | | |
| 200 | 3.58 | 33.55 | 5.78 | 26.70 | | | | | | | |
| 14 | ATTU; June 25, 1958; 0710 GCT; 55°04'N, 169°24'W; wind, 170°, 30 kt; weather, fog; sea, high. | | | | | | | | | | |
| 0 | 6.60 | 33.01 | – | 25.93 | 0 | 6.60 | 33.01 | | 25.93 | 208 | 0.00 |
| 10 | 6.76 | 32.98 | 7.07 | 25.88 | 10 | 6.76 | 32.98 | 7.07 | 25.88 | 213 | 0.02 |
| 25 | 6.78 | 32.97 | 7.17 | 25.87 | 20 | 6.77 | 32.97 | 7.17 | 25.87 | 214 | 0.04 |
| 50 | 5.07 | 33.09 | 6.59 | 26.18 | 30 | 6.39 | 33.00 | 7.03 | 25.95 | 207 | 0.06 |
| 75 | 4.02 | 33.17 | 6.29 | 26.35 | 50 | 5.07 | 33.09 | 6.59 | 26.18 | 185 | 0.10 |
| 100 | 3.84 | 33.22 | 6.46 | 26.41 | 75 | 4.02 | 33.17 | 6.29 | 26.35 | 169 | 0.15 |
| 125 | 3.57 | 33.26 | 6.18 | 26.47 | 100 | 3.84 | 33.22 | 6.46 | 26.41 | 163 | 0.19 |
| 150 | 2.90 | 33.27 | 6.87 | 26.54 | 150 | 2.90 | 33.27 | 6.87 | 26.54 | 151 | 0.27 |
| 200 | 3.78 | 33.47 | 4.32 | 26.61 | 200 | 3.78 | 33.47 | 4.32 | 26.61 | 145 | 0.34 |
| 250 | 3.88 | 33.63 | 3.26 | 26.73 | 250 | 3.88 | 33.63 | 3.26 | 26.73 | 134 | 0.41 |
| 300 | 3.85 | 33.76 | 2.46 | 26.84 | 300 | 3.85 | 33.76 | 2.46 | 26.84 | 124 | 0.48 |
| 15 | ATTU; June 26, 1958; 0020 GCT; 55°33'N, 169°45'W; wind, 240°, 8 kt; weather, fog; sea, high. | | | | | | | | | | |
| 0 | 6.60 | 32.82 | – | 25.78 | 0 | 6.60 | 32.82 | | 25.78 | 223 | 0.00 |
| 10 | 6.22 | 32.81 | 6.97 | 25.82 | 10 | 6.22 | 32.81 | 6.97 | 25.82 | 219 | 0.02 |
| 25 | 6.20 | 32.80 | 6.90 | 25.81 | 20 | 6.21 | 32.80 | 6.94 | 25.81 | 220 | 0.04 |
| 50 | 5.37 | 32.83 | 6.57 | 25.94 | 30 | 6.05 | 32.81 | 6.83 | 25.84 | 217 | 0.07 |
| 75 | 4.32 | 32.98 | 6.12 | 26.17 | 50 | 5.37 | 32.83 | 6.57 | 25.94 | 208 | 0.11 |
| 100 | 4.23 | 33.05 | 5.89 | 26.24 | 75 | 4.32 | 32.98 | 6.12 | 26.17 | 186 | 0.16 |
| 125 | 4.10 | 33.09 | 5.76 | 26.28 | 100 | 4.23 | 33.05 | 5.89 | 26.24 | 180 | 0.20 |
| 150 | 3.95 | 33.15 | 5.84 | 26.34 | 150 | 3.95 | 33.15 | 5.84 | 26.34 | 170 | 0.29 |
| 200 | 3.58 | 33.23 | 5.87 | 26.44 | 200 | 3.58 | 33.23 | 5.87 | 26.44 | 161 | 0.37 |
| 250 | 3.24 | 33.25 | 6.29 | 26.49 | 250 | 3.24 | 33.25 | 6.29 | 26.49 | 156 | 0.45 |
| 300 | 3.45 | 33.40 | 5.10 | 26.59 | 300 | 3.45 | 33.40 | 5.10 | 26.59 | 147 | 0.53 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; June 26, 1958; 0516 GCT; 55°58'N, 170°04'W; wind, 210°, 8 kt; weather, fog; sea, moderate. | | | | | | | | | | | 16 |
| 0 | 6.80 | 32.79 | - | 25.73 | 0 | 6.80 | 32.79 | | 25.73 | 227 | 0.00 |
| 10 | 6.64 | 32.78 | 7.28 | 25.74 | 10 | 6.64 | 32.78 | 7.28 | 25.74 | 226 | 0.02 |
| 30 | 6.58 | 32.77 | 7.04 | 25.74 | 20 | 6.61 | 32.77 | 7.17 | 25.74 | 227 | 0.05 |
| 50 | 5.52 | 32.83 | 6.72 | 25.92 | 30 | 6.58 | 32.77 | 7.04 | 25.74 | 226 | 0.07 |
| 70 | 4.48 | 32.90 | 5.61 | 26.09 | 50 | 5.52 | 32.83 | 6.72 | 25.92 | 210 | 0.11 |
| 90 | 4.25 | 32.99 | 5.89 | 26.19 | 75 | 4.43 | 32.92 | 5.69 | 26.11 | 192 | 0.16 |
| 110 | 3.97 | 33.09 | 6.10 | 26.29 | 100 | 4.08 | 33.05 | 6.04 | 26.25 | 178 | 0.21 |
| 130 | 3.92 | 33.15 | 5.99 | 26.35 | 150 | 3.74 | 33.16 | 6.24 | 26.37 | 167 | 0.30 |
| 150 | 3.74 | 33.16 | 6.24 | 26.37 | 200 | 3.50 | 33.25 | 5.86 | 26.47 | 158 | 0.38 |
| 170 | 3.52 | 33.19 | 6.12 | 26.42 | | | | | | | |
| 200 | 3.50 | 33.25 | 5.86 | 26.47 | | | | | | | |
| ATTU; June 27, 1958; 0405 GCT; 56°57'N, 169°58'W; wind, 150°, 3 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 17 |
| 0 | 6.80 | 32.22 | - | 25.28 | 0 | 6.80 | 32.22 | | 25.28 | 270 | 0.00 |
| 10 | 6.06 | 32.22 | 9.67 | 25.37 | 10 | 6.06 | 32.22 | 9.67 | 25.37 | 261 | 0.03 |
| 20 | 5.90 | 32.20 | 8.50 | 25.38 | 20 | 5.90 | 32.20 | 8.50 | 25.38 | 261 | 0.05 |
| 30 | 4.82 | 32.22 | 8.48 | 25.52 | 30 | 4.82 | 32.22 | 8.48 | 25.52 | 248 | 0.08 |
| 40 | 4.75 | 32.27 | 6.99 | 25.56 | 50 | 4.73 | 32.28 | 6.78 | 25.57 | 242 | 0.13 |
| 50 | 4.73 | 32.28 | 6.78 | 25.57 | | | | | | | |
| ATTU; June 28, 1958; 0029 GCT; 57°31'N, 170°00'W; wind, 100°, 12 kt; weather, fog; sea, moderate. | | | | | | | | | | | 18 |
| 0 | 6.00 | 32.18 | - | 25.35 | 0 | 6.00 | 32.18 | | 25.35 | 263 | 0.00 |
| 10 | 5.66 | 32.13 | 9.33 | 25.35 | 10 | 5.66 | 32.13 | 9.33 | 25.35 | 263 | 0.03 |
| 20 | 5.43 | 32.13 | 8.83 | 25.38 | 20 | 5.43 | 32.13 | 8.83 | 25.38 | 261 | 0.05 |
| 30 | 3.62 | 32.19 | 7.28 | 25.61 | 30 | 3.62 | 32.19 | 7.28 | 25.61 | 238 | 0.08 |
| 40 | 3.34 | 32.19 | 7.24 | 25.64 | 50 | 3.30 | 32.20 | 7.15 | 25.65 | 235 | 0.12 |
| 50 | 3.30 | 32.20 | 7.15 | 25.65 | | | | | | | |
| 60 | 3.30 | 32.20 | 7.30 | 25.65 | | | | | | | |
| ATTU; June 28, 1958; 0501 GCT; 57°59'N, 169°59'W; wind, 120°, 10 kt; weather, fog; sea, rough. | | | | | | | | | | | 19 |
| 0 | 6.50 | 32.13 | - | 25.25 | 0 | 6.50 | 32.13 | | 25.25 | 273 | 0.00 |
| 10 | 6.16 | 32.14 | 8.37 | 25.30 | 10 | 6.16 | 32.14 | 8.37 | 25.30 | 268 | 0.03 |
| 20 | 5.56 | 32.10 | 7.75 | 25.34 | 20 | 5.56 | 32.10 | 7.75 | 25.34 | 265 | 0.05 |
| 30 | 4.60 | 32.13 | 7.74 | 25.47 | 30 | 4.60 | 32.13 | 7.74 | 25.47 | 252 | 0.08 |
| 40 | 3.01 | 32.16 | 7.06 | 25.64 | 50 | 2.90 | 32.16 | 7.16 | 25.65 | 235 | 0.13 |
| 50 | 2.90 | 32.16 | 7.16 | 25.65 | | | | | | | |
| 60 | 2.86 | 32.17 | 6.46 | 25.66 | | | | | | | |
| ATTU; June 29, 1958; 0009 GCT; 57°40'N, 170°41'W; wind, calm; weather, fog; sea, slight. | | | | | | | | | | | 20 |
| 0 | 6.70 | 32.17 | - | 25.25 | 0 | 6.70 | 32.17 | | 25.25 | 272 | 0.00 |
| 10 | 6.02 | 32.16 | 7.96 | 25.33 | 10 | 6.02 | 32.16 | 7.96 | 25.33 | 265 | 0.03 |
| 20 | 6.00 | 32.14 | 7.73 | 25.32 | 20 | 6.00 | 32.14 | 7.73 | 25.32 | 267 | 0.05 |
| 30 | 4.84 | 32.18 | 7.34 | 25.48 | 30 | 4.84 | 32.18 | 7.34 | 25.48 | 251 | 0.08 |
| 40 | 3.55 | 32.21 | 6.87 | 25.64 | 50 | 3.52 | 32.21 | 6.70 | 25.64 | 236 | 0.13 |
| 50 | 3.52 | 32.21 | 6.70 | 25.64 | | | | | | | |
| 60 | 3.50 | 32.21 | 6.25 | 25.64 | | | | | | | |
| 70 | 3.50 | 32.21 | 6.92 | 25.64 | | | | | | | |
| ATTU; June 29, 1958; 0406 GCT; 57°18'N, 171°16'W; wind, calm; weather, fog; sea, slight. | | | | | | | | | | | 21 |
| 0 | 7.10 | 32.29 | - | 25.30 | 0 | 7.10 | 32.29 | | 25.30 | 268 | 0.00 |
| 10 | 6.48 | 32.31 | 8.56 | 25.39 | 10 | 6.48 | 32.31 | 8.56 | 25.39 | 259 | 0.03 |
| 20 | 6.48 | 32.31 | 8.06 | 25.39 | 20 | 6.48 | 32.31 | 8.06 | 25.39 | 260 | 0.05 |
| 30 | 5.36 | 32.28 | 7.24 | 25.50 | 30 | 5.36 | 32.28 | 7.24 | 25.50 | 249 | 0.08 |
| 40 | 4.88 | 32.30 | 6.98 | 25.57 | 50 | 4.48 | 32.37 | 6.73 | 25.67 | 233 | 0.12 |
| 50 | 4.48 | 32.37 | 6.73 | 25.67 | | | | | | | |
| 60 | 3.98 | 32.49 | 6.29 | 25.82 | | | | | | | |
| 70 | 3.94 | 32.53 | 6.06 | 25.85 | | | | | | | |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| **22** | ATTU; June 29, 1958; 0808 GCT; 56°55'N, 171°52'W; wind, 210°, 2 kt; weather, fog; sea, slight. | | | | | | | | | | |
| 0 | 6.50 | 32.39 | – | 25.45 | 0 | 6.50 | 32.39 | | 25.45 | 254 | 0.00 |
| 10 | 6.44 | 32.39 | 7.73 | 25.46 | 10 | 6.44 | 32.39 | 7.73 | 25.46 | 253 | 0.02 |
| 20 | 6.36 | 32.40 | 7.13 | 25.48 | 20 | 6.36 | 32.40 | 7.13 | 25.48 | 251 | 0.05 |
| 30 | 5.83 | 32.51 | 6.87 | 25.63 | 30 | 5.83 | 32.51 | 6.87 | 25.63 | 237 | 0.07 |
| 40 | 4.98 | 32.52 | 6.82 | 25.74 | 50 | 4.10 | 32.59 | 6.41 | 25.88 | 213 | 0.12 |
| 50 | 4.10 | 32.59 | 6.41 | 25.88 | | | | | | | |
| 60 | 4.05 | 32.71 | 5.56 | 25.98 | | | | | | | |
| 70 | 3.91 | 32.76 | 6.38 | 26.04 | | | | | | | |
| **23** | ATTU; June 29, 1958; 1221 GCT; 56°35'N, 172°35'W; wind, 150°, 4 kt; weather, patches of fog; sea, slight. | | | | | | | | | | |
| 0 | 6.90 | 32.51 | – | 25.50 | 0 | 6.90 | 32.51 | | 25.50 | 250 | 0.00 |
| 10 | 6.70 | 32.51 | 8.11 | 25.52 | 10 | 6.70 | 32.51 | 8.11 | 25.52 | 247 | 0.02 |
| 20 | 6.48 | 32.53 | 7.69 | 25.57 | 20 | 6.48 | 32.53 | 7.69 | 25.57 | 243 | 0.05 |
| 30 | 5.60 | 32.66 | 7.00 | 25.78 | 30 | 5.60 | 32.66 | 7.00 | 25.78 | 223 | 0.07 |
| 40 | 5.32 | 32.75 | 6.89 | 25.88 | 50 | 5.16 | 32.78 | 6.75 | 25.92 | 210 | 0.12 |
| 59 | 4.98 | 32.81 | 6.64 | 25.97 | 75 | 4.52 | 32.86 | 6.48 | 26.06 | 197 | 0.17 |
| 79 | 4.44 | 32.87 | 6.45 | 26.07 | 100 | 4.26 | 32.94 | 6.33 | 26.15 | 188 | 0.22 |
| 98 | 4.29 | 32.94 | 6.35 | 26.14 | 150 | 3.86 | 33.10 | 6.09 | 26.31 | 173 | 0.30 |
| 118 | 4.05 | 32.99 | 6.17 | 26.21 | | | | | | | |
| 138 | 3.92 | – | – | | | | | | | | |
| 157 | 3.83 | 33.13 | 6.10 | 26.34 | | | | | | | |
| **24** | ATTU; June 29, 1958; 1639 GCT; 56°15'N, 173°14'W; wind, 210°, 5 kt; weather, patches of fog; sea, slight. | | | | | | | | | | |
| 0 | 7.00 | 32.81 | – | 25.72 | 0 | 7.00 | 32.81 | | 25.72 | 228 | 0.00 |
| 10 | 6.78 | 32.84 | 6.97 | 25.77 | 10 | 6.78 | 32.84 | 6.97 | 25.77 | 224 | 0.02 |
| 25 | 6.66 | 32.91 | 5.80 | 25.84 | 20 | 6.76 | 32.89 | 6.05 | 25.81 | 220 | 0.04 |
| 50 | 5.30 | 33.05 | 6.60 | 26.12 | 30 | 6.37 | 32.94 | 6.08 | 25.90 | 211 | 0.07 |
| 75 | 4.22 | 33.13 | 5.87 | 26.30 | 50 | 5.30 | 33.05 | 6.60 | 26.12 | 191 | 0.11 |
| 100 | 3.74 | 33.18 | 5.38 | 26.39 | 75 | 4.22 | 33.13 | 5.87 | 26.30 | 174 | 0.15 |
| 125 | 3.29 | 33.22 | 6.13 | 26.46 | 100 | 3.74 | 33.18 | 5.38 | 26.39 | 165 | 0.20 |
| 150 | 3.24 | 33.26 | 4.80 | 26.50 | 150 | 3.24 | 33.26 | 4.80 | 26.50 | 155 | 0.28 |
| 200 | 3.29 | 33.32 | 5.08 | 26.54 | 200 | 3.29 | 33.32 | 5.08 | 26.54 | 151 | 0.35 |
| 250 | 3.82 | 33.58 | 2.80 | 26.70 | 250 | 3.82 | 33.58 | 2.80 | 26.70 | 137 | 0.42 |
| 300 | 3.86 | 33.69 | 1.41 | 26.78 | 300 | 3.86 | 33.69 | 1.41 | 26.78 | 130 | 0.49 |
| **25** | ATTU; June 29, 1958; 2056 GCT; 55°51'N, 173°48'W; wind, 190°, 4 kt; weather, patches of fog; sea, moderate. | | | | | | | | | | |
| 0 | 6.70 | 33.09 | – | 25.98 | 0 | 6.70 | 33.09 | | 25.98 | 204 | 0.00 |
| 10 | 6.48 | 33.06 | 6.99 | 25.98 | 10 | 6.48 | 33.06 | 6.99 | 25.98 | 203 | 0.02 |
| 25 | 6.25 | 33.08 | 7.07 | 26.03 | 20 | 6.40 | 33.07 | 7.06 | 26.00 | 202 | 0.04 |
| 50 | 4.36 | 33.13 | 6.82 | 26.29 | 30 | 5.78 | 33.09 | 7.04 | 26.09 | 193 | 0.06 |
| 75 | 3.65 | 33.21 | 6.31 | 26.42 | 50 | 4.36 | 33.13 | 6.82 | 26.29 | 175 | 0.10 |
| 100 | 3.25 | 33.21 | 6.81 | 26.46 | 75 | 3.65 | 33.21 | 6.31 | 26.42 | 162 | 0.14 |
| 125 | 3.11 | 33.25 | 6.51 | 26.50 | 100 | 3.25 | 33.21 | 6.81 | 26.46 | 159 | 0.18 |
| 150 | 2.94 | 33.27 | 6.64 | 26.53 | 150 | 2.94 | 33.27 | 6.64 | 26.53 | 152 | 0.26 |
| 200 | 3.61 | 33.48 | 4.36 | 26.64 | 200 | 3.61 | 33.48 | 4.36 | 26.64 | 142 | 0.33 |
| 250 | 3.85 | 33.68 | 2.95 | 26.77 | 250 | 3.85 | 33.68 | 2.95 | 26.77 | 130 | 0.40 |
| 300 | 3.83 | 33.77 | 2.35 | 26.85 | 300 | 3.83 | 33.77 | 2.35 | 26.85 | 123 | 0.46 |
| **26** | ATTU; June 30, 1958; 0123 GCT; 55°27'N, 174°23'W; wind, calm; weather, patches of fog; sea, moderate. | | | | | | | | | | |
| 0 | 6.90 | 32.87 | – | 25.78 | 0 | 6.90 | 32.87 | | 25.78 | 223 | 0.00 |
| 10 | 6.43 | 32.86 | 7.04 | 25.83 | 10 | 6.43 | 32.86 | 7.04 | 25.83 | 218 | 0.02 |
| 25 | 5.84 | 32.93 | 6.97 | 25.96 | 20 | 6.08 | 32.90 | 7.00 | 25.91 | 211 | 0.04 |
| 50 | 4.00 | 33.08 | 6.75 | 26.28 | 30 | 5.35 | 32.97 | 6.92 | 26.05 | 197 | 0.06 |
| 75 | 3.70 | 33.12 | 6.52 | 26.34 | 50 | 4.00 | 33.08 | 6.75 | 26.28 | 175 | 0.10 |
| 100 | 3.37 | 33.20 | 6.74 | 26.44 | 75 | 3.70 | 33.12 | 6.52 | 26.34 | 169 | 0.14 |
| 125 | 3.08 | 33.23 | 6.65 | 26.49 | 100 | 3.37 | 33.20 | 6.74 | 26.44 | 160 | 0.18 |
| 150 | 2.97 | 33.28 | 6.40 | 26.54 | 150 | 2.97 | 33.28 | 6.40 | 26.54 | 151 | 0.26 |
| 200 | 3.46 | 33.40 | 5.06 | 26.59 | 200 | 3.46 | 33.40 | 5.06 | 26.59 | 147 | 0.34 |
| 250 | 3.82 | 33.59 | 3.37 | 26.71 | 250 | 3.82 | 33.59 | 3.37 | 26.71 | 136 | 0.41 |
| 300 | 3.85 | 33.75 | 2.31 | 26.83 | 300 | 3.85 | 33.75 | 2.31 | 26.83 | 125 | 0.47 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

27

ATTU; June 30, 1958; 0740, 0557 GCT; 55°04'N, 174°52'W; wind, 290°, 6 kt; weather, intermittent slight drizzle; sea, slight.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.30 | 33.17 | - | 26.09 | 0 | 6.30 | 33.17 | | 26.09 | 193 | 0.00 |
| 10 | 5.97 | 33.14 | 7.03 | 26.11 | 10 | 5.97 | 33.14 | 7.03 | 26.11 | 191 | 0.02 |
| 25 | 5.68 | 33.15 | - | 26.15 | 20 | 5.84 | 33.15 | 7.13 | 26.13 | 189 | 0.04 |
| 50 | 3.96 | 33.19 | 7.13 | 26.37 | 30 | 5.27 | 33.16 | 7.18 | 26.21 | 182 | 0.06 |
| 75 | 3.09 | 33.24 | 6.81 | 26.50 | 50 | 3.96 | 33.19 | 7.13 | 26.37 | 166 | 0.09 |
| 100 | 2.95 | 33.28 | 6.74 | 26.54 | 75 | 3.09 | 33.24 | 6.81 | 26.50 | 155 | 0.13 |
| 125 | 2.56 | 33.28 | 6.69 | 26.57 | 100 | 2.95 | 33.28 | 6.74 | 26.54 | 151 | 0.17 |
| 150 | 2.90 | 33.35 | 5.69 | 26.60 | 150 | 2.90 | 33.35 | 5.69 | 26.60 | 145 | 0.24 |
| 200 | 3.82 | 33.62 | 3.26 | 26.73 | 200 | 3.82 | 33.62 | 3.26 | 26.73 | 134 | 0.31 |
| 250 | 3.86 | 33.75 | 2.37 | 26.83 | 250 | 3.86 | 33.75 | 2.37 | 26.83 | 125 | 0.38 |
| 300 | 3.85 | 33.84 | 1.80 | 26.90 | 300 | 3.85 | 33.84 | 1.80 | 26.90 | 118 | 0.44 |
| | | | | | 400 | 3.65 | 34.00 | 1.06 | 27.05 | 105 | 0.55 |
| 400 | 3.65 | 34.00 | 1.06 | 27.05 | 500 | 3.49 | 34.09 | 0.75 | 27.14 | 98 | 0.65 |
| 500 | 3.49 | 34.09 | 0.75 | 27.14 | 600 | 3.36 | 34.16 | 0.63 | 27.20 | 92 | 0.75 |
| 700 | 3.22 | 34.23 | 0.54 | 27.27 | 700 | 3.22 | 34.23 | 0.54 | 27.27 | 86 | 0.84 |
| 1050 | 2.71 | 34.38 | 0.53 | 27.44 | 800 | 3.08 | 34.29 | 0.49 | 27.33 | 80 | 0.92 |
| | | | | | 1000 | 2.79 | 34.37 | 0.50 | 27.42 | 73 | 1.07 |

28

ATTU; July 1, 1958; 0607, 0518 GCT; 53°58'N, 175°00'W; wind, 320°, 15 kt; weather, light fog; sea, rough.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.70 | 33.19 | - | 26.06 | 0 | 6.70 | 33.19 | | 26.06 | 196 | 0.00 |
| 10 | 6.01 | 33.18 | 6.94 | 26.14 | 10 | 6.01 | 33.18 | 6.94 | 26.14 | 189 | 0.02 |
| 25 | 6.01 | 33.18 | 7.03 | 26.14 | 20 | 6.01 | 33.18 | 7.01 | 26.14 | 189 | 0.04 |
| 50 | 4.48 | 33.21 | 7.10 | 26.34 | 30 | 5.92 | 33.19 | 7.04 | 26.16 | 187 | 0.06 |
| 75 | 3.22 | 33.25 | 7.15 | 26.49 | 50 | 4.48 | 33.21 | 7.10 | 26.34 | 170 | 0.09 |
| 100 | 3.03 | 33.27 | 7.20 | 26.53 | 75 | 3.22 | 33.25 | 7.15 | 26.49 | 155 | 0.13 |
| 125 | 2.86 | 33.26 | 7.24 | 26.53 | 100 | 3.03 | 33.27 | 7.20 | 26.53 | 152 | 0.17 |
| 150 | 2.89 | 33.31 | 6.50 | 26.57 | 150 | 2.89 | 33.31 | 6.50 | 26.57 | 148 | 0.25 |
| 200 | 3.55 | 33.65 | 3.32 | 26.78 | 200 | 3.55 | 33.65 | 3.32 | 26.78 | 129 | 0.32 |
| 250 | 3.79 | 33.81 | 1.96 | 26.88 | 250 | 3.79 | 33.81 | 1.96 | 26.88 | 120 | 0.38 |
| 300 | 3.75 | 33.90 | 1.31 | 26.96 | 300 | 3.75 | 33.90 | 1.31 | 26.96 | 113 | 0.44 |
| | | | | | 400 | 3.61 | 34.04 | 0.93 | 27.08 | 102 | 0.54 |
| 400 | 3.61 | 34.04 | 0.93 | 27.08 | 500 | 3.45 | 34.12 | 0.72 | 27.16 | 95 | 0.64 |
| 500 | 3.45 | 34.12 | 0.72 | 27.16 | 600 | 3.36 | 34.18 | 0.60 | 27.22 | 90 | 0.73 |
| 700 | 3.25 | 34.24 | 0.52 | 27.28 | 700 | 3.25 | 34.24 | 0.52 | 27.28 | 85 | 0.82 |
| 1050 | 2.78 | 34.38 | 0.47 | 27.43 | 800 | 3.13 | 34.29 | 0.46 | 27.33 | 81 | 0.90 |
| | | | | | 1000 | 2.86 | 34.37 | 0.45 | 27.42 | 73 | 1.06 |

29

ATTU; July 2, 1958; 0005 GCT; 53°29'N, 175°00'W; wind, 180°, 2 kt; weather, light fog; sea, slight.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.90 | 33.19 | - | 26.03 | 0 | 6.90 | 33.19 | | 26.03 | 199 | 0.00 |
| 10 | 6.08 | 33.16 | 7.03 | 26.11 | 10 | 6.08 | 33.16 | 7.03 | 26.11 | 191 | 0.02 |
| 25 | 6.05 | 33.18 | 7.10 | 26.13 | 20 | 6.06 | 33.17 | 7.08 | 26.12 | 190 | 0.04 |
| 50 | 5.20 | 33.20 | 7.16 | 26.25 | 30 | 5.95 | 33.18 | 7.13 | 26.14 | 188 | 0.06 |
| 75 | 3.45 | 33.22 | 6.87 | 26.45 | 50 | 5.20 | 33.20 | 7.16 | 26.25 | 178 | 0.09 |
| 100 | 3.02 | 33.24 | 7.07 | 26.50 | 75 | 3.45 | 33.22 | 6.87 | 26.45 | 160 | 0.14 |
| 125 | 2.81 | 33.24 | 7.04 | 26.52 | 100 | 3.02 | 33.24 | 7.07 | 26.50 | 154 | 0.18 |
| 150 | 2.75 | 33.30 | 6.50 | 26.57 | 150 | 2.75 | 33.30 | 6.50 | 26.57 | 148 | 0.25 |
| 200 | 3.54 | 33.52 | 4.18 | 26.68 | 200 | 3.54 | 33.52 | 4.18 | 26.68 | 139 | 0.32 |
| 250 | 3.85 | 33.74 | 2.52 | 26.82 | 250 | 3.85 | 33.74 | 2.52 | 26.82 | 126 | 0.39 |
| 300 | 3.86 | 33.84 | 1.94 | 26.90 | 300 | 3.86 | 33.84 | 1.94 | 26.90 | 118 | 0.45 |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | δ cl/ton | ΔD dyn m |
| 30 | ATTU; July 2, 1958; 0616, 0458 GCT; 53°01'N, 175°00'W; wind, 210°, 5 kt; weather, cloudy; sea, slight. | | | | | | | | | | |
| 0 | 6.80 | 33.08 | - | 25.96 | 0 | 6.80 | 33.08 | | 25.96 | 206 | 0.00 |
| 10 | 6.28 | 33.06 | 7.19 | 26.01 | 10 | 6.28 | 33.06 | 7.19 | 26.01 | 201 | 0.02 |
| 25 | 6.06 | 33.08 | 7.11 | 26.05 | 20 | 6.21 | 33.07 | 7.15 | 26.03 | 199 | 0.04 |
| 50 | 4.22 | 33.13 | 6.93 | 26.30 | 30 | 5.56 | 33.09 | 7.08 | 26.12 | 190 | 0.06 |
| 75 | 4.06 | 33.13 | 6.79 | 26.32 | 50 | 4.22 | 33.13 | 6.93 | 26.30 | 173 | 0.10 |
| 100 | 3.95 | 33.17 | 6.60 | 26.36 | 75 | 4.06 | 33.13 | 6.79 | 26.32 | 172 | 0.14 |
| 125 | 3.63 | 33.19 | 6.70 | 26.41 | 100 | 3.95 | 33.17 | 6.60 | 26.36 | 168 | 0.18 |
| 150 | 3.55 | 33.24 | 6.29 | 26.45 | 150 | 3.55 | 33.24 | 6.29 | 26.45 | 159 | 0.26 |
| 200 | 3.38 | 33.28 | 6.10 | 26.50 | 200 | 3.38 | 33.28 | 6.10 | 26.50 | 155 | 0.34 |
| 250 | 3.25 | 33.33 | 6.06 | 26.55 | 250 | 3.25 | 33.33 | 6.06 | 26.55 | 150 | 0.42 |
| 300 | 3.85 | 33.51 | 4.24 | 26.64 | 300 | 3.85 | 33.51 | 4.24 | 26.64 | 143 | 0.49 |
| | | | | | 400 | 4.02 | 33.73 | 2.44 | 26.80 | 129 | 0.63 |
| 400 | 4.02 | 33.73 | 2.44 | 26.80 | 500 | 3.80 | 33.95 | 1.49 | 26.99 | 111 | 0.75 |
| 500 | 3.80 | 33.95 | 1.49 | 26.99 | 600 | 3.62 | 34.05 | 1.00 | 27.09 | 103 | 0.85 |
| 700 | 3.45 | 34.14 | 0.64 | 27.18 | 700 | 3.45 | 34.14 | 0.64 | 27.18 | 95 | 0.95 |
| 1050 | 2.98 | 34.33 | 0.46 | 27.37 | 800 | 3.30 | 34.21 | 0.41 | 27.25 | 89 | 1.04 |
| | | | | | 1000 | 3.04 | 34.31 | 0.38 | 27.35 | 80 | 1.21 |
| 31 | ATTU; July 10, 1958; 2351 GCT; 52°14'N, 176°47'W; wind, 060°, 7 kt; weather, patches of fog; sea, slight. | | | | | | | | | | |
| 0 | 6.70 | 33.15 | | 26.02 | 0 | 6.70 | 33.15 | | 26.02 | 199 | 0.00 |
| 10 | 7.06 | 33.12 | | 25.95 | 10 | 7.06 | 33.12 | | 25.95 | 206 | 0.02 |
| 24 | 6.62 | 33.13 | | 26.02 | 20 | 6.77 | 33.13 | | 26.00 | 202 | 0.04 |
| 49 | 5.36 | 33.19 | | 26.22 | 30 | 6.30 | 33.15 | | 26.08 | 195 | 0.06 |
| 73 | 4.33 | 33.21 | | 26.35 | 50 | 5.31 | 33.19 | | 26.23 | 180 | 0.10 |
| 98 | 3.42 | 33.22 | | 26.45 | 75 | 4.23 | 33.21 | | 26.36 | 168 | 0.14 |
| 123 | 3.17 | 33.26 | | 26.51 | 100 | 3.39 | 33.22 | | 26.45 | 159 | 0.18 |
| 147 | 3.08 | 33.30 | | 26.55 | 150 | 3.09 | 33.30 | | 26.54 | 151 | 0.26 |
| 196 | 3.30 | 33.42 | | 26.62 | 200 | 3.35 | 33.44 | | 26.63 | 143 | 0.33 |
| 245 | 3.71 | 33.64 | | 26.76 | 250 | 3.72 | 33.65 | | 26.76 | 131 | 0.40 |
| 294 | 3.80 | 33.77 | | 26.85 | 300 | (3.81) | (33.79) | | (26.87) | (122) | (0.46) |
| 32 | ATTU; July 11, 1958; 0446, 0336 GCT; 52°26'N, 177°02'W; wind, 030°, 5 kt; weather, cloudy; sea, moderate. | | | | | | | | | | |
| 0 | 6.80 | 33.08 | - | 25.96 | 0 | 6.80 | 33.08 | | 25.96 | 206 | 0.00 |
| 10 | 7.00 | 33.09 | 6.80 | 25.94 | 10 | 7.00 | 33.09 | 6.80 | 25.94 | 208 | 0.02 |
| 25 | 6.68 | 33.12 | 6.83 | 26.00 | 20 | 6.83 | 33.11 | 6.82 | 25.98 | 204 | 0.04 |
| 50 | 5.18 | 33.17 | 6.97 | 26.23 | 30 | 6.36 | 33.13 | 6.88 | 26.05 | 197 | 0.06 |
| 75 | 3.98 | 33.21 | 6.92 | 26.39 | 50 | 5.18 | 33.17 | 6.97 | 26.23 | 180 | 0.10 |
| 100 | 3.52 | 33.21 | 6.79 | 26.43 | 75 | 3.98 | 33.21 | 6.92 | 26.39 | 165 | 0.14 |
| 125 | 3.52 | 33.24 | 6.16 | 26.46 | 100 | 3.52 | 33.21 | 6.79 | 26.43 | 161 | 0.18 |
| 150 | 3.15 | 33.27 | 6.29 | 26.51 | 150 | 3.15 | 33.27 | 6.29 | 26.51 | 154 | 0.26 |
| 200 | 3.65 | 33.44 | 4.97 | 26.60 | 200 | 3.65 | 33.44 | 4.97 | 26.60 | 146 | 0.34 |
| 250 | 3.79 | 33.62 | 3.40 | 26.73 | 250 | 3.79 | 33.62 | 3.40 | 26.73 | 134 | 0.41 |
| 286 | 3.90 | 33.63 | 2.86 | 26.73 | 300 | 3.88 | 33.68 | 2.58 | 26.77 | 131 | 0.47 |
| | | | | | 400 | 3.73 | 33.91 | 1.24 | 26.97 | 113 | 0.60 |
| 390 | 3.75 | 33.90 | 1.29 | 26.96 | 500 | 3.60 | 34.02 | 0.93 | 27.07 | 104 | 0.70 |
| 487 | 3.61 | 34.01 | 0.95 | 27.06 | 600 | 3.50 | 34.09 | 0.76 | 27.13 | 98 | 0.80 |
| 682 | 3.40 | 34.15 | 0.66 | 27.19 | 700 | 3.38 | 34.16 | 0.64 | 27.20 | 93 | 0.90 |
| 1024 | 2.87 | 34.34 | 0.56 | 27.39 | 800 | 3.24 | 34.22 | 0.57 | 27.26 | 87 | 0.99 |
| | | | | | 1000 | 2.91 | 34.33 | 0.55 | 27.38 | 77 | 1.15 |
| 33 | ATTU; July 11, 1958; 2340 GCT; 52°21'N, 178°00'W; wind, 340°, 15 kt; weather, cloudy; sea, moderate. | | | | | | | | | | |
| 0 | 7.30 | 33.14 | - | 25.94 | 0 | 7.30 | 33.14 | | 25.94 | 208 | 0.00 |
| 9 | 6.89 | 33.12 | 6.91 | 25.98 | 10 | 6.88 | 33.12 | 6.91 | 25.98 | 204 | 0.02 |
| 23 | 6.82 | 33.12 | 6.87 | 25.99 | 20 | 6.83 | 33.12 | 6.88 | 25.98 | 203 | 0.04 |
| 47 | 4.49 | 33.13 | 6.64 | 26.27 | 30 | 5.94 | 33.12 | 6.80 | 26.10 | 193 | 0.06 |
| 71 | 4.11 | 33.18 | 6.41 | 26.35 | 50 | 4.44 | 33.14 | 6.61 | 26.29 | 175 | 0.10 |
| 94 | 3.74 | 33.22 | 6.22 | 26.42 | 75 | 4.04 | 33.19 | 6.37 | 26.37 | 167 | 0.14 |
| 118 | 3.43 | 33.27 | 6.03 | 26.49 | 100 | 3.64 | 33.23 | 6.14 | 26.44 | 161 | 0.18 |
| 141 | 3.35 | 33.30 | 6.10 | 26.52 | 150 | 3.42 | 33.34 | 5.73 | 26.55 | 151 | 0.26 |
| 189 | 3.67 | 33.49 | 4.31 | 26.64 | 200 | 3.73 | 33.54 | 3.95 | 26.68 | 139 | 0.33 |
| 236 | 3.86 | 33.68 | 2.97 | 26.77 | 250 | 3.86 | 33.72 | 2.67 | 26.81 | 127 | 0.40 |
| 284 | 3.86 | 33.80 | 2.13 | 26.87 | 300 | (3.85) | (33.83) | (1.96) | (26.89) | (119) | (0.46) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; July 12, 1958; 0622, 0429 GCT; 52°04'N, 178°38'W; wind, 030°, 12 kt; weather, cloudy; sea, rough. | | | | | | | | | | | 34 |
| 0 | 7.20 | 33.13 | - | 25.94 | 0 | 7.20 | 33.13 | | 25.94 | 207 | 0.00 |
| 10 | 6.90 | 33.09 | 6.81 | 25.95 | 10 | 6.90 | 33.09 | 6.81 | 25.95 | 206 | 0.02 |
| 25 | 6.82 | 33.10 | 6.80 | 25.97 | 20 | 6.87 | 33.09 | 6.79 | 25.96 | 206 | 0.04 |
| 50 | 4.48 | 33.16 | 6.98 | 26.30 | 30 | 6.00 | 33.11 | 6.88 | 26.08 | 194 | 0.06 |
| 75 | 3.77 | 33.21 | 6.65 | 26.41 | 50 | 4.48 | 33.16 | 6.98 | 26.30 | 174 | 0.10 |
| 100 | 3.28 | 33.21 | 6.88 | 26.46 | 75 | 3.77 | 33.21 | 6.65 | 26.41 | 163 | 0.14 |
| 125 | 3.10 | 33.22 | 7.06 | 26.48 | 100 | 3.28 | 33.21 | 6.88 | 26.46 | 159 | 0.18 |
| 150 | 2.99 | 33.26 | 6.65 | 26.52 | 150 | 2.99 | 33.26 | 6.65 | 26.52 | 153 | 0.26 |
| 200 | 3.32 | 33.40 | 5.32 | 26.60 | 200 | 3.32 | 33.40 | 5.32 | 26.60 | 146 | 0.33 |
| 250 | 3.86 | 33.62 | 3.19 | 26.73 | 250 | 3.86 | 33.62 | 3.19 | 26.73 | 135 | 0.40 |
| 300 | 3.90 | 33.77 | 2.41 | 26.84 | 300 | 3.90 | 33.77 | 2.41 | 26.84 | 124 | 0.47 |
| | | | | | 400 | 3.77 | 33.94 | 1.32 | 26.99 | 111 | 0.59 |
| 395 | 3.78 | 33.93 | 1.34 | 26.98 | 500 | 3.55 | 34.05 | 0.92 | 27.10 | 101 | 0.69 |
| 494 | 3.56 | 34.05 | 0.93 | 27.10 | 600 | 3.43 | 34.12 | 0.69 | 27.17 | 95 | 0.79 |
| 691 | 3.32 | 34.17 | 0.57 | 27.22 | 700 | 3.31 | 34.18 | 0.56 | 27.22 | 90 | 0.88 |
| 1037 | 2.90 | 34.36 | 0.67 | 27.41 | 800 | 3.19 | 34.23 | 0.50 | 27.28 | 86 | 0.97 |
| | | | | | 1000 | 2.94 | 34.34 | 0.62 | 27.39 | 76 | 1.14 |
| ATTU; July 12, 1958; 2348 GCT; 52°16'N, 179°20'W; wind, 270°, 5 kt; weather, fog; sea, slight. | | | | | | | | | | | 35 |
| 0 | 6.50 | 33.16 | - | 26.06 | 0 | 6.50 | 33.16 | | 26.06 | 196 | 0.00 |
| 10 | 6.06 | 33.15 | 6.55 | 26.11 | 10 | 6.06 | 33.15 | 6.55 | 26.11 | 192 | 0.02 |
| 25 | 5.36 | 33.24 | 5.77 | 26.26 | 20 | 5.56 | 33.21 | 6.00 | 26.22 | 181 | 0.04 |
| 50 | 4.84 | 33.33 | 4.97 | 26.39 | 30 | 5.25 | 33.26 | 5.52 | 26.29 | 174 | 0.06 |
| 75 | 4.39 | 33.34 | 5.21 | 26.45 | 50 | 4.84 | 33.33 | 4.97 | 26.39 | 165 | 0.09 |
| 100 | 4.43 | 33.41 | 4.52 | 26.50 | 75 | 4.39 | 33.34 | 5.21 | 26.45 | 160 | 0.13 |
| 125 | 4.48 | 33.47 | 4.10 | 26.54 | 100 | 4.43 | 33.41 | 4.52 | 26.50 | 155 | 0.17 |
| 150 | 4.45 | 33.49 | 3.98 | 26.56 | 150 | 4.45 | 33.49 | 3.98 | 26.56 | 150 | 0.25 |
| 200 | 4.26 | 33.56 | 3.64 | 26.64 | 200 | 4.26 | 33.56 | 3.64 | 26.64 | 143 | 0.32 |
| 250 | 3.99 | 33.64 | 3.26 | 26.73 | 250 | 3.99 | 33.64 | 3.26 | 26.73 | 134 | 0.39 |
| ATTU; July 13, 1958; 0635 GCT; 52°31'N, 179°59'W; wind, 250°, 7 kt; weather, fog; sea, moderate. | | | | | | | | | | | 36 |
| 0 | 6.40 | 33.17 | - | 26.08 | 0 | 6.40 | 33.17 | | 26.08 | 194 | 0.00 |
| 10 | 6.09 | 33.16 | 6.89 | 26.11 | 10 | 6.09 | 33.16 | 6.89 | 26.11 | 191 | 0.02 |
| 25 | 5.67 | 33.21 | 6.60 | 26.20 | 20 | 5.81 | 33.20 | 6.68 | 26.18 | 185 | 0.04 |
| 50 | 4.90 | 33.20 | 6.55 | 26.28 | 30 | 5.47 | 33.20 | 6.64 | 26.22 | 181 | 0.06 |
| 75 | 4.74 | 33.28 | 5.77 | 26.36 | 50 | 4.90 | 33.20 | 6.55 | 26.28 | 175 | 0.09 |
| 100 | 4.02 | 33.26 | 6.00 | 26.42 | 75 | 4.74 | 33.28 | 5.77 | 26.36 | 168 | 0.14 |
| 125 | 4.18 | 33.31 | 5.48 | 26.45 | 100 | 4.02 | 33.26 | 6.00 | 26.42 | 162 | 0.18 |
| 150 | 4.24 | 33.33 | 5.34 | 26.46 | 150 | 4.24 | 33.33 | 5.34 | 26.46 | 159 | 0.26 |
| 200 | 4.18 | 33.45 | 4.52 | 26.56 | 200 | 4.18 | 33.45 | 4.52 | 26.56 | 150 | 0.33 |
| 250 | 4.00 | 33.53 | 3.92 | 26.64 | 250 | 4.00 | 33.53 | 3.92 | 26.64 | 143 | 0.41 |
| 300 | 3.92 | 33.62 | 3.37 | 26.72 | 300 | 3.92 | 33.62 | 3.37 | 26.72 | 136 | 0.48 |
| ATTU; July 14, 1958; 0015 GCT; 52°59'N, 179°58'W; wind, 270°, 15 kt; weather, fog; sea, rough. | | | | | | | | | | | 37 |
| 0 | 6.40 | 33.16 | - | 26.07 | 0 | 6.40 | 33.16 | | 26.07 | 195 | 0.00 |
| 10 | 6.08 | 33.16 | 6.78 | 26.11 | 10 | 6.08 | 33.16 | 6.78 | 26.11 | 191 | 0.02 |
| 25 | 5.64 | 33.21 | 6.50 | 26.21 | 20 | 5.81 | 33.20 | 6.55 | 26.18 | 185 | 0.04 |
| 49 | 4.43 | 33.15 | 6.66 | 26.29 | 30 | 5.36 | 33.19 | 6.54 | 26.22 | 181 | 0.06 |
| 74 | 3.54 | 33.17 | 6.72 | 26.40 | 50 | 4.38 | 33.15 | 6.68 | 26.30 | 174 | 0.09 |
| 98 | 3.54 | 33.23 | 6.26 | 26.45 | 75 | 3.53 | 33.17 | 6.71 | 26.40 | 164 | 0.13 |
| 122 | 3.88 | 33.32 | 5.48 | 26.49 | 100 | 3.58 | 33.24 | 6.18 | 26.45 | 159 | 0.17 |
| 146 | 3.95 | 33.39 | 5.00 | 26.53 | 150 | 3.92 | 33.39 | 4.94 | 26.54 | 152 | 0.25 |
| 195 | 3.75 | 33.49 | 4.09 | 26.63 | 200 | 3.77 | 33.51 | 3.91 | 26.65 | 142 | 0.32 |
| 244 | 3.88 | 33.69 | 2.74 | 26.78 | 250 | 3.87 | 33.71 | 2.65 | 26.80 | 128 | 0.39 |
| 292 | 3.83 | 33.79 | 2.26 | 26.86 | 300 | (3.82) | (33.80) | (2.23) | (26.87) | (121) | (0.45) |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **38** | ATTU; July 14, 1958; 0611, 0526 GCT; 53°31'N, 180°00'; wind, 240°, 7 kt; weather, fog; sea, moderate. | | | | | | | | | | |
| 0 | 6.50 | 33.07 | - | 25.99 | 0 | 6.50 | 33.07 | | 25.99 | 203 | 0.00 |
| 10 | 6.78 | 33.04 | 6.65 | 25.93 | 10 | 6.78 | 33.04 | 6.65 | 25.93 | 209 | 0.02 |
| 25 | 6.75 | 33.07 | 6.90 | 25.96 | 20 | 6.76 | 33.06 | 6.82 | 25.95 | 207 | 0.04 |
| 50 | 3.65 | 33.12 | 7.17 | 26.35 | 30 | 5.85 | 33.08 | 6.97 | 26.08 | 194 | 0.06 |
| 75 | 4.05 | 33.23 | 5.85 | 26.40 | 50 | 3.65 | 33.12 | 7.17 | 26.35 | 169 | 0.10 |
| 100 | 4.03 | 33.36 | 5.31 | 26.50 | 75 | 4.05 | 33.23 | 5.85 | 26.40 | 164 | 0.14 |
| 125 | 3.45 | 33.38 | 5.16 | 26.57 | 100 | 4.03 | 33.36 | 5.31 | 26.50 | 155 | 0.18 |
| 150 | 3.78 | 33.53 | 4.20 | 26.66 | 150 | 3.78 | 33.53 | 4.20 | 26.66 | 140 | 0.25 |
| 200 | 3.81 | 33.65 | 3.44 | 26.75 | 200 | 3.81 | 33.65 | 3.44 | 26.75 | 132 | 0.32 |
| | | | | | 250 | 3.80 | 33.74 | 2.48 | 26.83 | 125 | 0.39 |
| 341 | 3.71 | 34.00 | 1.14 | 27.04 | 300 | 3.80 | 33.78 | 2.07 | 26.86 | 122 | 0.45 |
| 390 | 3.63 | 34.05 | 0.88 | 27.09 | 400 | 3.62 | 34.06 | 0.82 | 27.10 | 100 | 0.56 |
| 439 | 3.59 | 34.11 | 0.63 | 27.14 | 500 | (3.53) | (34.17) | (0.60) | (27.20) | (92) | (0.66) |
| 488 | 3.54 | 34.16 | 0.60 | 27.19 | | | | | | | |
| **39** | ATTU; July 15, 1958; 0015 GCT; 53°41'N, 179°00'E; wind, 250°, 7 kt; weather, fog; sea, moderate. | | | | | | | | | | |
| 0 | 7.10 | 33.12 | - | 25.95 | 0 | 7.10 | 33.12 | | 25.95 | 207 | 0.00 |
| 10 | 7.04 | 33.11 | 6.73 | 25.95 | 10 | 7.04 | 33.11 | 6.73 | 25.95 | 207 | 0.02 |
| 25 | 6.51 | 33.13 | 6.87 | 26.03 | 20 | 6.79 | 33.12 | 6.81 | 25.99 | 203 | 0.04 |
| 50 | 3.62 | 33.13 | 7.22 | 26.36 | 30 | 5.74 | 33.13 | 6.99 | 26.13 | 190 | 0.06 |
| 75 | 3.10 | 33.17 | 6.97 | 26.44 | 50 | 3.62 | 33.13 | 7.22 | 26.36 | 168 | 0.10 |
| 100 | 2.80 | 33.22 | 6.72 | 26.51 | 75 | 3.10 | 33.17 | 6.97 | 26.44 | 160 | 0.14 |
| 125 | 2.77 | 33.31 | 6.66 | 26.58 | 100 | 2.80 | 33.22 | 6.72 | 26.51 | 154 | 0.18 |
| 150 | 3.34 | 33.48 | 4.66 | 26.66 | 150 | 3.34 | 33.48 | 4.66 | 26.66 | 139 | 0.25 |
| 200 | 3.90 | 33.74 | 2.35 | 26.82 | 200 | 3.90 | 33.74 | 2.35 | 26.82 | 126 | 0.32 |
| 250 | 3.78 | 33.85 | 1.51 | 26.92 | 250 | 3.78 | 33.85 | 1.51 | 26.92 | 117 | 0.38 |
| 300 | 3.75 | 33.96 | 0.95 | 27.01 | 300 | 3.75 | 33.96 | 0.95 | 27.01 | 108 | 0.43 |
| **40** | ATTU; July 15, 1958; 0728, 0557 GCT; 54°00'N, 178°00'E; wind, 250°, 2 kt; weather, cloudy; sea, smooth. | | | | | | | | | | |
| 0 | 7.30 | 33.20 | - | 25.98 | 0 | 7.30 | 33.20 | | 25.98 | 203 | 0.00 |
| 10 | 7.05 | 33.14 | 6.94 | 25.97 | 10 | 7.05 | 33.14 | 6.94 | 25.97 | 205 | 0.02 |
| 25 | 6.78 | 33.17 | 6.92 | 26.03 | 20 | 7.00 | 33.16 | 6.94 | 25.99 | 203 | 0.04 |
| 50 | 3.66 | 33.22 | 6.61 | 26.43 | 30 | 5.92 | 33.18 | 6.87 | 26.15 | 188 | 0.06 |
| 75 | 3.45 | 33.28 | 6.27 | 26.50 | 50 | 3.66 | 33.22 | 6.61 | 26.43 | 161 | 0.10 |
| 100 | 3.72 | 33.39 | 5.38 | 26.56 | 75 | 3.45 | 33.28 | 6.27 | 26.50 | 155 | 0.14 |
| 125 | 3.72 | 33.43 | 4.74 | 26.59 | 100 | 3.72 | 33.39 | 5.38 | 26.56 | 149 | 0.17 |
| 150 | 3.78 | 33.46 | 4.31 | 26.61 | 150 | 3.78 | 33.46 | 4.31 | 26.61 | 145 | 0.25 |
| 200 | 3.85 | 33.51 | 2.74 | 26.64 | 200 | 3.85 | 33.51 | 2.74 | 26.64 | 142 | 0.32 |
| 250 | 3.81 | 33.73 | 1.50 | 26.82 | 250 | 3.81 | 33.73 | 1.50 | 26.82 | 126 | 0.39 |
| 300 | 3.76 | 33.90 | 1.13 | 26.96 | 300 | 3.76 | 33.90 | 1.13 | 26.96 | 113 | 0.45 |
| | | | | | 400 | 3.66 | 34.06 | 0.73 | 27.10 | 101 | 0.55 |
| 398 | 3.66 | 34.06 | 0.73 | 27.10 | 500 | 3.50 | 34.17 | 0.56 | 27.20 | 92 | 0.65 |
| 497 | 3.50 | 34.17 | 0.56 | 27.20 | 600 | 3.35 | 34.22 | 0.52 | 27.25 | 87 | 0.74 |
| 696 | 3.22 | 34.26 | 0.49 | 27.30 | 700 | 3.21 | 34.26 | 0.49 | 27.30 | 83 | 0.82 |
| 1044 | 2.75 | 34.40 | 0.54 | 27.45 | 800 | 3.08 | 34.30 | 0.48 | 27.34 | 80 | 0.90 |
| | | | | | 1000 | 2.81 | 34.38 | 0.52 | 27.43 | 72 | 1.06 |
| **41** | ATTU; July 15, 1958; 2346 GCT; 54°01'N, 177°11'E; wind, 210°, 1 kt; weather, fog; sea, smooth. | | | | | | | | | | |
| 0 | 7.80 | 33.12 | - | 25.85 | 0 | 7.80 | 33.12 | | 25.85 | 216 | 0.00 |
| 10 | 7.10 | 33.11 | 6.89 | 25.94 | 10 | 7.10 | 33.11 | 6.89 | 25.94 | 207 | 0.02 |
| 25 | 6.42 | 33.15 | 7.15 | 26.06 | 20 | 6.73 | 33.14 | 7.08 | 26.01 | 201 | 0.04 |
| 50 | 3.66 | 33.24 | 7.16 | 26.44 | 30 | 5.69 | 33.17 | 7.16 | 26.17 | 186 | 0.06 |
| 75 | 3.15 | 33.25 | 7.02 | 26.50 | 50 | 3.66 | 33.24 | 7.16 | 26.44 | 160 | 0.10 |
| 100 | 2.75 | 33.27 | 6.94 | 26.55 | 75 | 3.15 | 33.25 | 7.02 | 26.50 | 155 | 0.13 |
| 125 | 2.87 | 33.37 | 5.64 | 26.62 | 100 | 2.75 | 33.27 | 6.94 | 26.55 | 150 | 0.17 |
| 150 | 3.33 | 33.51 | 4.26 | 26.69 | 150 | 3.33 | 33.51 | 4.26 | 26.69 | 137 | 0.24 |
| 200 | 3.89 | 33.79 | 2.03 | 26.86 | 200 | 3.89 | 33.79 | 2.03 | 26.86 | 122 | 0.31 |
| 250 | 3.80 | 33.89 | 1.40 | 26.95 | 250 | 3.80 | 33.89 | 1.40 | 26.95 | 114 | 0.37 |
| 300 | 3.78 | 33.96 | 1.05 | 27.00 | 300 | 3.78 | 33.96 | 1.05 | 27.00 | 109 | 0.42 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; July 16, 1958; 0616, 0545 GCT; 54°02'N, 176°28'E; wind, 190°, 1 kt; weather, fog; sea, smooth. | | | | | | | | | | | 42 |
| 0 | 8.00 | 33.16 | - | 25.85 | 0 | 8.00 | 33.16 | | 25.85 | 216 | 0.00 |
| 10 | 7.39 | 33.14 | 6.81 | 25.92 | 10 | 7.39 | 33.14 | 6.81 | 25.92 | 209 | 0.02 |
| 25 | 6.62 | 33.14 | 6.87 | 26.03 | 20 | 6.96 | 33.14 | 6.81 | 25.98 | 204 | 0.04 |
| 50 | 3.70 | 33.20 | 7.62 | 26.41 | 30 | 5.85 | 33.15 | 7.10 | 26.13 | 189 | 0.06 |
| 75 | 3.11 | 33.24 | 7.32 | 26.49 | 50 | 3.70 | 33.20 | 7.62 | 26.41 | 163 | 0.10 |
| 100 | 2.89 | 33.26 | 6.91 | 26.53 | 75 | 3.11 | 33.24 | 7.32 | 26.49 | 155 | 0.14 |
| 125 | 2.89 | 33.34 | 5.98 | 26.59 | 100 | 2.89 | 33.26 | 6.91 | 26.53 | 152 | 0.18 |
| 150 | 3.34 | 33.52 | 4.28 | 26.70 | 150 | 3.34 | 33.52 | 4.28 | 26.70 | 136 | 0.25 |
| 200 | 3.94 | 33.78 | 2.08 | 26.84 | 200 | 3.94 | 33.78 | 2.08 | 26.84 | 123 | 0.31 |
| 250 | 3.82 | 33.89 | 1.41 | 26.94 | 250 | 3.82 | 33.89 | 1.41 | 26.94 | 114 | 0.37 |
| 300 | 3.77 | 33.98 | 0.97 | 27.02 | 300 | 3.77 | 33.98 | 0.97 | 27.02 | 107 | 0.43 |
| | | | | | 400 | 3.70 | 34.08 | 0.66 | 27.11 | 100 | 0.53 |
| 395 | 3.71 | 34.08 | 0.66 | 27.11 | 500 | 3.56 | 34.15 | 0.57 | 27.18 | 94 | 0.63 |
| 494 | 3.57 | 34.15 | 0.57 | 27.18 | 600 | 3.40 | 34.21 | 0.53 | 27.24 | 88 | 0.72 |
| 692 | 3.26 | 34.26 | 0.50 | 27.29 | 700 | 3.25 | 34.26 | 0.50 | 27.29 | 84 | 0.80 |
| 1040 | 2.79 | 34.39 | 0.49 | 27.44 | 800 | 3.10 | 34.31 | 0.48 | 27.35 | 79 | 0.88 |
| | | | | | 1000 | 2.84 | 34.38 | 0.48 | 27.43 | 72 | 1.04 |
| ATTU; July 16, 1958; 2341 GCT; 54°03'N, 175°45'E; wind, 150°, 7 kt; weather, fog; sea, slight. | | | | | | | | | | | 43 |
| 0 | 7.90 | 33.13 | - | 25.84 | 0 | 7.90 | 33.13 | | 25.84 | 216 | 0.00 |
| 10 | 7.22 | 33.13 | 6.85 | 25.94 | 10 | 7.22 | 33.13 | 6.85 | 25.94 | 208 | 0.02 |
| 25 | 6.78 | 33.13 | 7.00 | 26.00 | 20 | 7.03 | 33.13 | 6.94 | 25.97 | 205 | 0.04 |
| 50 | 3.93 | 33.18 | 7.34 | 26.37 | 30 | 6.04 | 33.14 | 7.10 | 26.10 | 192 | 0.06 |
| 75 | 3.19 | 33.23 | 7.29 | 26.48 | 50 | 3.93 | 33.18 | 7.34 | 26.37 | 167 | 0.10 |
| 100 | 2.89 | 33.25 | 7.22 | 26.52 | 75 | 3.19 | 33.23 | 7.29 | 26.48 | 156 | 0.14 |
| 125 | 2.72 | 33.26 | 7.08 | 26.54 | 100 | 2.89 | 33.25 | 7.22 | 26.52 | 152 | 0.18 |
| 150 | 2.51 | 33.30 | 6.60 | 26.59 | 150 | 2.51 | 33.30 | 6.60 | 26.59 | 146 | 0.25 |
| 200 | 3.78 | 33.70 | 2.79 | 26.80 | 200 | 3.78 | 33.70 | 2.79 | 26.80 | 127 | 0.32 |
| 250 | 3.78 | 33.85 | 1.65 | 26.92 | 250 | 3.78 | 33.85 | 1.65 | 26.92 | 117 | 0.38 |
| 286 | 3.77 | 33.90 | 1.37 | 26.96 | 300 | (3.76) | (33.91) | (1.32) | (26.97) | (112) | (0.44) |
| ATTU; July 17, 1958; 0531, 0439 GCT; 54°00'N, 175°00'E; wind, 150°, 5 kt; weather, overcast; sea, slight. | | | | | | | | | | | 44 |
| 0 | 8.10 | 33.03 | - | 25.74 | 0 | 8.10 | 33.03 | | 25.74 | 227 | 0.00 |
| 10 | 7.99 | 33.02 | 6.89 | 25.74 | 10 | 7.99 | 33.02 | 6.89 | 25.74 | 226 | 0.02 |
| 25 | 6.68 | 33.03 | 7.17 | 25.93 | 20 | 7.12 | 33.02 | 7.11 | 25.87 | 215 | 0.04 |
| 50 | 4.46 | 33.12 | 6.81 | 26.27 | 30 | 6.09 | 33.05 | 7.08 | 26.02 | 200 | 0.07 |
| 75 | 4.01 | 33.16 | 6.63 | 26.35 | 50 | 4.46 | 33.12 | 6.81 | 26.27 | 177 | 0.10 |
| 100 | 3.87 | 33.22 | 6.19 | 26.41 | 75 | 4.01 | 33.16 | 6.63 | 26.35 | 169 | 0.15 |
| 125 | 3.62 | 33.28 | 5.79 | 26.48 | 100 | 3.87 | 33.22 | 6.19 | 26.41 | 164 | 0.19 |
| 150 | 3.72 | 33.37 | 5.19 | 26.54 | 150 | 3.72 | 33.37 | 5.19 | 26.54 | 151 | 0.27 |
| 200 | 3.88 | 33.56 | 3.80 | 26.68 | 200 | 3.88 | 33.56 | 3.80 | 26.68 | 139 | 0.34 |
| 250 | 4.05 | 33.75 | 2.43 | 26.81 | 250 | 4.05 | 33.75 | 2.43 | 26.81 | 127 | 0.41 |
| 300 | 3.99 | 33.90 | 1.52 | 26.94 | 300 | 3.99 | 33.90 | 1.52 | 26.94 | 115 | 0.47 |
| | | | | | 400 | 3.80 | 34.03 | 0.99 | 27.06 | 104 | 0.58 |
| 399 | 3.80 | 34.03 | 0.99 | 27.06 | 500 | 3.55 | 34.12 | 0.67 | 27.15 | 96 | 0.68 |
| 498 | 3.55 | 34.12 | 0.67 | 27.15 | 600 | 3.48 | 34.18 | 0.54 | 27.21 | 91 | 0.77 |
| 697 | 3.38 | 34.24 | 0.45 | 27.27 | 700 | 3.38 | 34.24 | 0.45 | 27.27 | 87 | 0.86 |
| 1045 | 2.83 | 34.39 | 0.52 | 27.44 | 800 | 3.25 | 34.29 | 0.40 | 27.32 | 82 | 0.94 |
| | | | | | 1000 | 2.92 | 34.37 | 0.47 | 27.41 | 74 | 1.10 |
| ATTU; July 18, 1958; 0029 GCT; 54°30'N, 175°00'E; wind, 080°, 4 kt; weather, fog; sea, slight. | | | | | | | | | | | 45 |
| 0 | 8.60 | 33.03 | - | 25.66 | 0 | 8.60 | 33.03 | | 25.66 | 234 | 0.00 |
| 10 | 8.18 | 32.99 | 6.83 | 25.69 | 10 | 8.18 | 32.99 | 6.83 | 25.69 | 231 | 0.02 |
| 25 | 7.25 | 33.02 | 7.01 | 25.85 | 20 | 7.61 | 33.01 | 6.99 | 25.79 | 222 | 0.05 |
| 50 | 4.62 | 33.14 | 6.54 | 26.27 | 30 | 6.57 | 33.05 | 6.89 | 25.96 | 206 | 0.07 |
| 75 | 3.94 | 33.18 | 6.46 | 26.37 | 50 | 4.62 | 33.14 | 6.54 | 26.27 | 177 | 0.10 |
| 100 | 3.80 | 33.24 | 6.01 | 26.43 | 75 | 3.94 | 33.18 | 6.46 | 26.37 | 167 | 0.15 |
| 125 | 3.65 | 33.31 | 5.49 | 26.50 | 100 | 3.80 | 33.24 | 6.01 | 26.43 | 162 | 0.19 |
| 150 | 3.57 | 33.39 | 4.92 | 26.57 | 150 | 3.57 | 33.39 | 4.92 | 26.57 | 148 | 0.27 |
| 200 | 3.94 | 33.75 | 2.52 | 26.82 | 200 | 3.94 | 33.75 | 2.52 | 26.82 | 125 | 0.33 |
| 250 | 3.89 | 33.88 | 1.53 | 26.93 | 250 | 3.89 | 33.88 | 1.53 | 26.93 | 115 | 0.39 |
| 300 | 3.82 | 33.96 | 1.18 | 27.00 | 300 | 3.82 | 33.96 | 1.18 | 27.00 | 109 | 0.45 |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **46** | ATTU; July 18, 1958; 0615, 0525 GCT; 55°00'N, 175°00'E; wind, 080°, 3 kt; weather, cloudy; sea, slight. | | | | | | | | | | |
| 0 | 8.30 | 33.16 | - | 25.81 | 0 | 8.30 | 33.16 | | 25.81 | 220 | 0.00 |
| 10 | 8.08 | 33.14 | 5.52 | 25.82 | 10 | 8.08 | 33.14 | 5.52 | 25.82 | 218 | 0.02 |
| 25 | 6.46 | 33.16 | 7.18 | 26.06 | 20 | 7.01 | 33.15 | 6.74 | 25.98 | 203 | 0.04 |
| 50 | 3.56 | 33.23 | 7.63 | 26.45 | 30 | 5.71 | 33.18 | 7.32 | 26.17 | 185 | 0.06 |
| 75 | 2.77 | 33.23 | 7.41 | 26.52 | 50 | 3.56 | 33.23 | 7.63 | 26.45 | 160 | 0.10 |
| 100 | 2.45 | 33.23 | 7.22 | 26.54 | 75 | 2.77 | 33.23 | 7.41 | 26.52 | 153 | 0.14 |
| 125 | 2.15 | 33.24 | 7.10 | 26.57 | 100 | 2.45 | 33.23 | 7.22 | 26.54 | 150 | 0.17 |
| 150 | 1.75 | 33.26 | 6.83 | 26.62 | 150 | 1.75 | 33.26 | 6.83 | 26.62 | 143 | 0.25 |
| 200 | 3.82 | 33.78 | 1.98 | 26.86 | 200 | 3.82 | 33.78 | 1.98 | 26.86 | 122 | 0.31 |
| 250 | 3.78 | 33.90 | 1.28 | 26.96 | 250 | 3.78 | 33.90 | 1.28 | 26.96 | 113 | 0.37 |
| 300 | 3.72 | 33.97 | 1.00 | 27.02 | 300 | 3.72 | 33.97 | 1.00 | 27.02 | 107 | 0.43 |
| | | | | | 400 | 3.61 | 34.08 | 0.67 | 27.12 | 99 | 0.53 |
| 395 | 3.62 | 34.08 | 0.67 | 27.12 | 500 | 3.49 | 34.16 | 0.58 | 27.19 | 92 | 0.63 |
| 494 | 3.50 | 34.16 | 0.58 | 27.19 | 600 | 3.34 | 34.21 | 0.53 | 27.25 | 88 | 0.72 |
| 692 | 3.21 | 34.25 | 0.49 | 27.29 | 700 | 3.20 | 34.25 | 0.49 | 27.29 | 84 | 0.80 |
| 1039 | 2.78 | 34.38 | 0.52 | 27.43 | 800 | 3.07 | 34.29 | 0.47 | 27.33 | 80 | 0.88 |
| | | | | | 1000 | 2.82 | 34.37 | 0.50 | 27.42 | 73 | 1.04 |
| **47** | ATTU; July 19, 1958; 0015 GCT; 55°31'N, 175°00'E; wind, 060°, 1 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | | |
| 0 | 8.50 | 33.19 | - | 25.80 | 0 | 8.50 | 33.19 | | 25.80 | 220 | 0.00 |
| 10 | 7.85 | 33.18 | 6.89 | 25.89 | 10 | 7.85 | 33.18 | 6.89 | 25.89 | 212 | 0.02 |
| 25 | 6.17 | 33.19 | 7.32 | 26.12 | 20 | 6.76 | 33.18 | 7.21 | 26.04 | 198 | 0.04 |
| 50 | 2.83 | 33.25 | 7.36 | 26.53 | 30 | 5.25 | 33.21 | 7.34 | 26.25 | 178 | 0.06 |
| 75 | 2.70 | 33.26 | 7.29 | 26.55 | 50 | 2.83 | 33.25 | 7.36 | 26.53 | 152 | 0.10 |
| 100 | 2.50 | 33.26 | 7.17 | 26.56 | 75 | 2.70 | 33.26 | 7.29 | 26.55 | 150 | 0.13 |
| 125 | 2.51 | 33.33 | 6.60 | 26.62 | 100 | 2.50 | 33.26 | 7.17 | 26.56 | 149 | 0.17 |
| 150 | 2.95 | 33.49 | 4.58 | 26.71 | 150 | 2.95 | 33.49 | 4.58 | 26.71 | 135 | 0.24 |
| 200 | 3.88 | 33.83 | 1.71 | 26.89 | 200 | 3.88 | 33.83 | 1.71 | 26.89 | 119 | 0.30 |
| 250 | 3.77 | 33.90 | - | 26.96 | 250 | 3.77 | 33.90 | 1.25 | 26.96 | 113 | 0.36 |
| 292 | 3.69 | 33.97 | 0.96 | 27.02 | 300 | (3.66) | (33.98) | (0.92) | (27.03) | (106) | (0.42) |
| **48** | ATTU; July 19, 1958; 0618, 0525 GCT; 55°59'N, 175°01'E; wind, calm; weather, partly cloudy; sea, smooth. | | | | | | | | | | |
| 0 | 8.50 | 33.09 | - | 25.72 | 0 | 8.50 | 33.09 | | 25.72 | 228 | 0.00 |
| 10 | 7.97 | 33.08 | 6.94 | 25.79 | 10 | 7.97 | 33.08 | 6.94 | 25.79 | 221 | 0.02 |
| 25 | 6.56 | 33.10 | 7.27 | 26.00 | 20 | 7.09 | 33.09 | 7.18 | 25.93 | 209 | 0.04 |
| 50 | 3.02 | 33.16 | 7.40 | 26.44 | 30 | 5.60 | 33.11 | 7.35 | 26.13 | 189 | 0.06 |
| 75 | 2.62 | 33.20 | 6.89 | 26.50 | 50 | 3.02 | 33.16 | 7.40 | 26.44 | 160 | 0.10 |
| 100 | 1.94 | 33.24 | 6.52 | 26.59 | 75 | 2.62 | 33.20 | 6.89 | 26.50 | 154 | 0.14 |
| 125 | 2.23 | 33.32 | 5.94 | 26.63 | 100 | 1.94 | 33.24 | 6.52 | 26.59 | 146 | 0.18 |
| 149 | 3.36 | 33.64 | 3.18 | 26.79 | 150 | 3.37 | 33.65 | 3.14 | 26.80 | 127 | 0.24 |
| 199 | 3.76 | 33.84 | 1.58 | 26.91 | 200 | 3.76 | 33.84 | 1.57 | 26.91 | 117 | 0.30 |
| 248 | 3.69 | 33.91 | 1.14 | 26.97 | 250 | 3.69 | 33.91 | 1.13 | 26.97 | 111 | 0.36 |
| 297 | 3.66 | 34.00 | 0.82 | 27.05 | 300 | 3.66 | 34.00 | 0.81 | 27.05 | 104 | 0.42 |
| | | | | | 400 | 3.59 | 34.07 | 0.60 | 27.11 | 99 | 0.52 |
| 395 | 3.60 | 34.07 | 0.60 | 27.11 | 500 | 3.44 | 34.16 | 0.54 | 27.20 | 92 | 0.61 |
| 494 | 3.44 | 34.15 | 0.55 | 27.19 | 600 | 3.33 | 34.24 | 0.47 | 27.27 | 85 | 0.70 |
| 692 | 3.15 | 34.26 | 0.45 | 27.30 | 700 | (3.13) | (34.26) | (0.45) | (27.30) | (82) | (0.79) |
| **49** | ATTU; July 20, 1958; 0049 GCT; 55°30'N, 175°06'E; wind, 250°, 2 kt; weather, partly cloudy; sea, slight. | | | | | | | | | | |
| 0 | 8.40 | 33.19 | - | 25.82 | 0 | 8.40 | 33.19 | | 25.82 | 219 | 0.00 |
| 10 | 7.96 | 33.17 | 6.96 | 25.87 | 10 | 7.96 | 33.17 | 6.96 | 25.87 | 214 | 0.02 |
| 25 | 6.50 | 33.20 | 7.40 | 26.09 | 20 | 7.04 | 33.19 | 7.29 | 26.01 | 201 | 0.04 |
| 50 | 3.08 | 33.27 | 7.46 | 26.52 | 30 | 5.57 | 33.22 | 7.43 | 26.22 | 181 | 0.06 |
| 75 | 2.68 | 33.29 | 7.39 | 26.57 | 50 | 3.08 | 33.27 | 7.46 | 26.52 | 152 | 0.10 |
| 100 | 2.57 | 33.29 | 7.28 | 26.58 | 75 | 2.68 | 33.29 | 7.39 | 26.57 | 148 | 0.13 |
| 125 | 2.08 | 33.31 | 6.65 | 26.64 | 100 | 2.57 | 33.29 | 7.28 | 26.58 | 147 | 0.17 |
| 150 | 3.05 | 33.55 | 4.39 | 26.75 | 150 | 3.05 | 33.55 | 4.39 | 26.75 | 132 | 0.24 |
| 200 | 3.88 | 33.84 | 1.80 | 26.90 | 200 | 3.88 | 33.84 | 1.80 | 26.90 | 118 | 0.30 |
| 250 | 3.76 | 33.93 | 1.32 | 26.98 | 250 | 3.76 | 33.93 | 1.32 | 26.98 | 110 | 0.36 |
| 300 | 3.72 | 33.99 | 1.02 | 27.03 | 300 | 3.72 | 33.99 | 1.02 | 27.03 | 106 | 0.41 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; July 20, 1958; 0543, 0458 GCT; 55°01'N, 174°58'E; wind, 270°, 1 kt; weather, partly cloudy; sea, slight. | | | | | | | | | | | 50 |
| 0 | 8.80 | 33.22 | - | 25.78 | 0 | 8.80 | 33.22 | | 25.78 | 223 | 0.00 |
| 10 | 7.86 | 33.17 | 6.73 | 25.88 | 10 | 7.86 | 33.17 | 6.73 | 25.88 | 213 | 0.02 |
| 25 | 6.26 | 33.19 | 7.28 | 26.11 | 20 | 6.80 | 33.18 | 7.12 | 26.04 | 198 | 0.04 |
| 50 | 3.42 | 33.26 | 7.73 | 26.48 | 30 | 5.51 | 33.21 | 7.43 | 26.22 | 181 | 0.06 |
| 75 | 2.80 | 33.26 | 7.45 | 26.54 | 50 | 3.42 | 33.26 | 7.73 | 26.48 | 156 | 0.10 |
| 100 | 2.43 | 33.26 | 7.22 | 26.57 | 75 | 2.80 | 33.26 | 7.45 | 26.54 | 151 | 0.13 |
| 125 | 2.28 | 33.30 | 7.00 | 26.61 | 100 | 2.43 | 33.26 | 7.22 | 26.57 | 148 | 0.17 |
| 150 | 2.27 | 33.35 | 6.03 | 26.65 | 150 | 2.27 | 33.35 | 6.03 | 26.65 | 140 | 0.24 |
| 200 | 3.82 | 33.78 | 2.13 | 26.86 | 200 | 3.82 | 33.78 | 2.13 | 26.86 | 122 | 0.31 |
| 250 | 3.75 | 33.89 | 1.51 | 26.95 | 250 | 3.75 | 33.89 | 1.51 | 26.95 | 113 | 0.37 |
| 300 | 3.91 | 33.96 | 1.12 | 26.99 | 300 | 3.91 | 33.96 | 1.12 | 26.99 | 110 | 0.42 |
| | | | | | 400 | 3.62 | 34.11 | 0.71 | 27.14 | 97 | 0.53 |
| 398 | 3.62 | 34.11 | 0.71 | 27.14 | 500 | 3.49 | 34.16 | 0.60 | 27.19 | 92 | 0.62 |
| 497 | 3.49 | 34.16 | 0.60 | 27.19 | 600 | 3.35 | 34.22 | 0.54 | 27.25 | 87 | 0.71 |
| 696 | 3.22 | 34.27 | 0.50 | 27.30 | 700 | 3.21 | 34.27 | 0.50 | 27.31 | 83 | 0.80 |
| 1044 | 2.74 | 34.43 | 0.52 | 27.48 | 800 | 3.08 | 34.32 | 0.48 | 27.36 | 78 | 0.88 |
| | | | | | 1000 | 2.80 | 34.41 | 0.50 | 27.45 | 70 | 1.02 |
| ATTU; July 21, 1958; 0008 GCT; 54°30'N, 174°58'E; wind, 040°, 1 kt; weather, partly cloudy; sea, slight. | | | | | | | | | | | 51 |
| 0 | 8.80 | 33.03 | - | 25.63 | 0 | 8.80 | 33.03 | | 25.63 | 237 | 0.00 |
| 10 | 7.95 | 33.01 | 7.92 | 25.74 | 10 | 7.95 | 33.01 | 7.92 | 25.74 | 226 | 0.02 |
| 25 | 6.73 | 33.07 | 6.93 | 25.96 | 20 | 7.14 | 33.05 | 7.19 | 25.89 | 213 | 0.04 |
| 50 | 4.62 | 33.13 | 6.80 | 26.26 | 30 | 6.22 | 33.09 | 6.90 | 26.04 | 198 | 0.07 |
| 75 | 3.58 | 33.13 | 6.73 | 26.36 | 50 | 4.62 | 33.13 | 6.80 | 26.26 | 178 | 0.10 |
| 100 | 3.75 | 33.25 | 5.98 | 26.44 | 75 | 3.58 | 33.13 | 6.73 | 26.36 | 168 | 0.15 |
| 125 | 3.83 | 33.37 | 5.20 | 26.53 | 100 | 3.75 | 33.25 | 5.98 | 26.44 | 160 | 0.19 |
| 150 | 3.66 | 33.46 | 4.58 | 26.62 | 150 | 3.66 | 33.46 | 4.58 | 26.62 | 144 | 0.26 |
| 200 | 3.90 | 33.69 | 2.71 | 26.78 | 200 | 3.90 | 33.69 | 2.71 | 26.78 | 129 | 0.33 |
| 250 | 3.95 | 33.86 | 1.69 | 26.91 | 250 | 3.95 | 33.86 | 1.69 | 26.91 | 118 | 0.39 |
| 300 | 3.88 | 33.95 | 1.23 | 26.99 | 300 | 3.88 | 33.95 | 1.23 | 26.99 | 110 | 0.45 |
| ATTU; July 21, 1958; 0610, 0522 GCT; 54°00'N, 174°58'E; wind, 330°, 3 kt; weather, partly cloudy; sea, slight. | | | | | | | | | | | 52 |
| 0 | 9.10 | 33.03 | - | 25.58 | 0 | 9.10 | 33.03 | | 25.58 | 241 | 0.00 |
| 10 | 8.04 | 33.05 | 6.80 | 25.76 | 10 | 8.04 | 33.05 | 6.80 | 25.76 | 225 | 0.02 |
| 25 | 7.00 | 33.07 | 7.08 | 25.92 | 20 | 7.39 | 33.06 | 7.02 | 25.86 | 215 | 0.04 |
| 50 | 4.43 | 33.15 | 6.83 | 26.29 | 30 | 6.28 | 33.08 | 7.10 | 26.02 | 200 | 0.07 |
| 75 | 4.44 | 33.27 | 5.76 | 26.39 | 50 | 4.43 | 33.15 | 6.83 | 26.29 | 174 | 0.10 |
| 100 | 3.99 | 33.32 | 5.72 | 26.47 | 75 | 4.44 | 33.27 | 5.76 | 26.39 | 165 | 0.14 |
| 125 | 4.01 | 33.37 | 5.25 | 26.51 | 100 | 3.99 | 33.32 | 5.72 | 26.47 | 157 | 0.18 |
| 150 | 3.95 | 33.41 | 4.96 | 26.55 | 150 | 3.95 | 33.41 | 4.96 | 26.55 | 150 | 0.26 |
| 199 | 3.96 | 33.57 | 3.72 | 26.68 | 200 | 3.96 | 33.58 | 3.68 | 26.68 | 138 | 0.33 |
| 249 | 3.97 | 33.77 | 2.36 | 26.83 | 250 | 3.97 | 33.77 | 2.35 | 26.83 | 124 | 0.40 |
| 298 | 3.84 | 33.86 | 2.04 | 26.92 | 300 | 3.84 | 33.86 | 2.02 | 26.92 | 117 | 0.46 |
| | | | | | 400 | 3.77 | 34.00 | 1.15 | 27.04 | 106 | 0.57 |
| 396 | 3.77 | 33.99 | 1.18 | 27.03 | 500 | 3.73 | 34.10 | 0.66 | 27.12 | 99 | 0.68 |
| 495 | 3.74 | 34.10 | 0.66 | 27.12 | 600 | 3.53 | 34.17 | 0.60 | 27.20 | 93 | 0.77 |
| 693 | 3.36 | 34.23 | 0.56 | 27.26 | 700 | 3.35 | 34.23 | 0.56 | 27.26 | 87 | 0.86 |
| 1040 | 2.83 | 34.37 | 0.54 | 27.42 | 800 | 3.18 | 34.28 | 0.54 | 27.32 | 82 | 0.95 |
| | | | | | 1000 | 2.88 | 34.36 | 0.53 | 27.41 | 74 | 1.10 |
| ATTU; July 22, 1958; 0016 GCT; 53°37'N, 174°26'E; wind, 240°, 7 kt; weather, cloudy; sea, slight. | | | | | | | | | | | 53 |
| 0 | 8.40 | 33.05 | - | 25.71 | 0 | 8.40 | 33.05 | | 25.71 | 230 | 0.00 |
| 10 | 7.99 | 33.06 | 6.97 | 25.77 | 10 | 7.99 | 33.06 | 6.97 | 25.77 | 223 | 0.02 |
| 25 | 6.93 | 33.06 | 6.99 | 25.92 | 20 | 7.28 | 33.06 | 7.01 | 25.88 | 214 | 0.04 |
| 49 | 5.37 | 33.10 | 6.38 | 26.15 | 30 | 6.53 | 33.06 | 6.84 | 25.98 | 204 | 0.07 |
| 74 | 4.72 | 33.20 | 5.94 | 26.30 | 50 | 5.34 | 33.10 | 6.36 | 26.15 | 188 | 0.10 |
| 99 | 4.28 | 33.29 | 5.54 | 26.42 | 75 | 4.70 | 33.20 | 5.92 | 26.31 | 173 | 0.15 |
| 124 | 4.11 | 33.35 | 5.16 | 26.49 | 100 | 4.28 | 33.29 | 5.52 | 26.42 | 162 | 0.19 |
| 148 | 3.62 | 33.35 | 5.25 | 26.53 | 150 | 3.64 | 33.36 | 5.17 | 26.54 | 151 | 0.27 |
| 198 | 4.02 | 33.59 | 3.44 | 26.69 | 200 | 4.02 | 33.60 | 3.35 | 26.69 | 137 | 0.34 |
| 247 | 4.00 | 33.79 | 2.04 | 26.85 | 250 | 3.98 | 33.80 | 2.04 | 26.86 | 122 | 0.41 |
| 285 | 3.80 | - | 1.98 | | 300 | (3.75) | (33.88) | (1.96) | (26.94) | (114) | (0.47) |

SBL

MV ATTU

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 54 | ATTU; July 22, 1958; 0532, 0450 GCT; 53°21'N, 174°04'E; wind, 240°, 12 kt; weather, overcast; sea, moderate. | | | | | | | | | | |
| 0 | 8.50 | 33.06 | - | 25.70 | 0 | 8.50 | 33.06 | | 25.70 | 230 | 0.00 |
| 10 | 7.20 | 33.04 | 6.78 | 25.87 | 10 | 7.20 | 33.04 | 6.78 | 25.87 | 214 | 0.02 |
| 25 | 6.50 | 33.05 | 7.01 | 25.97 | 20 | 6.75 | 33.04 | 6.97 | 25.93 | 208 | 0.04 |
| 50 | 4.90 | 33.14 | 6.66 | 26.24 | 30 | 6.11 | 33.07 | 6.97 | 26.04 | 198 | 0.06 |
| 75 | 4.20 | 33.23 | 5.96 | 26.38 | 50 | 4.90 | 33.14 | 6.66 | 26.24 | 180 | 0.10 |
| 100 | 3.80 | 33.30 | 5.49 | 26.48 | 75 | 4.20 | 33.23 | 5.96 | 26.38 | 166 | 0.14 |
| 125 | 3.60 | 33.44 | 4.59 | 26.61 | 100 | 3.80 | 33.30 | 5.49 | 26.48 | 157 | 0.18 |
| 150 | 3.50 | 33.52 | 4.01 | 26.68 | 150 | 3.50 | 33.52 | 4.01 | 26.68 | 138 | 0.26 |
| 200 | 3.70 | 33.71 | 2.72 | 26.81 | 200 | 3.70 | 33.71 | 2.72 | 26.81 | 126 | 0.32 |
| 250 | 3.70 | 33.85 | 1.84 | 26.92 | 250 | 3.70 | 33.85 | 1.84 | 26.92 | 116 | 0.38 |
| 300 | 3.70 | 33.93 | 1.44 | 26.99 | 300 | 3.70 | 33.93 | 1.44 | 26.99 | 110 | 0.44 |
| | | | | | 400 | 3.67 | 34.06 | 0.84 | 27.09 | 101 | 0.55 |
| 395 | 3.67 | 34.05 | 0.86 | 27.09 | 500 | 3.56 | 34.15 | 0.55 | 27.18 | 94 | 0.64 |
| 491 | 3.57 | 34.14 | 0.57 | 27.17 | 600 | 3.42 | 34.21 | 0.45 | 27.24 | 89 | 0.73 |
| 685 | 3.27 | 34.25 | 0.52 | 27.28 | | | | | | | |
| 55 | ATTU; July 29, 1958; 0113 GCT; 52°21'N, 175°00'E; wind, 280°, 5 kt; weather, overcast; sea, moderate. | | | | | | | | | | |
| 0 | 8.30 | 32.99 | - | 25.67 | 0 | 8.30 | 32.99 | | 25.67 | 232 | 0.00 |
| 10 | 7.94 | 32.97 | 6.85 | 25.71 | 10 | 7.94 | 32.97 | 6.85 | 25.71 | 229 | 0.02 |
| 25 | 7.61 | 32.99 | 6.79 | 25.77 | 20 | 7.79 | 32.98 | 6.81 | 25.74 | 226 | 0.05 |
| 50 | 5.64 | 33.08 | 6.66 | 26.10 | 30 | 7.15 | 33.01 | 6.78 | 25.85 | 216 | 0.07 |
| 75 | 4.44 | 33.15 | 6.43 | 26.29 | 50 | 5.64 | 33.08 | 6.66 | 26.10 | 192 | 0.11 |
| 100 | 4.08 | 33.19 | 6.33 | 26.36 | 75 | 4.44 | 33.15 | 6.43 | 26.29 | 174 | 0.16 |
| 125 | 4.02 | 33.20 | 6.19 | 26.38 | 100 | 4.08 | 33.19 | 6.33 | 26.36 | 168 | 0.20 |
| 150 | 3.96 | 33.21 | 6.15 | 26.39 | 150 | 3.96 | 33.21 | 6.15 | 26.39 | 166 | 0.28 |
| 200 | 3.94 | 33.52 | 4.01 | 26.64 | 200 | 3.94 | 33.52 | 4.01 | 26.64 | 142 | 0.36 |
| 237 | 3.90 | 33.70 | 2.83 | 26.79 | 250 | 3.92 | 33.73 | 2.64 | 26.81 | 127 | 0.42 |
| 277 | 3.93 | 33.78 | 2.34 | 26.85 | 300 | (3.90) | (33.80) | (2.16) | (26.86) | (122) | (0.49) |
| 56 | ATTU; July 29, 1958; 1312 GCT; 52°15'N, 177°01'E; wind, 240°, 5 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | | |
| 0 | 7.60 | 33.03 | - | 25.81 | 0 | 7.60 | 33.03 | | 25.81 | 220 | 0.00 |
| 10 | 7.59 | 32.97 | 6.64 | 25.76 | 10 | 7.59 | 32.97 | 6.64 | 25.76 | 224 | 0.02 |
| 25 | 7.39 | 32.98 | 6.72 | 25.80 | 20 | 7.55 | 32.97 | 6.72 | 25.77 | 224 | 0.04 |
| 50 | 5.21 | 33.14 | 6.34 | 26.20 | 30 | 6.79 | 33.02 | 6.64 | 25.91 | 210 | 0.07 |
| 75 | 5.04 | 33.18 | 6.03 | 26.25 | 50 | 5.21 | 33.14 | 6.34 | 26.20 | 183 | 0.10 |
| 100 | 4.44 | 33.29 | 5.49 | 26.40 | 75 | 5.04 | 33.18 | 6.03 | 26.25 | 178 | 0.15 |
| 125 | 3.92 | 33.28 | 5.77 | 26.45 | 100 | 4.44 | 33.29 | 5.49 | 26.40 | 164 | 0.19 |
| 150 | 3.74 | 33.35 | 5.47 | 26.52 | 150 | 3.74 | 33.35 | 5.47 | 26.52 | 153 | 0.27 |
| 200 | 3.85 | 33.54 | 3.85 | 26.66 | 200 | 3.85 | 33.54 | 3.85 | 26.66 | 140 | 0.34 |
| 250 | 3.82 | 33.71 | 2.69 | 26.80 | 250 | 3.82 | 33.71 | 2.69 | 26.80 | 128 | 0.41 |
| 300 | 3.95 | 33.89 | 1.42 | 26.93 | 300 | 3.95 | 33.89 | 1.42 | 26.93 | 116 | 0.47 |
| 57 | ATTU; August 5, 1958; 0024 GCT; 52°31'N, 174°58'W; wind, 280°, 6 kt; weather, fog; sea, moderate. | | | | | | | | | | |
| 0 | 8.50 | 33.13 | - | 25.75 | 0 | 8.50 | 33.13 | | 25.75 | 225 | 0.00 |
| 10 | 7.97 | 33.17 | 6.68 | 25.86 | 10 | 7.97 | 33.17 | 6.68 | 25.86 | 215 | 0.02 |
| 24 | 7.73 | 33.13 | 6.78 | 25.87 | 20 | 7.86 | 33.14 | 6.75 | 25.86 | 216 | 0.04 |
| 49 | 5.74 | 33.18 | 6.71 | 26.17 | 30 | 7.13 | 33.14 | 6.88 | 25.96 | 206 | 0.06 |
| 73 | 5.13 | 33.27 | 5.47 | 26.31 | 50 | 5.71 | 33.18 | 6.64 | 26.17 | 186 | 0.10 |
| 98 | 4.81 | 33.30 | 5.21 | 26.37 | 75 | 5.10 | 33.27 | 5.43 | 26.32 | 172 | 0.15 |
| 123 | 4.52 | 33.33 | 5.20 | 26.43 | 100 | 4.79 | 33.30 | 5.20 | 26.37 | 167 | 0.19 |
| 147 | 4.21 | 33.34 | 5.31 | 26.47 | 150 | 4.17 | 33.34 | 5.33 | 26.47 | 158 | 0.27 |
| 196 | 3.67 | 33.38 | 5.49 | 26.55 | 200 | 3.65 | 33.38 | 5.50 | 26.56 | 150 | 0.35 |
| 246 | 3.54 | 33.41 | 5.14 | 26.59 | 250 | 3.58 | 33.42 | 5.08 | 26.59 | 147 | 0.42 |
| 295 | 3.78 | 33.57 | 3.90 | 26.69 | 300 | (3.77) | (33.59) | (3.70) | (26.71) | (136) | (0.49) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; August 5, 1958; 0635, 0542 GCT; 53°00'N, 174°59'W; wind, 280°, 3 kt; weather, fog; sea, moderate. | | | | | | | | | | | 58 |
| 0 | 8.80 | 33.19 | - | 25.75 | 0 | 8.80 | 33.19 | | 25.75 | 225 | 0.00 |
| 10 | 8.38 | 33.14 | 6.72 | 25.78 | 10 | 8.38 | 33.14 | 6.72 | 25.78 | 223 | 0.02 |
| 25 | 8.29 | 33.14 | 6.74 | 25.79 | 20 | 8.33 | 33.14 | 6.73 | 25.79 | 222 | 0.04 |
| 50 | 5.02 | 33.21 | 7.22 | 26.28 | 30 | 7.50 | 33.16 | 6.90 | 25.92 | 209 | 0.07 |
| 75 | 3.50 | 33.23 | 7.01 | 26.45 | 50 | 5.02 | 33.21 | 7.22 | 26.28 | 176 | 0.10 |
| 100 | 3.20 | 33.26 | 6.64 | 26.50 | 75 | 3.50 | 33.23 | 7.01 | 26.45 | 159 | 0.15 |
| 125 | 3.22 | 33.31 | 6.27 | 26.54 | 100 | 3.20 | 33.26 | 6.64 | 26.50 | 154 | 0.19 |
| 150 | 2.89 | 33.31 | 6.37 | 26.57 | 150 | 2.89 | 33.31 | 6.37 | 26.57 | 148 | 0.26 |
| 200 | 3.79 | 33.61 | 3.57 | 26.72 | 200 | 3.79 | 33.61 | 3.57 | 26.72 | 134 | 0.33 |
| 250 | 3.86 | 33.76 | 2.32 | 26.84 | 250 | 3.86 | 33.76 | 2.32 | 26.84 | 124 | 0.40 |
| 300 | 3.77 | 33.83 | 1.69 | 26.90 | 300 | 3.77 | 33.83 | 1.69 | 26.90 | 118 | 0.46 |
| | | | | | 400 | 3.66 | 33.98 | 1.19 | 27.03 | 107 | 0.57 |
| 400 | 3.66 | 33.98 | 1.19 | 27.03 | 500 | 3.50 | 34.11 | 0.80 | 27.15 | 96 | 0.67 |
| 500 | 3.50 | 34.11 | 0.80 | 27.15 | 600 | 3.42 | 34.17 | 0.71 | 27.21 | 92 | 0.77 |
| 700 | 3.32 | 34.22 | 0.63 | 27.26 | 700 | 3.32 | 34.22 | 0.63 | 27.26 | 88 | 0.86 |
| 1050 | 2.84 | 34.37 | 0.52 | 27.42 | 800 | 3.20 | 34.27 | 0.57 | 27.31 | 83 | 0.94 |
| | | | | | 1000 | 2.92 | 34.35 | 0.52 | 27.40 | 76 | 1.10 |
| ATTU; August 5, 1958; 2345 GCT; 53°30'N, 175°00'W; wind, calm; weather, fog; sea, smooth. | | | | | | | | | | | 59 |
| 0 | 8.60 | 33.13 | - | 25.74 | 0 | 8.60 | 33.13 | | 25.74 | 226 | 0.00 |
| 10 | 8.17 | 33.12 | 6.66 | 25.80 | 10 | 8.17 | 33.12 | 6.66 | 25.80 | 221 | 0.02 |
| 25 | 8.12 | 33.12 | 6.66 | 25.80 | 20 | 8.14 | 33.12 | 6.64 | 25.80 | 221 | 0.04 |
| 50 | 4.34 | 33.22 | 7.10 | 26.36 | 30 | 7.14 | 33.15 | 6.81 | 25.97 | 205 | 0.06 |
| 75 | 3.36 | 33.24 | 6.75 | 26.47 | 50 | 4.34 | 33.22 | 7.10 | 26.36 | 168 | 0.10 |
| 100 | 3.12 | 33.27 | 6.66 | 26.52 | 75 | 3.36 | 33.24 | 6.75 | 26.47 | 157 | 0.14 |
| 125 | 2.89 | 33.29 | 6.65 | 26.55 | 100 | 3.12 | 33.27 | 6.66 | 26.52 | 153 | 0.18 |
| 150 | 3.00 | 33.34 | 5.98 | 26.58 | 150 | 3.00 | 33.34 | 5.98 | 26.58 | 147 | 0.26 |
| 200 | 3.86 | 33.65 | 3.12 | 26.75 | 200 | 3.86 | 33.65 | 3.12 | 26.75 | 132 | 0.33 |
| 250 | 3.79 | 33.80 | 2.20 | 26.88 | 250 | 3.79 | 33.80 | 2.20 | 26.88 | 120 | 0.39 |
| 300 | 3.74 | 33.89 | 1.46 | 26.95 | 300 | 3.74 | 33.89 | 1.46 | 26.95 | 114 | 0.45 |
| ATTU; August 6, 1958; 0510, 0423 GCT; 54°00'N, 175°00'W; wind, 240°, 1 kt; weather, cloudy; sea, smooth. | | | | | | | | | | | 60 |
| 0 | 9.00 | 33.15 | - | 25.69 | 0 | 9.00 | 33.15 | | 25.69 | 231 | 0.00 |
| 10 | 8.28 | 33.13 | 6.64 | 25.79 | 10 | 8.28 | 33.13 | 6.64 | 25.79 | 222 | 0.02 |
| 25 | 8.20 | 33.13 | 6.66 | 25.80 | 20 | 8.26 | 33.13 | 6.66 | 25.79 | 222 | 0.04 |
| 50 | 4.28 | 33.21 | 7.17 | 26.36 | 30 | 8.05 | 33.15 | 6.82 | 25.84 | 218 | 0.07 |
| 75 | 3.20 | 33.24 | 6.91 | 26.49 | 50 | 4.28 | 33.21 | 7.17 | 26.36 | 168 | 0.11 |
| 100 | 3.00 | 33.29 | 6.54 | 26.54 | 75 | 3.20 | 33.24 | 6.91 | 26.49 | 156 | 0.15 |
| 125 | 3.15 | 33.37 | 6.07 | 26.59 | 100 | 3.00 | 33.29 | 6.54 | 26.54 | 150 | 0.18 |
| 150 | 3.31 | 33.46 | 4.80 | 26.65 | 150 | 3.31 | 33.46 | 4.80 | 26.65 | 141 | 0.26 |
| 200 | 3.71 | 33.73 | 2.44 | 26.83 | 200 | 3.71 | 33.73 | 2.44 | 26.83 | 124 | 0.32 |
| 250 | 3.75 | 33.84 | 1.64 | 26.91 | 250 | 3.75 | 33.84 | 1.64 | 26.91 | 117 | 0.38 |
| 300 | 3.70 | 33.89 | 1.31 | 26.96 | 300 | 3.70 | 33.89 | 1.31 | 26.96 | 113 | 0.44 |
| | | | | | 400 | 3.58 | 34.04 | 0.88 | 27.09 | 101 | 0.55 |
| 400 | 3.58 | 34.04 | 0.88 | 27.09 | 500 | 3.44 | 34.14 | 0.63 | 27.18 | 93 | 0.64 |
| 500 | 3.44 | 34.14 | 0.63 | 27.18 | 600 | 3.35 | 34.18 | 0.60 | 27.22 | 90 | 0.74 |
| 700 | 3.25 | 34.22 | 0.58 | 27.26 | 700 | 3.25 | 34.22 | 0.58 | 27.26 | 87 | 0.82 |
| 1012 | 2.89 | 34.35 | 0.52 | 27.40 | 800 | 3.14 | 34.26 | 0.56 | 27.30 | 83 | 0.91 |
| | | | | | 1000 | 2.91 | 34.34 | 0.52 | 27.39 | 76 | 1.07 |
| ATTU; August 6, 1958; 2340 GCT; 54°30'N, 175°00'W; wind, 260°, 10 kt; weather, overcast; sea, rough. | | | | | | | | | | | 61 |
| 0 | 8.50 | 33.15 | - | 25.77 | 0 | 8.50 | 33.15 | | 25.77 | 224 | 0.00 |
| 10 | 8.45 | 33.14 | 6.72 | 25.77 | 10 | 8.45 | 33.14 | 6.72 | 25.77 | 224 | 0.02 |
| 25 | 8.25 | 33.14 | 6.65 | 25.80 | 20 | 8.40 | 33.14 | 6.64 | 25.78 | 223 | 0.04 |
| 50 | 3.98 | 33.22 | 7.27 | 26.40 | 30 | 7.12 | 33.16 | 6.85 | 25.98 | 204 | 0.06 |
| 75 | 3.21 | 33.25 | 6.96 | 26.49 | 50 | 3.98 | 33.22 | 7.27 | 26.40 | 164 | 0.10 |
| 100 | 3.02 | 33.27 | 6.93 | 26.53 | 75 | 3.21 | 33.25 | 6.96 | 26.49 | 155 | 0.14 |
| 125 | 2.89 | 33.29 | 6.73 | 26.55 | 100 | 3.02 | 33.27 | 6.93 | 26.53 | 152 | 0.18 |
| 150 | 3.08 | 33.40 | 5.21 | 26.62 | 150 | 3.08 | 33.40 | 5.21 | 26.62 | 143 | 0.25 |
| 200 | 3.78 | 33.67 | 3.04 | 26.77 | 200 | 3.78 | 33.67 | 3.04 | 26.77 | 130 | 0.32 |
| 250 | 3.85 | 33.82 | 2.03 | 26.89 | 250 | 3.85 | 33.82 | 2.03 | 26.89 | 120 | 0.38 |
| 300 | 3.80 | 33.89 | 1.61 | 26.95 | 300 | 3.80 | 33.89 | 1.61 | 26.95 | 114 | 0.44 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 62 | ATTU; August 7, 1958; 0513, 0431 GCT; 55°01'N, 175°00'W; wind, 240°, 20 kt; weather, overcast; sea, rough. | | | | | | | | | | |
| 0 | 9.00 | 33.15 | - | 25.69 | 0 | 9.00 | 33.15 | | 25.69 | 231 | 0.00 |
| 10 | 8.90 | 33.12 | 6.54 | 25.68 | 10 | 8.90 | 33.12 | 6.54 | 25.68 | 232 | 0.02 |
| 25 | 8.56 | 33.12 | 6.66 | 25.74 | 20 | 8.83 | 33.12 | 6.61 | 25.70 | 231 | 0.05 |
| 50 | 4.76 | 33.21 | 7.19 | 26.31 | 30 | 7.62 | 33.14 | 6.83 | 25.89 | 212 | 0.07 |
| 75 | 3.21 | 33.23 | 6.91 | 26.48 | 50 | 4.76 | 33.21 | 7.19 | 26.31 | 173 | 0.11 |
| 100 | 3.03 | 33.22 | 6.87 | 26.49 | 75 | 3.21 | 33.23 | 6.91 | 26.48 | 157 | 0.15 |
| 125 | 2.92 | 33.28 | 6.76 | 26.54 | 100 | 3.03 | 33.22 | 6.87 | 26.49 | 156 | 0.19 |
| 150 | 3.08 | 33.36 | 5.88 | 26.59 | 150 | 3.08 | 33.36 | 5.88 | 26.59 | 146 | 0.26 |
| 200 | 3.65 | 33.58 | 3.84 | 26.71 | 200 | 3.65 | 33.58 | 3.84 | 26.71 | 135 | 0.33 |
| 250 | 3.80 | 33.73 | 3.61 | 26.82 | 250 | 3.80 | 33.73 | 3.61 | 26.82 | 126 | 0.40 |
| 300 | 3.78 | 33.86 | 1.80 | 26.92 | 300 | 3.78 | 33.86 | 1.80 | 26.92 | 116 | 0.46 |
| | | | | | 400 | 3.73 | 34.01 | 1.10 | 27.05 | 105 | 0.57 |
| 374 | 3.79 | 33.98 | 1.21 | 27.02 | 500 | 3.55 | 34.10 | 0.80 | 27.14 | 97 | 0.67 |
| 468 | 3.59 | 34.08 | 0.85 | 27.12 | 600 | 3.41 | 34.17 | 0.65 | 27.21 | 91 | 0.76 |
| 670 | 3.32 | 34.22 | 0.58 | 27.26 | 700 | 3.28 | 34.24 | 0.56 | 27.28 | 86 | 0.85 |
| 1022 | 2.85 | 34.39 | 0.56 | 27.43 | 800 | 3.15 | 34.29 | 0.50 | 27.33 | 81 | 0.94 |
| | | | | | 1000 | 2.88 | 34.38 | 0.55 | 27.42 | 73 | 1.09 |
| 63 | ATTU; August 10, 1958; 0425 GCT; 52°00'N, 172°30'W; wind, 210°, 12 kt; weather, overcast; sea, rough. | | | | | | | | | | |
| 0 | 6.60 | 33.10 | - | 26.00 | 0 | 6.60 | 33.10 | | 26.00 | 202 | 0.00 |
| 10 | 5.89 | 33.11 | 5.36 | 26.10 | 10 | 5.89 | 33.11 | 5.36 | 26.10 | 192 | 0.02 |
| 20 | 5.72 | 33.20 | 5.32 | 26.19 | 20 | 5.72 | 33.20 | 5.32 | 26.19 | 184 | 0.04 |
| 30 | 5.63 | 33.21 | 5.21 | 26.21 | 30 | 5.63 | 33.21 | 5.21 | 26.21 | 182 | 0.06 |
| 40 | 5.36 | 33.25 | 4.83 | 26.27 | 50 | 5.10 | 33.31 | 4.28 | 26.35 | 169 | 0.09 |
| 50 | 5.10 | 33.31 | 4.28 | 26.35 | 75 | 4.90 | 33.40 | 4.17 | 26.44 | 160 | 0.13 |
| 70 | 4.93 | 33.38 | 4.30 | 26.42 | 100 | 4.81 | 33.49 | 3.55 | 26.52 | 153 | 0.17 |
| 90 | 4.83 | 33.45 | 3.77 | 26.49 | 150 | 4.65 | 33.74 | 2.40 | 26.74 | 133 | 0.24 |
| 120 | 4.76 | 33.58 | 3.10 | 26.60 | | | | | | | |
| 150 | 4.65 | 33.74 | 2.40 | 26.74 | | | | | | | |
| 175 | 3.95 | 33.78 | 2.26 | 26.84 | | | | | | | |
| 64 | ATTU; August 16, 1958; 1431 GCT; 52°36'N, 165°22'W; wind, calm; weather, partly cloudy; sea, smooth. | | | | | | | | | | |
| 0 | 10.60 | 32.59 | - | 24.99 | 0 | 10.60 | 32.59 | | 24.99 | 297 | 0.00 |
| 10 | 10.68 | 32.54 | 6.42 | 24.94 | 10 | 10.68 | 32.54 | 6.42 | 24.94 | 303 | 0.03 |
| 25 | 10.70 | 32.53 | 6.32 | 24.93 | 20 | 10.70 | 32.53 | 6.33 | 24.93 | 304 | 0.06 |
| 50 | 5.21 | 32.84 | 6.54 | 25.96 | 30 | 10.62 | 32.60 | 6.47 | 25.00 | 298 | 0.09 |
| 75 | 4.36 | 33.11 | 5.38 | 26.27 | 50 | 5.21 | 32.84 | 6.54 | 25.96 | 206 | 0.14 |
| 100 | 4.17 | 33.49 | 3.27 | 26.59 | 75 | 4.36 | 33.11 | 5.38 | 26.27 | 176 | 0.19 |
| 125 | 4.17 | 33.77 | 1.80 | 26.81 | 100 | 4.17 | 33.49 | 3.27 | 26.59 | 146 | 0.23 |
| 150 | 4.17 | 33.90 | 1.34 | 26.92 | 150 | 4.17 | 33.90 | 1.34 | 26.92 | 116 | 0.29 |
| 200 | 4.10 | 33.98 | 0.56 | 26.99 | 200 | 4.10 | 33.98 | 0.56 | 26.99 | 110 | 0.35 |
| 250 | 3.84 | 34.04 | 0.45 | 27.06 | 250 | 3.84 | 34.04 | 0.45 | 27.06 | 103 | 0.40 |
| 300 | 3.94 | 34.09 | 0.39 | 27.09 | 300 | 3.94 | 34.09 | 0.39 | 27.09 | 101 | 0.45 |
| 65 | ATTU; August 17, 1958; 0425, 0337 GCT; 52°00'N, 165°00'W; wind, calm; weather, partly cloudy; sea, smooth. | | | | | | | | | | |
| 0 | 13.10 | 32.68 | - | 24.60 | 0 | 13.10 | 32.68 | | 24.60 | 335 | 0.00 |
| 10 | 9.95 | 32.62 | 6.48 | 25.13 | 10 | 9.95 | 32.62 | 6.48 | 25.13 | 285 | 0.03 |
| 25 | 9.87 | 32.61 | 6.42 | 25.13 | 20 | 9.90 | 32.61 | 6.43 | 25.13 | 285 | 0.06 |
| 50 | 5.20 | 32.83 | 6.89 | 25.96 | 30 | 9.81 | 32.66 | 6.61 | 25.18 | 280 | 0.09 |
| 75 | 4.46 | 32.97 | 6.18 | 26.15 | 50 | 5.20 | 32.83 | 6.89 | 25.96 | 206 | 0.14 |
| 100 | 3.95 | 33.48 | 3.36 | 26.61 | 75 | 4.46 | 32.97 | 6.18 | 26.15 | 188 | 0.18 |
| 125 | 4.01 | 33.78 | 1.69 | 26.84 | 100 | 3.95 | 33.48 | 3.36 | 26.61 | 145 | 0.23 |
| 149 | 3.97 | 33.87 | 1.20 | 26.91 | 150 | 3.97 | 33.87 | 1.19 | 26.91 | 116 | 0.29 |
| 198 | 3.92 | 33.95 | 0.73 | 26.98 | 200 | 3.91 | 33.95 | 0.71 | 26.98 | 110 | 0.35 |
| 248 | 3.79 | 34.01 | 0.41 | 27.04 | 250 | 3.79 | 34.01 | 0.41 | 27.04 | 105 | 0.40 |
| 297 | 3.84 | 34.06 | 0.43 | 27.08 | 300 | 3.84 | 34.06 | 0.43 | 27.08 | 102 | 0.46 |
| | | | | | 400 | 3.69 | 34.15 | 0.46 | 27.16 | 94 | 0.55 |
| 396 | 3.70 | 34.15 | 0.46 | 27.16 | 500 | 3.51 | 34.22 | 0.43 | 27.24 | 88 | 0.64 |
| 495 | 3.52 | 34.22 | 0.43 | 27.24 | 600 | 3.32 | 34.28 | 0.43 | 27.30 | 82 | 0.73 |
| 693 | 3.16 | 34.32 | 0.45 | 27.35 | 700 | 3.15 | 34.32 | 0.45 | 27.35 | 78 | 0.81 |
| 1040 | 2.71 | 34.43 | 0.62 | 27.48 | 800 | 3.00 | 34.36 | 0.48 | 27.40 | 74 | 0.88 |
| | | | | | 1000 | 2.75 | 34.42 | 0.59 | 27.47 | 68 | 1.03 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

66

ATTU; August 18, 1958; 0002 GCT; 51°30'N, 165°00'W; wind, 240°, 1 kt; weather, sky obscured; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.10 | 32.70 | - | 25.16 | 0 | 10.10 | 32.70 | | 25.16 | 281 | 0.00 |
| 10 | 9.86 | 32.65 | 6.32 | 25.16 | 10 | 9.86 | 32.65 | 6.32 | 25.16 | 281 | 0.03 |
| 25 | 9.75 | 32.64 | 6.44 | 25.17 | 20 | 9.80 | 32.64 | 6.38 | 25.17 | 281 | 0.06 |
| 50 | 5.31 | 32.80 | 6.83 | 25.92 | 30 | 9.72 | 32.65 | 6.71 | 25.19 | 280 | 0.08 |
| 75 | 4.03 | 33.21 | 4.85 | 26.38 | 50 | 5.31 | 32.80 | 6.83 | 25.92 | 210 | 0.13 |
| 100 | 4.03 | 33.59 | 2.71 | 26.68 | 75 | 4.03 | 33.21 | 4.85 | 26.38 | 166 | 0.18 |
| 125 | 4.10 | 33.82 | 1.42 | 26.86 | 100 | 4.03 | 33.59 | 2.71 | 26.68 | 137 | 0.22 |
| 150 | 4.06 | 33.90 | 0.90 | 26.93 | 150 | 4.06 | 33.90 | 0.90 | 26.93 | 115 | 0.28 |
| 200 | 3.95 | 33.97 | 0.56 | 26.99 | 200 | 3.95 | 33.97 | 0.56 | 26.99 | 109 | 0.34 |
| 250 | 3.83 | 34.03 | 0.50 | 27.05 | 250 | 3.83 | 34.03 | 0.50 | 27.05 | 104 | 0.39 |
| 300 | 3.77 | 34.07 | 0.53 | 27.09 | 300 | 3.77 | 34.07 | 0.53 | 27.09 | 100 | 0.44 |

67

ATTU; August 18, 1958; 0602, 0527 GCT; 51°00'N, 165°00'W; wind, 240°, 2 kt; weather, sky obscured; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.20 | 32.67 | - | 25.12 | 0 | 10.20 | 32.67 | | 25.12 | 285 | 0.00 |
| 10 | 9.78 | 32.65 | 6.59 | 25.18 | 10 | 9.78 | 32.65 | 6.59 | 25.18 | 280 | 0.03 |
| 25 | 9.70 | 32.65 | 6.43 | 25.19 | 20 | 9.73 | 32.65 | 6.44 | 25.19 | 279 | 0.06 |
| 50 | 4.79 | 32.83 | 6.91 | 26.00 | 30 | 9.65 | 32.67 | 6.73 | 25.21 | 277 | 0.08 |
| 75 | 4.02 | 33.23 | 4.79 | 26.40 | 50 | 4.79 | 32.83 | 6.91 | 26.00 | 202 | 0.13 |
| 100 | 3.95 | 33.74 | 2.31 | 26.81 | 75 | 4.02 | 33.23 | 4.79 | 26.40 | 164 | 0.18 |
| 125 | 4.10 | 33.86 | 1.27 | 26.89 | 100 | 3.95 | 33.74 | 2.31 | 26.81 | 125 | 0.21 |
| 150 | 4.10 | 33.89 | 0.95 | 26.92 | 150 | 4.10 | 33.89 | 0.95 | 26.92 | 116 | 0.27 |
| 200 | 3.97 | 33.97 | 0.59 | 26.99 | 200 | 3.97 | 33.97 | 0.59 | 26.99 | 109 | 0.33 |
| 250 | 3.83 | 34.03 | 0.56 | 27.05 | 250 | 3.83 | 34.03 | 0.56 | 27.05 | 104 | 0.38 |
| 300 | 3.75 | 34.08 | 0.46 | 27.10 | 300 | 3.75 | 34.08 | 0.46 | 27.10 | 99 | 0.43 |
| | | | | | 400 | 3.65 | | 0.44 | | | |
| 392 | 3.66 | - | 0.45 | | 500 | 3.46 | | 0.39 | | | |
| 490 | 3.48 | - | 0.39 | | 600 | 3.26 | | 0.41 | | | |
| 685 | 3.11 | - | 0.45 | | 700 | 3.08 | | 0.46 | | | |
| 1028 | 2.62 | - | 0.63 | | 800 | 2.92 | | 0.49 | | | |
| | | | | | 1000 | 2.65 | | 0.60 | | | |

68

ATTU; August 19, 1958; 0025 GCT; 50°30'N, 165°00'W; wind, 230°, 5 kt; weather, sky obscured; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.90 | 32.69 | - | 25.19 | 0 | 9.90 | 32.69 | | 25.19 | 279 | 0.00 |
| 10 | 9.89 | 32.67 | 6.50 | 25.17 | 10 | 9.89 | 32.67 | 6.50 | 25.17 | 280 | 0.03 |
| 25 | 9.72 | 32.66 | 6.54 | 25.19 | 20 | 9.79 | 32.66 | 6.53 | 25.18 | 280 | 0.06 |
| 50 | 9.10 | 32.69 | 6.60 | 25.32 | 30 | 9.71 | 32.67 | 6.53 | 25.20 | 278 | 0.08 |
| 75 | 4.72 | 32.86 | 6.90 | 26.03 | 50 | 9.10 | 32.69 | 6.60 | 25.32 | 267 | 0.14 |
| 100 | 4.05 | 33.21 | 5.14 | 26.38 | 75 | 4.72 | 32.86 | 6.90 | 26.03 | 199 | 0.20 |
| 125 | 3.84 | 33.73 | 2.54 | 26.82 | 100 | 4.05 | 33.21 | 5.14 | 26.38 | 166 | 0.24 |
| 150 | 3.80 | 33.80 | 2.09 | 26.87 | 150 | 3.80 | 33.80 | 2.09 | 26.87 | 120 | 0.31 |
| 200 | 3.74 | 33.89 | 1.36 | 26.95 | 200 | 3.74 | 33.89 | 1.36 | 26.95 | 113 | 0.37 |
| 250 | 3.71 | 33.97 | 1.09 | 27.02 | 250 | 3.71 | 33.97 | 1.09 | 27.02 | 107 | 0.43 |
| 300 | 3.72 | 34.05 | 0.68 | 27.08 | 300 | 3.72 | 34.05 | 0.68 | 27.08 | 101 | 0.48 |

69

ATTU; August 19, 1958; 0600, 0513 GCT; 50°00'N, 165°00'W; wind, 250°, 3 kt; weather, sky obscured; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.80 | 32.75 | - | 25.25 | 0 | 9.80 | 32.75 | | 25.25 | 273 | 0.00 |
| 10 | 9.88 | 32.73 | 6.38 | 25.22 | 10 | 9.88 | 32.73 | 6.38 | 25.22 | 276 | 0.03 |
| 25 | 9.60 | 32.70 | 6.44 | 25.25 | 20 | 9.70 | 32.70 | 6.40 | 25.23 | 275 | 0.06 |
| 50 | 5.37 | 32.87 | 7.11 | 25.97 | 30 | 9.57 | 32.75 | 6.64 | 25.29 | 270 | 0.08 |
| 75 | 4.46 | 32.90 | 6.97 | 26.09 | 50 | 5.37 | 32.87 | 7.11 | 25.97 | 205 | 0.13 |
| 100 | 3.85 | 33.21 | 5.34 | 26.40 | 75 | 4.46 | 32.90 | 6.97 | 26.09 | 193 | 0.18 |
| 125 | 3.78 | 33.71 | 2.82 | 26.81 | 100 | 3.85 | 33.21 | 5.34 | 26.40 | 164 | 0.22 |
| 150 | 3.72 | 33.79 | 2.33 | 26.87 | 150 | 3.72 | 33.79 | 2.33 | 26.87 | 120 | 0.30 |
| 200 | 3.67 | 33.87 | 1.72 | 26.94 | 200 | 3.67 | 33.87 | 1.72 | 26.94 | 114 | 0.35 |
| 250 | 3.59 | 33.96 | 1.30 | 27.02 | 250 | 3.59 | 33.96 | 1.30 | 27.02 | 106 | 0.41 |
| 300 | 3.65 | 34.02 | 0.96 | 27.06 | 300 | 3.65 | 34.02 | 0.96 | 27.06 | 103 | 0.46 |
| | | | | | 400 | 3.52 | 34.13 | 0.84 | 27.16 | 94 | 0.56 |
| 391 | 3.53 | 34.12 | 0.86 | 27.16 | 500 | 3.42 | 34.22 | 0.66 | 27.25 | 87 | 0.65 |
| 489 | 3.44 | 34.21 | 0.67 | 27.24 | 600 | 3.28 | 34.27 | 0.59 | 27.30 | 83 | 0.74 |
| 685 | 3.16 | 34.31 | 0.56 | 27.34 | 700 | 3.14 | 34.32 | 0.56 | 27.35 | 78 | 0.82 |
| 1028 | 2.64 | 34.43 | 0.64 | 27.48 | 800 | 2.99 | 34.36 | 0.55 | 27.40 | 74 | 0.89 |
| | | | | | 1000 | 2.68 | 34.42 | 0.62 | 27.47 | 68 | 1.03 |

SBL

MV ATTU

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 70 | ATTU; August 20, 1958; 0405 GCT; 50°00'N, 163°00'W; wind, 100°, 2 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | | |
| | 0 | 9.80 | 32.79 | - | 25.28 | 0 | 9.80 | 32.79 | | 25.28 | 270 | 0.00 |
| | 10 | 9.80 | 32.74 | 6.48 | 25.24 | 10 | 9.80 | 32.74 | 6.48 | 25.24 | 274 | 0.03 |
| | 25 | 8.58 | 32.78 | 6.61 | 25.47 | 20 | 9.05 | 32.76 | 6.55 | 25.38 | 261 | 0.05 |
| | 50 | 5.20 | 32.99 | 7.07 | 26.08 | 30 | 7.68 | 32.84 | 6.75 | 25.65 | 236 | 0.08 |
| | 75 | 4.67 | 32.99 | 6.89 | 26.14 | 50 | 5.20 | 32.99 | 7.07 | 26.08 | 194 | 0.12 |
| | 100 | 3.85 | 33.00 | 5.24 | 26.23 | 75 | 4.67 | 32.99 | 6.89 | 26.14 | 189 | 0.17 |
| | 125 | 3.70 | 33.74 | 2.83 | 26.84 | 100 | 3.85 | 33.00 | 5.24 | 26.23 | 180 | 0.22 |
| | 150 | 3.65 | 33.80 | 2.58 | 26.89 | 150 | 3.65 | 33.80 | 2.58 | 26.89 | 118 | 0.29 |
| | 200 | 3.58 | 33.88 | 1.84 | 26.96 | 200 | 3.58 | 33.88 | 1.84 | 26.96 | 112 | 0.35 |
| | 250 | 3.57 | 33.94 | 1.48 | 27.01 | 250 | 3.57 | 33.94 | 1.48 | 27.01 | 108 | 0.40 |
| | 300 | 3.50 | 34.00 | 1.15 | 27.06 | 300 | 3.50 | 34.00 | 1.15 | 27.06 | 103 | 0.46 |
| 71 | ATTU; August 20, 1958; 1200 GCT; 50°00'N, 161°40'W; wind, 010°, 20 kt; weather, thick drizzle; sea, rough. | | | | | | | | | | | |
| | 0 | 8.50 | 32.73 | - | 25.44 | 0 | 8.50 | 32.73 | | 25.44 | 255 | 0.00 |
| | 10 | 9.90 | 32.69 | 6.43 | 25.19 | 10 | 9.90 | 32.69 | 6.43 | 25.19 | 279 | 0.03 |
| | 24 | 9.70 | 32.70 | 6.35 | 25.23 | 20 | 9.78 | 32.69 | 6.34 | 25.21 | 277 | 0.06 |
| | 49 | 6.42 | 32.86 | 6.99 | 25.83 | 30 | 9.62 | 32.75 | 6.60 | 25.28 | 270 | 0.08 |
| | 73 | 4.76 | 32.91 | 6.59 | 26.07 | 50 | 6.33 | 32.86 | 6.97 | 25.84 | 217 | 0.13 |
| | 97 | 4.20 | 33.02 | 6.47 | 26.22 | 75 | 4.71 | 32.90 | 6.69 | 26.07 | 196 | 0.18 |
| | 121 | 3.80 | 33.66 | 3.36 | 26.76 | 100 | 4.13 | 33.13 | 5.97 | 26.31 | 173 | 0.23 |
| | 146 | 3.74 | 33.78 | 2.43 | 26.86 | 150 | 3.74 | 33.79 | 2.36 | 26.87 | 120 | 0.30 |
| | 195 | 3.66 | 33.87 | 1.70 | 26.94 | 200 | 3.62 | 33.88 | 1.64 | 26.96 | 112 | 0.36 |
| | 244 | 3.36 | 33.96 | 1.13 | 27.04 | 250 | 3.36 | 33.97 | 1.08 | 27.05 | 104 | 0.41 |
| | 291 | 3.35 | 34.04 | 0.85 | 27.11 | 300 | (3.35) | (34.06) | (0.83) | (27.13) | (97) | (0.46) |
| 72 | ATTU; August 24, 1958; 2235 GCT; 53°03'N, 146°07'W; wind, 190°, 15 kt; weather, partly cloudy; sea, rough. | | | | | | | | | | | |
| | 0 | 11.50 | 32.68 | | 24.90 | 0 | 11.50 | 32.68 | | 24.90 | 306 | 0.00 |
| | 10 | 11.68 | 32.61 | | 24.82 | 10 | 11.68 | 32.61 | | 24.82 | 314 | 0.03 |
| | 25 | 11.54 | 32.59 | | 24.83 | 20 | 11.60 | 32.59 | | 24.81 | 315 | 0.06 |
| | 50 | 7.77 | 32.70 | | 25.52 | 30 | 11.52 | 32.62 | | 24.85 | 311 | 0.09 |
| | 75 | 6.16 | 32.75 | | 25.78 | 50 | 7.77 | 32.70 | | 25.52 | 248 | 0.15 |
| | 99 | 5.42 | 32.85 | | 25.95 | 75 | 6.16 | 32.75 | | 25.78 | 223 | 0.21 |
| | 124 | 4.84 | 33.05 | | 26.17 | 100 | 5.39 | 32.85 | | 25.95 | 207 | 0.26 |
| | 148 | 4.38 | 33.53 | | 26.60 | 150 | 4.37 | 33.54 | | 26.61 | 145 | 0.35 |
| | 198 | 4.06 | 33.78 | | 26.83 | 200 | 4.02 | 33.79 | | 26.84 | 123 | 0.42 |
| | 248 | 3.47 | 33.94 | | 27.02 | 250 | 3.48 | 33.94 | | 27.02 | 107 | 0.47 |
| | 297 | 3.73 | 34.14 | | 27.15 | 300 | (3.75) | (34.16) | | (27.17) | (93) | (0.52) |
| 73 | ATTU; August 25, 1958; 0614, 0540 GCT; 52°35'N, 145°03'W; wind, 200°, 7 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | | | |
| | 0 | 11.80 | 32.61 | | 24.79 | 0 | 11.80 | 32.61 | | 24.79 | 316 | 0.00 |
| | 10 | 12.11 | 32.57 | | 24.70 | 10 | 12.11 | 32.57 | | 24.70 | 325 | 0.03 |
| | 23 | 12.00 | 32.56 | | 24.72 | 20 | 12.08 | 32.56 | | 24.70 | 325 | 0.06 |
| | 48 | 7.20 | 32.70 | | 25.60 | 30 | 11.90 | 32.61 | | 24.77 | 319 | 0.10 |
| | 72 | 6.22 | 32.70 | | 25.73 | 50 | 7.10 | 32.70 | | 25.62 | 239 | 0.15 |
| | 96 | 5.61 | 32.75 | | 25.85 | 75 | 6.14 | 32.69 | | 25.73 | 228 | 0.21 |
| | 120 | 4.98 | 33.11 | | 26.20 | 100 | 5.49 | 32.81 | | 25.91 | 211 | 0.27 |
| | 144 | 4.61 | 33.41 | | 26.48 | 150 | 4.53 | 33.46 | | 26.53 | 153 | 0.36 |
| | 192 | 4.09 | 33.75 | | 26.81 | 200 | 4.03 | 33.79 | | 26.84 | 123 | 0.43 |
| | 240 | 3.82 | 33.96 | | 27.00 | 250 | 3.81 | 34.00 | | 27.03 | 106 | 0.48 |
| | 288 | 3.78 | 34.13 | | 27.14 | 300 | 3.76 | 34.14 | | 27.15 | 95 | 0.53 |
| | | | | | | 400 | 3.55 | 34.23 | | 27.24 | 87 | 0.62 |
| | 384 | 3.59 | 34.22 | | 27.23 | 500 | 3.38 | 34.27 | | 27.29 | 83 | 0.71 |
| | 481 | 3.39 | 34.27 | | 27.29 | 600 | 3.31 | 34.29 | | 27.31 | 82 | 0.79 |
| | 675 | 3.24 | 34.31 | | 27.33 | 700 | 3.20 | 34.32 | | 27.35 | 79 | 0.87 |
| | 990 | 2.80 | 34.40 | | 27.45 | 800 | 3.04 | 34.37 | | 27.40 | 74 | 0.95 |
| | | | | | | 1000 | (2.79) | (34.40) | | (27.45) | (70) | (1.09) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

ATTU; August 26, 1958; 0421 GCT; 53°26'N, 143°10'W; wind, 190°, 7 kt; weather, sky obscured; sea, moderate. 74

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.90 | 32.27 | 24.32 | 0 | 12.90 | 32.27 | 24.32 | 361 | 0.00 |
| 10 | 13.38 | 32.18 | 24.16 | 10 | 13.38 | 32.18 | 24.16 | 377 | 0.04 |
| 24 | 13.40 | 32.17 | 24.15 | 20 | 13.39 | 32.17 | 24.15 | 378 | 0.08 |
| 48 | 7.28 | 32.22 | 25.22 | 30 | 13.35 | 32.17 | 24.16 | 378 | 0.11 |
| 72 | 6.41 | 32.61 | 25.64 | 50 | 7.19 | 32.26 | 25.26 | 273 | 0.18 |
| 96 | 5.98 | 32.83 | 25.86 | 75 | 6.33 | 32.63 | 25.66 | 234 | 0.24 |
| 120 | 5.98 | 33.21 | 26.16 | 100 | 5.98 | 32.90 | 25.92 | 210 | 0.30 |
| 145 | 5.92 | 33.56 | 26.45 | 150 | 5.89 | 33.60 | 26.48 | 158 | 0.39 |
| 193 | 5.53 | 33.83 | 26.71 | 200 | 5.39 | 33.84 | 26.73 | 134 | 0.46 |
| 290 | 4.05 | 33.91 | 26.94 | 250 | 4.56 | 33.88 | 26.86 | 122 | 0.53 |
| 509 | 3.86 | 34.12 | 27.12 | 300 | 3.95 | 33.92 | 26.96 | 114 | 0.58 |
| | | | | 400 | 3.41 | 34.01 | 27.08 | 102 | 0.69 |
| | | | | 500 | 3.78 | 34.11 | 27.12 | 99 | 0.79 |

ATTU; August 26, 1958; 1555, 1517 GCT; 54°13'N, 141°33'W; wind, 240°, 8 kt; weather, sky obscured; sea, moderate. 75

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.70 | 32.36 | 24.23 | 0 | 13.70 | 32.36 | 24.23 | 370 | 0.00 |
| 10 | 13.88 | 32.32 | 24.16 | 10 | 13.88 | 32.32 | 24.16 | 376 | 0.04 |
| 25 | 12.94 | 32.38 | 24.40 | 20 | 13.46 | 32.36 | 24.28 | 366 | 0.07 |
| 50 | 7.24 | 32.56 | 25.49 | 30 | 11.42 | 32.42 | 24.72 | 324 | 0.11 |
| 74 | 6.20 | 32.65 | 25.70 | 50 | 7.24 | 32.56 | 25.49 | 251 | 0.17 |
| 99 | 6.02 | 32.85 | 25.88 | 75 | 6.19 | 32.66 | 25.70 | 230 | 0.23 |
| 124 | 5.97 | 33.17 | 26.13 | 100 | 6.02 | 32.86 | 25.88 | 214 | 0.28 |
| 148 | 5.63 | 33.50 | 26.44 | 150 | 5.62 | 33.52 | 26.45 | 160 | 0.38 |
| 198 | 5.38 | 33.81 | 26.71 | 200 | 5.36 | 33.81 | 26.71 | 136 | 0.45 |
| 297 | 4.51 | 33.94 | 26.91 | 250 | 4.88 | 33.88 | 26.82 | 126 | 0.52 |
| | | | | 300 | 4.49 | 33.94 | 26.91 | 118 | 0.58 |
| 520 | 3.83 | 34.14 | 27.14 | 400 | 3.98 | 34.05 | 27.06 | 105 | 0.69 |
| | | | | 500 | 3.82 | 34.13 | 27.13 | 98 | 0.79 |

ATTU; August 27, 1958; 0412, 0320 GCT; 55°00'N, 140°00'W; wind, 270°, 5 kt; weather, overcast; sea, slight. 76

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.10 | 32.37 | 24.16 | 0 | 14.10 | 32.37 | 24.16 | 377 | 0.00 |
| 10 | 14.40 | 32.34 | 24.07 | 10 | 14.40 | 32.34 | 24.07 | 385 | 0.04 |
| 24 | 14.10 | 32.35 | 24.14 | 20 | 14.34 | 32.34 | 24.09 | 384 | 0.08 |
| 49 | 7.66 | 32.54 | 25.41 | 30 | 12.05 | 32.40 | 24.58 | 337 | 0.11 |
| 73 | 6.64 | 32.66 | 25.65 | 50 | 7.60 | 32.54 | 25.42 | 257 | 0.17 |
| 98 | 6.30 | 33.11 | 26.05 | 75 | 6.59 | 32.70 | 25.69 | 232 | 0.23 |
| 122 | 6.54 | 33.49 | 26.31 | 100 | 6.32 | 33.15 | 26.07 | 196 | 0.29 |
| 146 | 6.76 | 33.74 | 26.48 | 150 | 6.74 | 33.75 | 26.49 | 157 | 0.37 |
| 195 | 6.45 | 33.87 | 26.62 | 200 | 6.40 | 33.87 | 26.63 | 144 | 0.45 |
| 244 | 5.98 | 33.91 | 26.72 | 250 | 5.92 | 33.91 | 26.72 | 136 | 0.52 |
| 293 | 5.50 | 33.94 | 26.80 | 300 | 5.44 | 33.95 | 26.81 | 128 | 0.58 |
| | | | | 400 | 4.75 | 34.05 | 26.97 | 113 | 0.71 |
| 391 | 4.78 | 34.04 | 26.96 | 500 | 4.41 | 34.14 | 27.08 | 104 | 0.82 |
| 489 | 4.45 | 34.13 | 27.07 | 600 | 4.07 | 34.18 | 27.15 | 98 | 0.92 |
| 685 | 3.82 | 34.22 | 27.21 | 700 | 3.78 | 34.23 | 27.22 | 92 | 1.01 |
| 1028 | 3.13 | 34.36 | 27.38 | 800 | 3.53 | 34.27 | 27.27 | 87 | 1.10 |
| | | | | 1000 | 3.17 | 34.35 | 27.37 | 78 | 1.26 |

ATTU; August 28, 1958; 0511, 0439 GCT; 54°05'N, 138°12'W; wind, 140°, 2 kt; weather, moderate rain; sea, slight. 77

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.70 | 32.55 | 24.17 | 0 | 14.70 | 32.55 | 24.17 | 376 | 0.00 |
| 10 | 14.78 | 32.53 | 24.14 | 10 | 14.78 | 32.53 | 24.14 | 379 | 0.04 |
| 25 | 14.64 | 32.54 | 24.18 | 20 | 14.73 | 32.53 | 24.15 | 378 | 0.08 |
| 50 | 7.91 | 32.68 | 25.49 | 30 | 14.40 | 32.58 | 24.26 | 368 | 0.11 |
| 74 | 6.94 | 32.70 | 25.64 | 50 | 7.91 | 32.68 | 25.49 | 251 | 0.18 |
| 99 | 6.22 | 32.75 | 25.77 | 75 | 6.91 | 32.70 | 25.64 | 236 | 0.24 |
| 123 | 5.78 | 33.10 | 26.10 | 100 | 6.20 | 32.77 | 25.79 | 223 | 0.29 |
| 148 | 5.35 | 33.40 | 26.39 | 150 | 5.33 | 33.42 | 26.41 | 164 | 0.39 |
| 197 | 4.92 | 33.74 | 26.71 | 200 | 4.90 | 33.75 | 26.72 | 135 | 0.46 |
| 296 | 4.45 | 33.91 | 26.89 | 250 | 4.65 | 33.84 | 26.82 | 126 | 0.53 |
| | | | | 300 | 4.43 | 33.92 | 26.90 | 118 | 0.59 |
| 518 | 3.95 | 34.11 | 27.11 | 400 | 4.12 | 34.03 | 27.02 | 108 | 0.70 |
| | | | | 500 | 3.96 | 34.10 | 27.10 | 102 | 0.81 |

SBL

MV ATTU

78

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| ATTU; August 29, 1958; 2030 GCT; 52°00'N, 131°35'W; wind, 180°, 2 kt; weather, cloudy; sea, moderate. | | | | | | | | | | | |
| 0 | 14.90 | 31.75 | | 23.51 | 0 | 14.90 | 31.75 | | 23.51 | 438 | 0.00 |
| 10 | 14.88 | 31.75 | | 23.52 | 10 | 14.88 | 31.75 | | 23.52 | 438 | 0.04 |
| 25 | 14.60 | 31.88 | | 23.68 | 20 | 14.81 | 31.83 | | 23.59 | 431 | 0.09 |
| 50 | 11.76 | 32.13 | | 24.43 | 30 | 14.02 | 31.91 | | 23.82 | 410 | 0.13 |
| 75 | 9.02 | 32.65 | | 25.30 | 50 | 11.76 | 32.13 | | 24.43 | 352 | 0.20 |
| 99 | 8.26 | 32.78 | | 25.52 | 75 | 9.02 | 32.65 | | 25.30 | 270 | 0.28 |
| 124 | 7.80 | 33.03 | | 25.78 | 100 | 8.24 | 32.79 | | 25.53 | 248 | 0.35 |
| 149 | 7.24 | 33.31 | | 26.08 | 150 | 7.23 | 33.32 | | 26.09 | 196 | 0.46 |
| 199 | 6.69 | 33.61 | | 26.39 | 200 | 6.68 | 33.61 | | 26.39 | 167 | 0.55 |
| 298 | 5.88 | 33.93 | | 26.74 | 250 | 6.25 | 33.79 | | 26.59 | 149 | 0.63 |
| 521 | 4.85 | 34.10 | | 27.00 | 300 | 5.87 | 33.93 | | 26.75 | 135 | 0.70 |
| | | | | | 400 | 5.27 | 34.10 | | 26.95 | 116 | 0.82 |
| | | | | | 500 | 4.90 | 34.12 | | 27.01 | 111 | 0.94 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; May 18, 1958; 2000 GCT; 54°18'N, 160°00'W; wind, 180°, 18 kt; weather, sky obscured; sea, rough. | | | | | | | | | | | 1 |
| 0 | 4.20 | 32.11 | - | 25.49 | 0 | 4.20 | 32.11 | | 25.49 | 250 | 0.00 |
| 9 | 5.42 | 32.11 | 7.92 | 25.36 | 10 | 5.42 | 32.11 | 7.90 | 25.36 | 262 | 0.03 |
| 23 | 5.35 | 32.11 | 7.47 | 25.37 | 20 | 5.37 | 32.11 | 7.58 | 25.37 | 262 | 0.05 |
| 46 | 5.67 | 32.51 | 6.84 | 25.65 | 30 | 5.39 | 32.13 | 7.29 | 25.38 | 261 | 0.08 |
| 69 | 5.60 | 32.57 | 6.79 | 25.71 | 50 | 5.67 | 32.51 | 6.90 | 25.65 | 235 | 0.13 |
| 93 | 5.30 | 32.74 | 5.82 | 25.87 | 75 | 5.48 | 32.60 | 6.55 | 25.74 | 227 | 0.19 |
| 117 | 5.45 | 33.00 | 4.83 | 26.06 | 100 | 5.35 | 32.83 | 5.47 | 25.94 | 208 | 0.24 |
| 141 | 5.52 | 33.12 | 4.46 | 26.15 | 150 | 5.57 | 33.17 | 4.23 | 26.18 | 186 | 0.34 |
| 189 | 5.62 | 33.41 | 3.36 | 26.37 | 200 | 5.55 | 33.50 | 3.11 | 26.45 | 162 | 0.43 |
| 238 | 5.31 | 33.73 | 2.46 | 26.66 | 250 | 5.21 | 33.75 | 2.33 | 26.68 | 140 | 0.50 |
| 287 | 5.01 | 33.80 | 2.06 | 26.75 | 300 | (4.98) | (33.82) | (2.02) | (26.76) | (132) | (0.57) |
| PIONEER; May 18, 1958; 2342 GCT; 54°00'N, 160°00'W; wind, 180°, 12 kt; weather, sky obscured; sea, rough. | | | | | | | | | | | 2 |
| 0 | 4.40 | 32.65 | - | 25.90 | 0 | 4.40 | 32.65 | | 25.90 | 211 | 0.00 |
| 9 | 5.73 | 32.65 | 7.10 | 25.75 | 10 | 5.73 | 32.65 | 7.09 | 25.75 | 225 | 0.02 |
| 23 | 5.73 | 32.65 | 7.03 | 25.75 | 20 | 5.73 | 32.65 | 7.04 | 25.75 | 225 | 0.04 |
| 46 | 5.69 | 32.65 | 6.99 | 25.76 | 30 | 5.74 | 32.65 | 7.02 | 25.75 | 226 | 0.07 |
| 69 | 5.42 | 32.65 | 6.92 | 25.79 | 50 | 5.67 | 32.64 | 6.99 | 25.75 | 226 | 0.11 |
| 94 | 4.68 | 32.81 | 6.61 | 26.00 | 75 | 5.12 | 32.67 | 7.00 | 25.84 | 218 | 0.17 |
| 117 | 5.15 | 33.12 | 4.86 | 26.19 | 100 | 4.86 | 32.89 | 6.08 | 26.04 | 198 | 0.22 |
| 141 | 4.98 | 33.44 | 3.82 | 26.46 | 150 | 5.02 | 33.53 | 3.43 | 26.53 | 153 | 0.31 |
| 189 | 5.02 | 33.81 | 2.13 | 26.75 | 200 | 4.95 | 33.84 | 1.96 | 26.78 | 129 | 0.38 |
| 237 | 4.64 | 33.91 | 1.42 | 26.87 | 250 | 4.48 | 33.92 | 1.15 | 26.90 | 119 | 0.44 |
| 286 | 4.08 | 33.95 | 0.72 | 26.97 | 300 | (3.94) | (33.96) | (0.67) | (26.99) | (110) | (0.50) |
| PIONEER; May 27, 1958; 2150, 2035 GCT; 52°36'N, 178°58'W; wind, 100°, 5 kt; weather, intermittent slight drizzle; sea, slight. | | | | | | | | | | | 3 |
| 0 | 4.10 | 33.12 | - | 26.30 | 0 | 4.10 | 33.12 | | 26.30 | 173 | 0.00 |
| 9 | 4.55 | 33.16 | 6.97 | 26.29 | 10 | 4.55 | 33.16 | 6.97 | 26.29 | 174 | 0.02 |
| 23 | 4.50 | 33.16 | 6.92 | 26.30 | 20 | 4.51 | 33.16 | 6.93 | 26.29 | 174 | 0.03 |
| 47 | 4.43 | 33.18 | 6.79 | 26.32 | 30 | 4.49 | 33.16 | 6.88 | 26.30 | 174 | 0.05 |
| 71 | 4.24 | 33.21 | 6.65 | 26.36 | 50 | 4.40 | 33.18 | 6.76 | 26.32 | 172 | 0.09 |
| 94 | 4.15 | 33.25 | 6.53 | 26.40 | 75 | 4.23 | 33.22 | 6.66 | 26.37 | 167 | 0.13 |
| 118 | 3.90 | 33.30 | 5.94 | 26.47 | 100 | 4.08 | 33.27 | 6.35 | 26.43 | 162 | 0.17 |
| 142 | 3.72 | 33.24 | 5.64 | 26.44 | 150 | 3.68 | 33.24 | 5.67 | 26.44 | 161 | 0.25 |
| 191 | 3.60 | 33.31 | 5.42 | 26.50 | 200 | 3.65 | 33.35 | 5.20 | 26.53 | 152 | 0.33 |
| 240 | 3.81 | 33.49 | 4.32 | 26.63 | 250 | 3.81 | 33.52 | 4.16 | 26.65 | 142 | 0.40 |
| 289 | 3.83 | 33.63 | 3.49 | 26.74 | 300 | 3.85 | 33.66 | 3.29 | 26.76 | 132 | 0.47 |
| | | | | | 400 | 3.89 | 33.87 | 1.87 | 26.92 | 117 | 0.60 |
| 386 | 3.91 | 33.84 | 2.00 | 26.90 | 500 | 3.71 | 34.02 | 1.15 | 27.06 | 105 | 0.71 |
| 484 | 3.74 | 34.01 | 1.21 | 27.05 | 600 | 3.54 | 34.10 | 0.82 | 27.14 | 98 | 0.81 |
| 682 | 3.41 | 34.16 | 0.63 | 27.20 | 700 | 3.38 | 34.17 | 0.59 | 27.21 | 92 | 0.90 |
| 1028 | 2.90 | 34.34 | 0.52 | 27.39 | 800 | 3.23 | 34.23 | 0.46 | 27.27 | 86 | 0.99 |
| | | | | | 1000 | 2.94 | 34.33 | 0.48 | 27.38 | 77 | 1.16 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 4 | PIONEER; May 28, 1958; 0848, 0651 GCT; 53°00'N, 180°00'; wind, 060°, 10 kt; weather, fog in patches; sea, slight. | | | | | | | | | | |
| 0 | 3.20 | 33.17 | - | 26.43 | 0 | 3.20 | 33.17 | | 26.43 | 161 | 0.00 |
| 10 | 3.59 | 33.20 | 7.38 | 26.42 | 10 | 3.59 | 33.20 | 7.38 | 26.42 | 162 | 0.02 |
| 25 | 3.65 | 33.20 | 7.27 | 26.41 | 20 | 3.66 | 33.20 | 7.30 | 26.41 | 163 | 0.03 |
| 49 | 3.27 | 33.21 | 7.20 | 26.46 | 30 | 3.56 | 33.20 | 7.26 | 26.42 | 162 | 0.05 |
| 74 | 3.02 | 33.25 | 7.13 | 26.51 | 50 | 3.26 | 33.21 | 7.20 | 26.46 | 158 | 0.08 |
| 99 | 2.90 | 33.26 | 7.08 | 26.53 | 75 | 3.01 | 33.25 | 7.13 | 26.51 | 153 | 0.12 |
| 123 | 2.82 | 33.30 | 6.98 | 26.57 | 100 | 2.89 | 33.26 | 7.11 | 26.53 | 152 | 0.16 |
| 148 | 3.20 | 33.46 | 5.07 | 26.66 | 150 | 3.22 | 33.47 | 4.98 | 26.67 | 139 | 0.23 |
| | | | | | 200 | 3.62 | 33.67 | 3.10 | 26.79 | 128 | 0.30 |
| 389 | 3.55 | 34.09 | 0.91 | 27.13 | 250 | 3.85 | 33.84 | 1.77 | 26.90 | 118 | 0.36 |
| 487 | 3.43 | 34.19 | 0.71 | 27.22 | 300 | 3.72 | 33.94 | 1.38 | 26.99 | 110 | 0.42 |
| 684 | 3.25 | 34.28 | 0.46 | 27.31 | 400 | 3.54 | 34.10 | 0.88 | 27.14 | 97 | 0.52 |
| 1030 | 2.65 | 34.44 | 0.57 | 27.49 | 500 | 3.42 | 34.20 | 0.68 | 27.23 | 89 | 0.61 |
| | | | | | 600 | 3.34 | 34.24 | 0.54 | 27.27 | 86 | 0.70 |
| | | | | | 700 | 3.23 | 34.29 | 0.45 | 27.32 | 81 | 0.78 |
| | | | | | 800 | 3.09 | 34.33 | 0.41 | 27.36 | 78 | 0.86 |
| | | | | | 1000 | 2.72 | 34.43 | 0.54 | 27.48 | 67 | 1.01 |
| 5 | PIONEER; May 29, 1958; 0127 GCT; 53°04'N, 179°05'E; wind, 090°, 12 kt; weather, sky obscured; sea, slight. | | | | | | | | | | |
| 0 | 3.50 | 33.23 | - | 26.45 | 0 | 3.50 | 33.23 | | 26.45 | 159 | 0.00 |
| 9 | 3.82 | 33.20 | 6.99 | 26.40 | 10 | 3.81 | 33.20 | 7.01 | 26.40 | 164 | 0.02 |
| 24 | 3.65 | 33.22 | 7.17 | 26.43 | 20 | 3.69 | 33.22 | 7.15 | 26.42 | 161 | 0.03 |
| 48 | 3.50 | 33.22 | 6.98 | 26.44 | 30 | 3.62 | 33.22 | 7.11 | 26.43 | 161 | 0.05 |
| 72 | 3.24 | 33.26 | 6.83 | 26.50 | 50 | 3.48 | 33.22 | 6.97 | 26.44 | 160 | 0.08 |
| 96 | 3.05 | 33.28 | 6.52 | 26.53 | 75 | 3.22 | 33.26 | 6.80 | 26.50 | 154 | 0.12 |
| 120 | 2.85 | 33.34 | 6.00 | 26.60 | 100 | 2.97 | 33.28 | 6.50 | 26.54 | 151 | 0.16 |
| 144 | 3.35 | 33.49 | 4.57 | 26.67 | 150 | 3.43 | 33.52 | 4.31 | 26.69 | 137 | 0.23 |
| 193 | 3.81 | 33.69 | 2.81 | 26.79 | 200 | 3.82 | 33.71 | 2.65 | 26.80 | 127 | 0.30 |
| 242 | 3.85 | 33.84 | 1.88 | 26.90 | 250 | 3.84 | 33.86 | 1.75 | 26.92 | 116 | 0.36 |
| 290 | 3.76 | 33.93 | 1.30 | 26.98 | 300 | (3.73) | (33.94) | (1.25) | (26.99) | (110) | (0.41) |
| 6 | PIONEER; May 29, 1958; 0756, 0639 GCT; 53°00'N, 178°15'E; wind, 140°, 5 kt; weather, fog; sea, calm. | | | | | | | | | | |
| 0 | 3.40 | 33.23 | - | 26.46 | 0 | 3.40 | 33.23 | | 26.46 | 158 | 0.00 |
| 10 | 3.77 | 33.23 | 7.30 | 26.42 | 10 | 3.77 | 33.23 | 7.30 | 26.42 | 161 | 0.02 |
| 25 | 3.66 | 33.23 | 7.20 | 26.44 | 20 | 3.69 | 33.23 | 7.24 | 26.43 | 161 | 0.03 |
| 49 | 3.52 | 33.23 | 7.10 | 26.45 | 30 | 3.65 | 33.23 | 7.17 | 26.44 | 160 | 0.05 |
| 74 | 3.10 | 33.25 | 7.10 | 26.50 | 50 | 3.50 | 33.23 | 7.10 | 26.45 | 159 | 0.08 |
| 98 | 2.97 | 33.27 | 6.94 | 26.53 | 75 | 3.09 | 33.25 | 7.10 | 26.50 | 154 | 0.12 |
| 123 | 2.82 | 33.27 | 6.69 | 26.54 | 100 | 2.95 | 33.27 | 6.96 | 26.53 | 152 | 0.16 |
| 147 | 2.87 | 33.38 | 5.53 | 26.63 | 150 | 2.95 | 33.41 | 5.29 | 26.64 | 141 | 0.23 |
| 197 | 3.82 | 33.73 | 2.45 | 26.82 | 200 | 3.82 | 33.74 | 2.39 | 26.83 | 125 | 0.30 |
| 246 | 3.81 | 33.86 | 1.59 | 26.92 | 250 | 3.81 | 33.87 | 1.55 | 26.93 | 115 | 0.36 |
| 295 | 3.77 | 33.93 | 1.16 | 26.98 | 300 | 3.76 | 33.94 | 1.14 | 26.99 | 110 | 0.41 |
| | | | | | 400 | 3.62 | 34.07 | 0.77 | 27.11 | 100 | 0.52 |
| 387 | 3.65 | 34.05 | 0.82 | 27.09 | 500 | 3.45 | 34.16 | 0.56 | 27.20 | 92 | 0.61 |
| 485 | 3.47 | 34.15 | 0.57 | 27.19 | 600 | 3.32 | 34.21 | 0.53 | 27.25 | 88 | 0.70 |
| 680 | 3.21 | 34.25 | 0.52 | 27.29 | 700 | 3.18 | 34.26 | 0.52 | 27.30 | 83 | 0.79 |
| 1021 | 2.72 | 34.39 | 0.56 | 27.45 | 800 | 3.04 | 34.30 | 0.52 | 27.35 | 79 | 0.87 |
| | | | | | 1000 | 2.75 | 34.38 | 0.55 | 27.43 | 71 | 1.02 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; May 30, 1958; 0449 GCT; 53°29'N, 176°42'E; wind, 120°, 8 kt; weather, sky obscured; sea, moderate. | | | | | | | | | | | 7 |
| 0 | 4.20 | 33.08 | - | 26.26 | 0 | 4.20 | 33.08 | | 26.26 | 177 | 0.00 |
| 10 | 4.55 | 33.06 | 7.02 | 26.21 | 10 | 4.55 | 33.06 | 7.02 | 26.21 | 182 | 0.02 |
| 25 | 3.70 | 33.14 | 7.30 | 26.36 | 20 | 3.93 | 33.12 | 7.26 | 26.32 | 171 | 0.04 |
| 49 | 3.32 | 33.16 | 6.94 | 26.41 | 30 | 3.61 | 33.14 | 7.18 | 26.37 | 167 | 0.05 |
| 74 | 3.00 | 33.17 | 7.25 | 26.45 | 50 | 3.30 | 33.16 | 6.97 | 26.41 | 163 | 0.09 |
| 98 | 2.84 | 33.20 | 7.01 | 26.49 | 75 | 2.99 | 33.17 | 7.25 | 26.45 | 159 | 0.13 |
| 122 | 2.74 | 33.27 | 6.34 | 26.55 | 100 | 2.83 | 33.21 | 6.96 | 26.50 | 155 | 0.16 |
| 146 | 2.75 | 33.33 | 5.62 | 26.60 | 150 | 2.91 | 33.37 | 5.29 | 26.62 | 144 | 0.24 |
| 196 | 4.08 | 33.73 | 2.51 | 26.79 | 200 | 4.07 | 33.74 | 2.43 | 26.80 | 127 | 0.31 |
| 245 | 3.93 | 33.87 | 1.75 | 26.92 | 250 | 3.92 | 33.88 | 1.70 | 26.93 | 116 | 0.37 |
| 319 | 3.80 | 33.98 | 1.60 | 27.02 | 300 | 3.82 | 33.96 | 1.52 | 27.00 | 109 | 0.42 |
| PIONEER; May 30, 1958; 1605, 1457 GCT; 54°00'N, 175°00'E; wind, 040°, 5 kt; weather, sky obscured; sea, slight. | | | | | | | | | | | 8 |
| 0 | 3.20 | 33.18 | - | 26.44 | 0 | 3.20 | 33.18 | | 26.44 | 160 | 0.00 |
| 10 | 3.72 | 33.18 | 7.29 | 26.39 | 10 | 3.72 | 33.18 | 7.29 | 26.39 | 165 | 0.02 |
| 25 | 3.62 | 33.15 | 7.34 | 26.38 | 20 | 3.65 | 33.16 | 7.32 | 26.38 | 166 | 0.03 |
| 50 | 3.54 | 33.15 | 7.24 | 26.38 | 30 | 3.65 | 33.14 | 7.31 | 26.37 | 167 | 0.05 |
| 74 | 2.96 | 33.21 | 7.18 | 26.48 | 50 | 3.54 | 33.15 | 7.24 | 26.38 | 166 | 0.08 |
| 99 | 2.82 | 33.24 | 6.94 | 26.52 | 75 | 2.96 | 33.21 | 7.18 | 26.48 | 156 | 0.12 |
| 123 | 2.34 | 33.28 | 6.51 | 26.59 | 100 | 2.78 | 33.24 | 6.94 | 26.52 | 152 | 0.16 |
| 148 | 3.07 | 33.45 | 5.01 | 26.67 | 150 | 3.11 | 33.47 | 4.86 | 26.68 | 138 | 0.24 |
| 197 | 3.75 | 33.76 | 2.31 | 26.85 | 200 | 3.76 | 33.77 | 2.22 | 26.85 | 122 | 0.30 |
| 246 | 3.87 | 33.89 | 1.29 | 26.94 | 250 | 3.87 | 33.90 | 1.28 | 26.95 | 114 | 0.36 |
| 295 | 3.84 | 33.98 | 1.13 | 27.01 | 300 | 3.83 | 33.99 | 1.10 | 27.02 | 107 | 0.41 |
| | | | | | 400 | 3.63 | 34.10 | 0.66 | 27.13 | 98 | 0.52 |
| 387 | 3.65 | 34.09 | 0.68 | 27.12 | 500 | 3.46 | 34.19 | 0.53 | 27.22 | 90 | 0.61 |
| 485 | 3.48 | 34.18 | 0.53 | 27.21 | 600 | 3.33 | 34.24 | 0.50 | 27.27 | 85 | 0.70 |
| 682 | 3.22 | 34.28 | 0.50 | 27.31 | 700 | 3.20 | 34.29 | 0.50 | 27.32 | 81 | 0.78 |
| 1026 | 2.76 | 34.41 | 0.54 | 27.46 | 800 | 3.06 | 34.33 | 0.50 | 27.37 | 77 | 0.86 |
| | | | | | 1000 | 2.79 | 34.40 | 0.53 | 27.45 | 70 | 1.01 |
| PIONEER; May 30, 1958; 2200 GCT; 54°33'N, 174°27'E; wind, 040°, 5 kt; weather, sky obscured; sea, slight. | | | | | | | | | | | 9 |
| 0 | 3.30 | 33.15 | - | 26.41 | 0 | 3.30 | 33.15 | | 26.41 | 163 | 0.00 |
| 10 | 3.44 | 33.16 | 7.37 | 26.40 | 10 | 3.44 | 33.16 | 7.37 | 26.40 | 164 | 0.02 |
| 25 | 3.20 | 33.17 | 7.30 | 26.43 | 20 | 3.27 | 33.17 | 7.32 | 26.42 | 161 | 0.03 |
| 49 | 3.06 | 33.19 | 7.19 | 26.46 | 30 | 3.18 | 33.18 | 7.26 | 26.44 | 160 | 0.05 |
| 74 | 2.84 | 33.19 | 7.29 | 26.48 | 50 | 3.05 | 33.19 | 7.20 | 26.46 | 158 | 0.08 |
| 98 | 2.52 | 33.22 | 7.18 | 26.53 | 75 | 2.83 | 33.19 | 7.29 | 26.48 | 156 | 0.12 |
| 123 | 1.88 | 33.23 | 6.74 | 26.59 | 100 | 2.41 | 33.21 | 7.21 | 26.53 | 152 | 0.16 |
| 147 | 2.89 | 33.47 | 4.63 | 26.70 | 150 | 2.97 | 33.50 | 4.38 | 26.71 | 135 | 0.23 |
| 197 | 3.80 | 33.85 | 1.71 | 26.91 | 200 | 3.80 | 33.85 | 1.67 | 26.91 | 116 | 0.29 |
| 246 | 3.84 | 33.92 | 1.13 | 26.97 | 250 | 3.84 | 33.93 | 1.10 | 26.97 | 111 | 0.35 |
| 320 | 3.75 | 34.02 | 0.68 | 27.05 | 300 | 3.79 | 33.99 | 0.75 | 27.03 | 107 | 0.40 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | δ cl/ton | ΔD dyn m |

10 PIONEER; May 31, 1958; 0448, 0327 GCT; 55°00'N, 174°00'E; wind, 360°, 15 kt; weather, intermittent slight drizzle; sea, moderate.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 2.70 | 33.22 | - | 26.51 | 0 | 2.70 | 33.22 | | 26.51 | 153 | 0.00 |
| 10 | 3.08 | 33.22 | 7.47 | 26.48 | 10 | 3.08 | 33.22 | 7.47 | 26.48 | 156 | 0.02 |
| 24 | 2.90 | 33.22 | 7.50 | 26.50 | 20 | 2.95 | 33.22 | 7.49 | 26.49 | 155 | 0.03 |
| 48 | 2.72 | 33.22 | 7.59 | 26.51 | 30 | 2.85 | 33.22 | 7.55 | 26.50 | 154 | 0.05 |
| 72 | 2.58 | 33.22 | 7.48 | 26.52 | 50 | 2.71 | 33.22 | 7.58 | 26.51 | 153 | 0.08 |
| 96 | 2.35 | 33.22 | 7.43 | 26.54 | 75 | 2.55 | 33.22 | 7.47 | 26.53 | 152 | 0.12 |
| 120 | 2.22 | 33.23 | 7.36 | 26.56 | 100 | 2.37 | 33.22 | 7.44 | 26.54 | 151 | 0.15 |
| 144 | 1.42 | 33.23 | 7.04 | 26.62 | 150 | 1.82 | 33.32 | 6.13 | 26.66 | 139 | 0.22 |
| 192 | 3.65 | 33.78 | 1.77 | 26.87 | 200 | 3.66 | 33.80 | 1.66 | 26.89 | 119 | 0.29 |
| 240 | 3.70 | 33.90 | 1.19 | 26.96 | 250 | 3.70 | 33.91 | 1.10 | 26.97 | 111 | 0.35 |
| 289 | 3.67 | 33.97 | 0.84 | 27.02 | 300 | 3.65 | 33.98 | 0.81 | 27.03 | 106 | 0.40 |
| | | | | | 400 | 3.51 | 34.10 | 0.59 | 27.14 | 96 | 0.50 |
| 372 | 3.55 | 34.07 | 0.63 | 27.11 | 500 | 3.39 | 34.18 | 0.50 | 27.22 | 90 | 0.60 |
| 470 | 3.42 | 34.16 | 0.53 | 27.20 | 600 | 3.29 | 34.22 | 0.45 | 27.26 | 86 | 0.68 |
| 661 | 3.22 | 34.25 | 0.43 | 27.29 | 700 | 3.12 | 34.28 | 0.44 | 27.32 | 81 | 0.77 |
| 998 | 2.76 | 34.37 | 0.46 | 27.43 | 800 | 2.92 | 34.33 | 0.45 | 27.38 | 76 | 0.84 |
| | | | | | 1000 | (2.76) | (34.37) | (0.46) | (27.43) | (72) | (0.99) |

11 PIONEER; June 1, 1958; 0012 GCT; 54°30'N, 173°33'E; wind, 270°, 5 kt; weather, cloudy; sea, smooth.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 3.20 | 33.15 | - | 26.41 | 0 | 3.20 | 33.15 | | 26.41 | 162 | 0.00 |
| 9 | 3.76 | 33.12 | 7.12 | 26.34 | 10 | 3.73 | 33.12 | 7.16 | 26.34 | 169 | 0.02 |
| 23 | 3.45 | 33.13 | 7.41 | 26.38 | 20 | 3.51 | 33.13 | 7.38 | 26.37 | 166 | 0.03 |
| 47 | 3.12 | 33.17 | 7.11 | 26.44 | 30 | 3.35 | 33.15 | 7.30 | 26.40 | 164 | 0.05 |
| 71 | 2.82 | 33.17 | 7.07 | 26.46 | 50 | 3.08 | 33.17 | 7.12 | 26.44 | 160 | 0.08 |
| 95 | 2.61 | 33.20 | 6.66 | 26.51 | 75 | 2.80 | 33.17 | 6.98 | 26.47 | 158 | 0.12 |
| 121 | 2.15 | 33.27 | 6.62 | 26.60 | 100 | 2.44 | 33.21 | 6.80 | 26.53 | 152 | 0.16 |
| 143 | 2.58 | 33.40 | 5.20 | 26.67 | 150 | 2.75 | 33.47 | 4.60 | 26.71 | 135 | 0.23 |
| 192 | 3.41 | 33.78 | 2.05 | 26.90 | 200 | 3.41 | 33.80 | 1.90 | 26.91 | 116 | 0.30 |
| 241 | 3.42 | 33.89 | 1.31 | 26.98 | 250 | 3.43 | 33.91 | 1.21 | 27.00 | 109 | 0.35 |
| 315 | 3.58 | 34.01 | 0.76 | 27.06 | 300 | 3.53 | 33.99 | 0.82 | 27.05 | 104 | 0.41 |

12 PIONEER; June 1, 1958; 0705, 0554 GCT; 54°00'N, 173°00'E; wind, 320°, 5 kt; weather, sky obscured; sea, smooth.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 3.50 | 33.09 | - | 26.34 | 0 | 3.50 | 33.09 | | 26.34 | 169 | 0.00 |
| 10 | 4.02 | 33.09 | 7.22 | 26.29 | 10 | 4.02 | 33.09 | 7.22 | 26.29 | 174 | 0.02 |
| 25 | 3.66 | 33.09 | 7.25 | 26.32 | 20 | 3.77 | 33.09 | 7.25 | 26.31 | 172 | 0.03 |
| 50 | 3.25 | 33.09 | 7.12 | 26.36 | 30 | 3.57 | 33.09 | 7.20 | 26.33 | 170 | 0.05 |
| 75 | 2.97 | 33.11 | 7.19 | 26.40 | 50 | 3.25 | 33.09 | 7.12 | 26.36 | 167 | 0.08 |
| 99 | 2.48 | 33.19 | 6.69 | 26.51 | 75 | 2.97 | 33.11 | 7.19 | 26.40 | 164 | 0.13 |
| 124 | 2.30 | 33.30 | 5.90 | 26.61 | 100 | 2.46 | 33.19 | 6.65 | 26.51 | 154 | 0.17 |
| 149 | 2.53 | 33.47 | 4.98 | 26.73 | 150 | 2.55 | 33.48 | 4.89 | 26.73 | 133 | 0.24 |
| 198 | 3.35 | 33.78 | 1.83 | 26.90 | 200 | 3.36 | 33.79 | 1.83 | 26.91 | 117 | 0.30 |
| 248 | 3.58 | 33.92 | 1.60 | 26.99 | 250 | 3.58 | 33.92 | 1.56 | 26.99 | 109 | 0.36 |
| 297 | 3.61 | 34.02 | 0.69 | 27.07 | 300 | 3.60 | 34.02 | 0.69 | 27.07 | 102 | 0.41 |
| | | | | | 400 | 3.38 | 34.10 | 0.62 | 27.15 | 95 | 0.51 |
| 394 | 3.38 | 34.10 | 0.62 | 27.15 | 500 | 3.30 | 34.16 | 0.58 | 27.21 | 90 | 0.60 |
| 493 | 3.30 | 34.16 | 0.59 | 27.21 | 600 | 3.22 | 34.23 | 0.50 | 27.27 | 85 | 0.69 |
| 690 | 3.14 | 34.28 | 0.46 | 27.32 | 700 | 3.13 | 34.29 | 0.46 | 27.33 | 80 | 0.77 |
| 1039 | 2.68 | 34.40 | 0.50 | 27.46 | 800 | 3.02 | 34.33 | 0.44 | 27.37 | 77 | 0.85 |
| | | | | | 1000 | 2.74 | 34.39 | 0.48 | 27.44 | 71 | 1.00 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; June 2, 1958; 0223 GCT; 53°29'N, 172°29'E; wind, 260°, 15 kt; weather, sky obscured; sea, moderate. | | | | | | | | | | | 13 |
| 0 | 3.90 | 33.05 | - | 26.27 | 0 | 3.90 | 33.05 | | 26.27 | 176 | 0.00 |
| 10 | 4.18 | 33.05 | 7.30 | 26.24 | 10 | 4.18 | 33.05 | 7.30 | 26.24 | 179 | 0.02 |
| 24 | 4.12 | 33.05 | 7.24 | 26.25 | 20 | 4.15 | 33.05 | 7.25 | 26.24 | 178 | 0.04 |
| 48 | 3.78 | 33.05 | 7.19 | 26.28 | 30 | 4.03 | 33.05 | 7.25 | 26.26 | 178 | 0.05 |
| 72 | 3.52 | 33.10 | 6.93 | 26.35 | 50 | 3.78 | 33.05 | 7.16 | 26.28 | 175 | 0.09 |
| 96 | 2.72 | 33.14 | 7.07 | 26.45 | 75 | 3.40 | 33.10 | 6.98 | 26.36 | 168 | 0.13 |
| 121 | 2.30 | 33.21 | 6.68 | 26.54 | 100 | 2.57 | 33.14 | 7.15 | 26.46 | 158 | 0.17 |
| 145 | 3.12 | 33.49 | 4.32 | 26.69 | 150 | 3.24 | 33.54 | 3.90 | 26.72 | 134 | 0.25 |
| 194 | 3.85 | 33.87 | 1.38 | 26.93 | 200 | 3.81 | 33.88 | 1.34 | 26.94 | 114 | 0.31 |
| 244 | 3.58 | 33.93 | 1.14 | 27.00 | 250 | 3.55 | 33.94 | 1.12 | 27.01 | 108 | 0.36 |
| 318 | 3.35 | 33.96 | 0.90 | 27.05 | 300 | 3.39 | 33.96 | 0.94 | 27.04 | 105 | 0.42 |
| PIONEER; June 2, 1958; 0917, 0817 GCT; 53°00'N, 172°00'E; wind, 260°, 10 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | | 14 |
| 0 | 3.60 | 33.05 | - | 26.30 | 0 | 3.60 | 33.05 | | 26.30 | 173 | 0.00 |
| 10 | 4.52 | 33.04 | 6.84 | 26.20 | 10 | 4.52 | 33.04 | 6.84 | 26.20 | 183 | 0.02 |
| 24 | 4.33 | 33.05 | 7.10 | 26.23 | 20 | 4.39 | 33.05 | 7.06 | 26.22 | 181 | 0.04 |
| 49 | 3.79 | 33.06 | 6.74 | 26.29 | 30 | 4.19 | 33.05 | 7.02 | 26.24 | 179 | 0.05 |
| 74 | 3.34 | 33.12 | 6.34 | 26.38 | 50 | 3.76 | 33.06 | 6.75 | 26.29 | 174 | 0.09 |
| 99 | 3.44 | 33.30 | 4.61 | 26.51 | 75 | 3.34 | 33.13 | 6.25 | 26.39 | 165 | 0.13 |
| 123 | 3.70 | 33.50 | 3.88 | 26.65 | 100 | 3.45 | 33.31 | 4.58 | 26.52 | 153 | 0.17 |
| 148 | 4.00 | 33.63 | 3.07 | 26.72 | 150 | 4.01 | 33.64 | 3.02 | 26.73 | 134 | 0.24 |
| 198 | 4.10 | 33.77 | 1.99 | 26.82 | 200 | 4.10 | 33.78 | 1.95 | 26.83 | 125 | 0.31 |
| 248 | 4.08 | 33.92 | 1.18 | 26.94 | 250 | 4.07 | 33.92 | 1.16 | 26.94 | 114 | 0.37 |
| 298 | 3.88 | 33.97 | 0.93 | 27.00 | 300 | 3.88 | 33.97 | 0.93 | 27.00 | 109 | 0.42 |
| | | | | | 400 | 3.85 | 34.05 | 0.67 | 27.07 | 104 | 0.53 |
| 394 | 3.86 | 34.04 | 0.69 | 27.06 | 500 | 3.67 | 34.16 | 0.47 | 27.17 | 94 | 0.63 |
| 494 | 3.68 | 34.15 | 0.47 | 27.16 | 600 | 3.52 | 34.21 | 0.46 | 27.23 | 90 | 0.72 |
| 594 | 3.53 | 34.21 | 0.46 | 27.23 | | | | | | | |
| 644 | 3.48 | 34.22 | 0.49 | 27.24 | | | | | | | |
| PIONEER; June 3, 1958; 0005 GCT; 52°30'N, 172°00'E; wind, 030°, 4 kt; weather, cloudy; sea, smooth. | | | | | | | | | | | 15 |
| 0 | 4.80 | 32.99 | - | 26.13 | 0 | 4.80 | 32.99 | | 26.13 | 189 | 0.00 |
| 10 | 4.78 | 32.97 | 6.91 | 26.11 | 10 | 4.78 | 32.97 | 6.91 | 26.11 | 191 | 0.02 |
| 24 | 4.41 | 33.00 | 6.92 | 26.18 | 20 | 4.53 | 32.99 | 6.91 | 26.16 | 187 | 0.04 |
| 48 | 3.50 | 33.10 | 7.02 | 26.35 | 30 | 4.13 | 33.03 | 6.97 | 26.23 | 180 | 0.06 |
| 72 | 3.10 | 33.12 | 6.89 | 26.40 | 50 | 3.47 | 33.10 | 7.01 | 26.35 | 169 | 0.09 |
| 97 | 2.70 | 33.14 | 6.76 | 26.45 | 75 | 2.99 | 33.11 | 7.00 | 26.40 | 164 | 0.13 |
| 121 | 3.45 | 33.43 | 4.40 | 26.61 | 100 | 2.82 | 33.18 | 6.44 | 26.47 | 157 | 0.17 |
| 145 | 3.81 | 33.68 | 2.68 | 26.78 | 150 | 3.85 | 33.71 | 2.49 | 26.80 | 127 | 0.24 |
| 195 | 4.05 | 33.93 | 1.20 | 26.95 | 200 | 4.05 | 33.93 | 1.14 | 26.95 | 113 | 0.30 |
| 244 | 3.98 | 33.96 | 0.78 | 26.98 | 250 | 3.96 | 33.96 | 0.75 | 26.99 | 110 | 0.36 |
| 319 | 3.63 | 34.03 | 0.63 | 27.07 | 300 | 3.75 | 34.01 | 0.62 | 27.05 | 105 | 0.41 |
| PIONEER; June 7, 1958; 2337 GCT; 52°22'N, 173°00'E; wind, 070°, 4 kt; weather, sky obscured; sea, calm. | | | | | | | | | | | 16 |
| 0 | 5.60 | 32.97 | - | 26.02 | 0 | 5.60 | 32.97 | | 26.02 | 200 | 0.00 |
| 10 | 5.09 | 32.96 | 7.18 | 26.07 | 10 | 5.09 | 32.96 | 7.18 | 26.07 | 195 | 0.02 |
| 25 | 5.00 | 32.95 | 7.17 | 26.07 | 20 | 5.03 | 32.95 | 7.18 | 26.07 | 195 | 0.04 |
| 50 | 4.81 | 32.97 | 7.10 | 26.11 | 30 | 4.98 | 32.95 | 7.19 | 26.08 | 195 | 0.06 |
| 104 | 3.83 | 33.34 | 5.59 | 26.51 | 50 | 4.81 | 32.97 | 7.10 | 26.11 | 192 | 0.10 |
| 145 | 3.95 | 33.57 | 3.71 | 26.68 | 75 | 4.20 | 33.15 | 6.54 | 26.32 | 172 | 0.14 |
| 202 | 4.08 | 33.79 | 2.16 | 26.84 | 100 | 3.86 | 33.32 | 5.73 | 26.49 | 156 | 0.18 |
| | | | | | 150 | 3.96 | 33.59 | 3.52 | 26.69 | 137 | 0.26 |
| | | | | | 200 | 4.08 | 33.78 | 2.20 | 26.83 | 124 | 0.32 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 17 | PIONEER; June 8, 1958; 0655, 0554 GCT; 51°35'N, 173°00'E; wind, 040°, 12 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 4.60 | 33.08 | - | 26.22 | 0 | 4.60 | 33.08 | | 26.22 | 181 | 0.00 |
| 9 | 4.66 | 33.06 | 7.30 | 26.20 | 10 | 4.65 | 33.06 | 7.30 | 26.20 | 183 | 0.02 |
| 24 | 4.41 | 33.06 | 7.25 | 26.23 | 20 | 4.49 | 33.06 | 7.26 | 26.22 | 181 | 0.04 |
| 49 | 3.65 | 33.08 | 7.12 | 26.32 | 30 | 4.18 | 33.06 | 7.24 | 26.25 | 178 | 0.05 |
| 74 | 3.45 | 33.11 | 6.82 | 26.36 | 50 | 3.64 | 33.08 | 7.12 | 26.32 | 172 | 0.09 |
| 98 | 3.36 | 33.27 | 5.85 | 26.50 | 75 | 3.44 | 33.12 | 6.79 | 26.37 | 167 | 0.13 |
| 123 | 3.79 | 33.40 | 4.68 | 26.56 | 100 | 3.40 | 33.28 | 5.75 | 26.50 | 155 | 0.17 |
| 148 | 4.10 | 33.49 | 3.85 | 26.60 | 150 | 4.11 | 33.50 | 3.82 | 26.61 | 145 | 0.25 |
| 198 | 4.25 | 33.63 | 2.97 | 26.69 | 200 | 4.25 | 33.64 | 2.93 | 26.70 | 137 | 0.32 |
| 248 | 4.28 | 33.77 | 2.21 | 26.80 | 250 | 4.28 | 33.77 | 2.18 | 26.80 | 128 | 0.38 |
| 298 | 4.22 | 33.86 | 1.68 | 26.88 | 300 | 4.21 | 33.86 | 1.66 | 26.88 | 121 | 0.44 |
| | | | | | 400 | 4.01 | 33.98 | 0.94 | 27.00 | 110 | 0.56 |
| 393 | 4.02 | 33.97 | 0.97 | 26.99 | 500 | 3.89 | 34.07 | 0.64 | 27.08 | 103 | 0.67 |
| 491 | 3.90 | 34.07 | 0.65 | 27.08 | 600 | 3.76 | 34.13 | 0.54 | 27.14 | 98 | 0.77 |
| 690 | 3.64 | 34.17 | 0.47 | 27.18 | 700 | 3.63 | 34.17 | 0.46 | 27.19 | 94 | 0.86 |
| 1040 | 3.15 | 34.31 | 0.46 | 27.34 | 800 | 3.49 | 34.22 | 0.43 | 27.24 | 90 | 0.96 |
| | | | | | 1000 | 3.21 | 34.30 | 0.44 | 27.33 | 82 | 1.13 |
| 18 | PIONEER; June 11, 1958; 0030 GCT; 51°17'N, 178°35'E; wind, 320°, 10 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 5.20 | 32.82 | - | 25.95 | 0 | 5.20 | 32.82 | | 25.95 | 206 | 0.00 |
| 10 | 5.48 | 32.85 | 6.90 | 25.94 | 10 | 5.48 | 32.85 | 6.90 | 25.94 | 207 | 0.02 |
| 25 | 4.98 | 33.07 | 6.51 | 26.17 | 20 | 5.13 | 33.01 | 6.62 | 26.11 | 192 | 0.04 |
| 49 | 4.56 | 33.16 | 6.25 | 26.29 | 30 | 4.87 | 33.09 | 6.50 | 26.20 | 183 | 0.06 |
| 74 | 4.35 | 33.29 | 5.36 | 26.41 | 50 | 4.55 | 33.17 | 6.20 | 26.30 | 174 | 0.10 |
| 99 | 4.26 | 33.35 | 5.01 | 26.47 | 75 | 4.35 | 33.29 | 5.34 | 26.41 | 163 | 0.14 |
| 123 | 4.10 | 33.41 | 4.80 | 26.53 | 100 | 4.25 | 33.35 | 5.00 | 26.47 | 158 | 0.18 |
| 148 | 4.09 | 33.46 | 4.57 | 26.58 | 150 | 4.09 | 33.46 | 4.56 | 26.58 | 148 | 0.25 |
| 198 | 4.10 | 33.55 | 3.88 | 26.65 | 200 | 4.10 | 33.56 | 3.81 | 26.65 | 141 | 0.33 |
| 247 | 4.15 | 33.76 | 2.46 | 26.81 | 250 | 4.15 | 33.77 | 2.40 | 26.82 | 126 | 0.39 |
| 321 | 4.04 | 33.90 | 1.59 | 26.93 | 300 | 4.09 | 33.88 | 1.68 | 26.91 | 118 | 0.45 |
| 19 | PIONEER; June 11, 1958; 0622, 0436 GCT; 51°00'N, 179°00'E; wind, 320°, 18 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | | |
| 0 | 5.00 | 32.72 | - | 25.89 | 0 | 5.00 | 32.72 | | 25.89 | 212 | 0.00 |
| 9 | 5.68 | 32.72 | 7.02 | 25.81 | 10 | 5.68 | 32.72 | 7.02 | 25.81 | 219 | 0.02 |
| 24 | 5.59 | 32.72 | 7.04 | 25.82 | 20 | 5.62 | 32.72 | 7.04 | 25.82 | 219 | 0.04 |
| 48 | 5.34 | 32.73 | 6.98 | 25.86 | 30 | 5.57 | 32.71 | 7.03 | 25.82 | 219 | 0.07 |
| 72 | 4.63 | 32.83 | 6.88 | 26.02 | 50 | 5.30 | 32.73 | 6.98 | 25.87 | 215 | 0.11 |
| 96 | 3.47 | 33.10 | 6.64 | 26.35 | 75 | 4.43 | 32.87 | 6.88 | 26.07 | 195 | 0.16 |
| 120 | 3.25 | 33.22 | 5.88 | 26.47 | 100 | 3.39 | 33.11 | 6.60 | 26.37 | 168 | 0.20 |
| 144 | 3.68 | 33.52 | 3.88 | 26.66 | 150 | 3.70 | 33.57 | 3.51 | 26.70 | 136 | 0.28 |
| 193 | 3.76 | 33.83 | 1.75 | 26.90 | 200 | 3.72 | 33.84 | 1.74 | 26.91 | 116 | 0.34 |
| 242 | 3.56 | 33.92 | 1.56 | 26.99 | 250 | 3.56 | 33.93 | 1.47 | 27.00 | 108 | 0.40 |
| 292 | 3.55 | 33.99 | 1.09 | 27.05 | 300 | 3.54 | 34.00 | 1.05 | 27.06 | 103 | 0.45 |
| | | | | | 400 | 3.54 | 34.11 | 0.67 | 27.15 | 96 | 0.55 |
| 376 | 3.50 | 34.08 | 0.75 | 27.13 | 500 | 3.56 | 34.20 | 0.49 | 27.22 | 90 | 0.65 |
| 473 | 3.60 | 34.18 | 0.50 | 27.20 | 600 | 3.42 | 34.25 | 0.45 | 27.27 | 86 | 0.73 |
| 669 | 3.32 | 34.29 | 0.43 | 27.31 | 700 | 3.26 | 34.30 | 0.43 | 27.32 | 81 | 0.82 |
| 912 | 2.91 | 34.38 | 0.44 | 27.42 | 800 | 3.09 | 34.34 | 0.43 | 27.37 | 77 | 0.90 |
| | | | | | 1000 | (2.78) | (34.41) | (0.45) | (27.46) | (70) | (1.04) |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; June 16, 1958; 2310 GCT; 52°42'N, 178°51'W; wind, 140°, 8 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | | 20 |
| 0 | 5.50 | 33.15 | - | 26.17 | 0 | 5.50 | 33.15 | | 26.17 | 185 | 0.00 |
| 10 | 5.72 | 33.14 | 4.51 | 26.14 | 10 | 5.72 | 33.14 | 4.51 | 26.14 | 188 | 0.02 |
| 25 | 5.15 | 33.15 | 5.94 | 26.22 | 20 | 5.30 | 33.15 | 5.53 | 26.20 | 183 | 0.04 |
| 50 | 4.95 | 33.16 | 6.92 | 26.25 | 30 | 5.15 | 33.15 | 6.24 | 26.22 | 181 | 0.06 |
| 75 | 4.22 | 33.19 | 6.54 | 26.35 | 50 | 4.95 | 33.16 | 6.92 | 26.25 | 179 | 0.09 |
| 100 | 4.07 | 33.22 | 6.28 | 26.39 | 75 | 4.22 | 33.19 | 6.54 | 26.35 | 169 | 0.14 |
| 125 | 4.02 | 33.26 | 6.04 | 26.42 | 100 | 4.07 | 33.22 | 6.28 | 26.39 | 166 | 0.18 |
| 150 | 3.82 | 33.28 | 6.18 | 26.46 | 150 | 3.82 | 33.28 | 6.18 | 26.46 | 159 | 0.26 |
| 200 | 3.61 | 33.33 | 5.36 | 26.52 | 200 | 3.61 | 33.33 | 5.36 | 26.52 | 154 | 0.34 |
| 250 | 3.68 | 33.42 | 4.91 | 26.58 | 250 | 3.68 | 33.42 | 4.91 | 26.58 | 148 | 0.41 |
| 325 | 3.89 | 33.66 | 3.20 | 26.75 | 300 | 3.81 | 33.57 | 3.91 | 26.69 | 138 | 0.48 |
| PIONEER; June 17, 1958; 0718, 0616 GCT; 53°00'N, 180°00'; wind, calm; weather, fog; sea, calm. | | | | | | | | | | | 21 |
| 0 | 5.10 | 33.16 | - | 26.23 | 0 | 5.10 | 33.16 | | 26.23 | 180 | 0.00 |
| 10 | 4.95 | 33.15 | 7.60 | 26.24 | 10 | 4.95 | 33.15 | 7.60 | 26.24 | 179 | 0.02 |
| 25 | 4.62 | 33.15 | 7.44 | 26.27 | 20 | 4.76 | 33.15 | 7.48 | 26.26 | 177 | 0.04 |
| 50 | 3.38 | 33.17 | 7.29 | 26.41 | 30 | 4.29 | 33.15 | 7.41 | 26.31 | 172 | 0.05 |
| 75 | 3.16 | 33.21 | 7.08 | 26.47 | 50 | 3.38 | 33.17 | 7.29 | 26.41 | 163 | 0.09 |
| 100 | 3.00 | 33.26 | 7.03 | 26.52 | 75 | 3.16 | 33.21 | 7.08 | 26.47 | 158 | 0.13 |
| 116 | 3.37 | 33.28 | 7.02 | 26.50 | 100 | 3.00 | 33.26 | 7.03 | 26.52 | 153 | 0.17 |
| 174 | 3.78 | 33.47 | 5.56 | 26.61 | 150 | 3.65 | 33.38 | 6.08 | 26.56 | 150 | 0.24 |
| 246 | 3.86 | 33.83 | 4.65 | 26.89 | 200 | 3.86 | 33.64 | 5.58 | 26.74 | 133 | 0.31 |
| 300 | 3.65 | 33.87 | 2.00 | 26.95 | 250 | 3.84 | 33.83 | 4.38 | 26.89 | 119 | 0.38 |
| | | | | | 300 | 3.65 | 33.87 | 2.00 | 26.95 | 114 | 0.43 |
| 392 | 3.61 | 34.02 | 2.12 | 27.07 | 400 | 3.61 | 34.03 | 2.00 | 27.08 | 102 | 0.54 |
| 489 | 3.57 | 34.10 | 1.03 | 27.14 | 500 | 3.56 | 34.11 | 1.00 | 27.14 | 97 | 0.64 |
| 684 | 3.33 | 34.21 | 0.65 | 27.25 | 600 | 3.45 | 34.16 | 0.78 | 27.20 | 93 | 0.74 |
| 914 | 2.90 | 34.34 | 0.55 | 27.39 | 700 | 3.30 | 34.22 | 0.64 | 27.26 | 87 | 0.83 |
| | | | | | 800 | 3.11 | 34.27 | 0.57 | 27.31 | 82 | 0.91 |
| | | | | | 1000 | (2.75) | (34.39) | (0.57) | (27.44) | (71) | (1.06) |
| PIONEER; June 17, 1958; 2340 GCT; 53°32'N, 180°00'; wind, calm; weather, distant fog higher than observer; sea, calm. | | | | | | | | | | | 22 |
| 0 | 5.90 | 33.18 | - | 26.15 | 0 | 5.90 | 33.18 | | 26.15 | 187 | 0.00 |
| 10 | 5.30 | 33.17 | 7.30 | 26.21 | 10 | 5.30 | 33.17 | 7.30 | 26.21 | 181 | 0.02 |
| 25 | 4.60 | 33.16 | 7.30 | 26.28 | 20 | 4.83 | 33.16 | 7.30 | 26.26 | 177 | 0.04 |
| 50 | 3.44 | 33.21 | 7.20 | 26.44 | 30 | 4.30 | 33.17 | 7.28 | 26.32 | 171 | 0.05 |
| 74 | 3.10 | 33.23 | 7.09 | 26.49 | 50 | 3.44 | 33.21 | 7.20 | 26.44 | 160 | 0.09 |
| 99 | 2.82 | 33.29 | 6.66 | 26.56 | 75 | 3.09 | 33.23 | 7.07 | 26.49 | 156 | 0.12 |
| 124 | 2.68 | 33.31 | 6.29 | 26.59 | 100 | 2.80 | 33.29 | 6.66 | 26.56 | 149 | 0.16 |
| 149 | 3.05 | 33.44 | 5.04 | 26.66 | 150 | 3.07 | 33.45 | 4.96 | 26.67 | 139 | 0.24 |
| 198 | 3.78 | 33.76 | 2.45 | 26.85 | 200 | 3.78 | 33.76 | 2.43 | 26.85 | 123 | 0.30 |
| 248 | 3.80 | 33.86 | 1.94 | 26.92 | 250 | 3.80 | 33.86 | 1.92 | 26.92 | 116 | 0.36 |
| 322 | 3.70 | 33.98 | 1.08 | 27.03 | 300 | 3.75 | 33.95 | 1.34 | 27.00 | 109 | 0.42 |
| PIONEER; June 18, 1958; 0448 GCT; 54°00'N, 180°00'; wind, calm; weather, sky obscured; sea, calm. | | | | | | | | | | | 23 |
| 0 | 6.10 | 33.22 | - | 26.16 | 0 | 6.10 | 33.22 | | 26.16 | 187 | 0.00 |
| 10 | 4.98 | 33.21 | 7.31 | 26.28 | 10 | 4.98 | 33.21 | 7.31 | 26.28 | 175 | 0.02 |
| 24 | 4.42 | 33.22 | 7.43 | 26.35 | 20 | 4.55 | 33.22 | 7.40 | 26.34 | 170 | 0.04 |
| 49 | 4.04 | 33.22 | 7.31 | 26.39 | 30 | 4.36 | 33.22 | 7.43 | 26.36 | 168 | 0.05 |
| 74 | 3.29 | 33.24 | 6.92 | 26.48 | 50 | 4.00 | 33.22 | 7.31 | 26.39 | 164 | 0.08 |
| 98 | 3.03 | 33.30 | 5.95 | 26.55 | 75 | 3.28 | 33.24 | 6.87 | 26.48 | 156 | 0.12 |
| 123 | 2.96 | 33.34 | 6.04 | 26.59 | 100 | 3.01 | 33.30 | 6.01 | 26.55 | 150 | 0.16 |
| 147 | 3.28 | 33.48 | 4.63 | 26.67 | 150 | 3.34 | 33.50 | 4.47 | 26.68 | 138 | 0.24 |
| 172 | 3.65 | 33.63 | 3.42 | 26.75 | 200 | 3.79 | 33.77 | 2.40 | 26.85 | 122 | 0.30 |
| 196 | 3.78 | 33.75 | 2.52 | 26.84 | | | | | | | |
| 246 | 3.70 | 33.93 | 1.38 | 26.99 | | | | | | | |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **24** | PIONEER; June 19, 1958; 0103 GCT; 54°25'N, 179°00'E; wind, 040°, 15 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | | |
| 0 | 5.80 | 33.22 | - | 26.19 | 0 | 5.80 | 33.22 | | 26.19 | 183 | 0.00 |
| 9 | 5.35 | 33.20 | 7.37 | 26.23 | 10 | 5.27 | 33.20 | 7.38 | 26.24 | 179 | 0.02 |
| 23 | 4.65 | 33.21 | 7.44 | 26.32 | 20 | 4.72 | 33.21 | 7.43 | 26.31 | 172 | 0.04 |
| 47 | 4.52 | 33.21 | 7.35 | 26.33 | 30 | 4.60 | 33.21 | 7.45 | 26.32 | 171 | 0.05 |
| 70 | 3.27 | 33.21 | 6.92 | 26.46 | 50 | 4.30 | 33.21 | 7.27 | 26.36 | 168 | 0.09 |
| 94 | 2.98 | 33.25 | 6.88 | 26.51 | 75 | 3.19 | 33.21 | 6.98 | 26.46 | 158 | 0.13 |
| 118 | 2.95 | 33.33 | 6.07 | 26.58 | 100 | 2.95 | 33.26 | 6.71 | 26.52 | 152 | 0.17 |
| 141 | 3.16 | 33.46 | 4.97 | 26.67 | 150 | 3.32 | 33.52 | 4.41 | 26.70 | 136 | 0.24 |
| 188 | 3.77 | 33.73 | 2.63 | 26.82 | 200 | 3.77 | 33.77 | 2.35 | 26.85 | 122 | 0.30 |
| 235 | 3.76 | 33.87 | 1.71 | 26.93 | 250 | 3.75 | 33.90 | 1.51 | 26.96 | 112 | 0.36 |
| 306 | 3.68 | 33.96 | 1.14 | 27.01 | 300 | 3.69 | 33.96 | 1.15 | 27.01 | 108 | 0.42 |
| **25** | PIONEER; June 19, 1958; 0734, 0633 GCT; 54°43'N, 178°14'E; wind, 010°, 10 kt; weather, cloudy; sea, moderate. | | | | | | | | | | |
| 0 | 4.90 | 33.25 | - | 26.32 | 0 | 4.90 | 33.25 | | 26.32 | 171 | 0.00 |
| 10 | 4.70 | 33.25 | 7.57 | 26.34 | 10 | 4.70 | 33.25 | 7.57 | 26.34 | 169 | 0.02 |
| 25 | 4.20 | 33.24 | 7.30 | 26.39 | 20 | 4.37 | 33.24 | 7.38 | 26.37 | 166 | 0.03 |
| 50 | 3.25 | 33.24 | 7.19 | 26.48 | 30 | 3.95 | 33.24 | 7.28 | 26.42 | 162 | 0.05 |
| 75 | 2.99 | 33.26 | 7.12 | 26.52 | 50 | 3.25 | 33.24 | 7.19 | 26.48 | 156 | 0.08 |
| 100 | 2.96 | 33.29 | - | 26.55 | 75 | 2.99 | 33.26 | 7.12 | 26.52 | 152 | 0.12 |
| 125 | 3.02 | 33.39 | 5.31 | 26.62 | 100 | 2.96 | 33.29 | | 26.55 | 150 | 0.16 |
| 150 | 3.42 | 33.64 | 3.49 | 26.78 | 150 | 3.42 | 33.64 | 3.49 | 26.78 | 128 | 0.23 |
| 200 | 3.62 | 33.79 | 2.27 | 26.88 | 200 | 3.62 | 33.79 | 2.27 | 26.88 | 119 | 0.29 |
| 250 | 3.69 | 33.89 | 1.39 | 26.96 | 250 | 3.69 | 33.89 | 1.39 | 26.96 | 113 | 0.35 |
| 300 | 3.69 | 33.97 | 0.97 | 27.02 | 300 | 3.69 | 33.97 | 0.97 | 27.02 | 107 | 0.40 |
| | | | | | 400 | 3.51 | 34.07 | 0.91 | 27.12 | 98 | 0.51 |
| 390 | 3.52 | 34.06 | 0.93 | 27.11 | 500 | 3.44 | 34.14 | 0.71 | 27.18 | 93 | 0.60 |
| 490 | 3.45 | 34.13 | 0.72 | 27.17 | 600 | 3.30 | 34.20 | 0.58 | 27.24 | 88 | 0.69 |
| 690 | 3.18 | 34.25 | 0.52 | 27.29 | 700 | 3.17 | 34.26 | 0.50 | 27.30 | 83 | 0.78 |
| 1039 | 2.72 | 34.38 | 0.55 | 27.44 | 800 | 3.03 | 34.30 | 0.47 | 27.35 | 79 | 0.86 |
| | | | | | 1000 | 2.77 | 34.37 | 0.52 | 27.43 | 72 | 1.01 |
| **26** | PIONEER; June 23, 1958; 0525 GCT; 54°02'N, 177°15'E; wind, 240°, 12 kt; weather, fog in patches; sea, rough. | | | | | | | | | | |
| 0 | 4.50 | 33.12 | - | 26.26 | 0 | 4.50 | 33.12 | | 26.26 | 177 | 0.00 |
| 10 | 4.98 | 33.12 | 7.25 | 26.21 | 10 | 4.98 | 33.12 | 7.25 | 26.21 | 182 | 0.02 |
| 25 | 4.89 | 33.13 | 7.27 | 26.23 | 20 | 4.99 | 33.13 | 7.27 | 26.22 | 181 | 0.04 |
| 49 | 3.37 | 33.13 | 7.20 | 26.38 | 30 | 4.47 | 33.13 | 7.26 | 26.27 | 176 | 0.05 |
| 74 | 3.06 | 33.17 | 7.12 | 26.44 | 50 | 3.36 | 33.13 | 7.20 | 26.38 | 165 | 0.09 |
| 98 | 2.88 | 33.24 | 6.74 | 26.51 | 75 | 3.05 | 33.17 | 7.12 | 26.44 | 160 | 0.13 |
| 123 | 2.94 | 33.35 | 5.75 | 26.60 | 100 | 2.87 | 33.25 | 6.66 | 26.52 | 152 | 0.17 |
| 147 | 3.34 | 33.44 | 4.76 | 26.63 | 150 | 3.47 | 33.46 | 4.52 | 26.64 | 142 | 0.24 |
| 197 | 4.10 | 33.77 | 2.44 | 26.82 | 200 | (4.05) | (33.79) | (2.41) | (26.84) | (123) | (0.31) |
| **27** | PIONEER; June 23, 1958; 2055 GCT; 53°02'N, 175°00'E; wind, 220°, 16 kt; weather, sky obscured; sea, rough. | | | | | | | | | | |
| 0 | 4.60 | 33.13 | - | 26.26 | 0 | 4.60 | 33.13 | | 26.26 | 177 | 0.00 |
| 10 | 5.35 | 33.10 | 7.03 | 26.15 | 10 | 5.35 | 33.10 | 7.03 | 26.15 | 187 | 0.02 |
| 25 | 5.21 | 33.10 | 7.02 | 26.17 | 20 | 5.28 | 33.10 | 7.02 | 26.16 | 186 | 0.04 |
| 49 | 4.50 | 33.11 | 7.00 | 26.26 | 30 | 5.03 | 33.10 | 7.06 | 26.19 | 184 | 0.06 |
| 74 | 4.13 | 33.20 | 6.46 | 26.37 | 50 | 4.49 | 33.11 | 6.97 | 26.26 | 178 | 0.09 |
| 98 | 3.54 | 33.22 | 6.43 | 26.44 | 75 | 4.10 | 33.20 | 6.47 | 26.37 | 167 | 0.14 |
| 123 | 3.32 | 33.28 | 5.98 | 26.51 | 100 | 3.50 | 33.22 | 6.41 | 26.44 | 160 | 0.18 |
| 147 | 3.68 | 33.38 | 5.22 | 26.55 | 150 | 3.69 | 33.39 | 5.11 | 26.56 | 150 | 0.25 |
| 196 | 3.88 | 33.57 | 3.63 | 26.68 | 200 | 3.90 | 33.58 | 3.54 | 26.69 | 138 | 0.32 |
| 246 | 4.00 | 33.71 | 2.59 | 26.78 | 250 | 4.00 | 33.72 | 2.51 | 26.79 | 128 | 0.39 |
| 320 | 3.90 | 33.90 | 1.46 | 26.94 | 300 | 3.96 | 33.85 | 1.71 | 26.90 | 119 | 0.45 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |

PIONEER; June 28, 1958; 0750 GCT; 51°30'N, 173°57'E; wind, 220°, 28 kt; weather, sky obscured; sea, rough. 28

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.20 | 33.01 | - | 25.98 | 0 | 6.20 | 33.01 | | 25.98 | 204 | 0.00 |
| 9 | 6.82 | 33.02 | 6.88 | 25.91 | 10 | 6.82 | 33.02 | 6.89 | 25.91 | 211 | 0.02 |
| 23 | 6.80 | 33.02 | 6.98 | 25.91 | 20 | 6.80 | 33.02 | 6.96 | 25.91 | 210 | 0.04 |
| 45 | 4.75 | 33.03 | 7.15 | 26.17 | 30 | 6.65 | 33.02 | 7.06 | 25.93 | 209 | 0.06 |
| 68 | 4.02 | 33.09 | 7.10 | 26.29 | 50 | 4.54 | 33.04 | 7.17 | 26.20 | 183 | 0.10 |
| 91 | 3.90 | 33.13 | 6.70 | 26.33 | 75 | 3.99 | 33.09 | 7.03 | 26.29 | 174 | 0.15 |
| 114 | 3.69 | 33.27 | 5.75 | 26.46 | 100 | 3.79 | 33.19 | 6.29 | 26.39 | 165 | 0.19 |
| 136 | 3.70 | 33.37 | 5.12 | 26.54 | 150 | 3.77 | 33.43 | 4.59 | 26.58 | 147 | 0.27 |
| 182 | 3.90 | 33.57 | 3.54 | 26.68 | 200 | 3.95 | 33.65 | 3.02 | 26.74 | 133 | 0.34 |
| 226 | 4.01 | 33.74 | 2.39 | 26.81 | 250 | 4.03 | 33.78 | 2.03 | 26.84 | 124 | 0.40 |
| 297 | 4.05 | 33.90 | 1.32 | 26.93 | 300 | (4.05) | (33.91) | (1.28) | (26.94) | (115) | (0.46) |

PIONEER; June 28, 1958; 2206 GCT; 51°15'N, 176°25'E; wind, 220°, 16 kt; weather, sky obscured; sea, moderate. 29

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.10 | 32.83 | - | 25.85 | 0 | 6.10 | 32.83 | | 25.85 | 216 | 0.00 |
| 9 | 6.52 | 32.81 | 6.87 | 25.78 | 10 | 6.54 | 32.81 | 6.88 | 25.78 | 223 | 0.02 |
| 23 | 6.46 | 32.80 | 6.97 | 25.78 | 20 | 6.54 | 32.80 | 6.94 | 25.77 | 224 | 0.04 |
| 46 | 4.72 | 32.89 | 7.09 | 26.06 | 30 | 5.87 | 32.82 | 7.03 | 25.87 | 214 | 0.07 |
| 69 | 3.55 | 33.06 | 6.93 | 26.31 | 50 | 4.46 | 32.92 | 7.09 | 26.11 | 192 | 0.11 |
| 93 | 3.13 | 33.21 | 6.43 | 26.47 | 75 | 3.39 | 33.10 | 6.87 | 26.36 | 168 | 0.15 |
| 117 | 3.25 | 33.35 | 5.32 | 26.57 | 100 | 3.14 | 33.24 | 6.22 | 26.49 | 155 | 0.19 |
| 141 | 3.60 | 33.61 | 3.15 | 26.74 | 150 | 3.56 | 33.66 | 2.89 | 26.79 | 128 | 0.26 |
| 190 | 3.48 | 33.84 | 1.95 | 26.94 | 200 | 3.50 | 33.86 | 1.77 | 26.95 | 113 | 0.32 |
| 238 | 3.55 | 33.93 | 1.23 | 27.00 | 250 | 3.56 | 33.95 | 1.11 | 27.02 | 107 | 0.38 |
| 311 | 3.54 | 34.03 | 0.90 | 27.08 | 300 | 3.55 | 34.02 | 0.88 | 27.07 | 102 | 0.43 |

PIONEER; June 29, 1958; 0833 GCT; 51°13'N, 178°23'E; wind, 220°, 10 kt; weather, sky obscured; sea, moderate. 30

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.90 | 32.90 | - | 25.93 | 0 | 5.90 | 32.90 | | 25.93 | 208 | 0.00 |
| 10 | 6.49 | 32.89 | 6.29 | 25.85 | 10 | 6.49 | 32.89 | 6.29 | 25.85 | 216 | 0.02 |
| 25 | 5.06 | 33.11 | 5.38 | 26.19 | 20 | 5.42 | 33.05 | 5.62 | 26.11 | 192 | 0.04 |
| 49 | 4.92 | 33.12 | 4.93 | 26.22 | 30 | 5.03 | 33.11 | 5.20 | 26.20 | 183 | 0.06 |
| 73 | 4.84 | 33.13 | 5.49 | 26.23 | 50 | 4.92 | 33.12 | 4.96 | 26.22 | 181 | 0.10 |
| 98 | 4.78 | 33.22 | 5.40 | 26.31 | 75 | 4.84 | 33.14 | 5.49 | 26.24 | 179 | 0.14 |
| 123 | 4.60 | 33.27 | 5.26 | 26.37 | 100 | 4.77 | 33.22 | 5.41 | 26.31 | 173 | 0.18 |
| 147 | 4.42 | 33.32 | 4.58 | 26.43 | 150 | 4.41 | 33.32 | 4.54 | 26.43 | 162 | 0.27 |
| 196 | 4.28 | 33.40 | 4.00 | 26.51 | 200 | 4.27 | 33.41 | 3.99 | 26.52 | 154 | 0.35 |
| 246 | 4.22 | 33.56 | 3.53 | 26.64 | 250 | 4.22 | 33.58 | 3.46 | 26.66 | 141 | 0.42 |
| 320 | 4.45 | 33.90 | 1.46 | 26.89 | 300 | 4.35 | 33.80 | 2.17 | 26.82 | 127 | 0.49 |

PIONEER; June 29, 1958; 2341, 2230 GCT; 50°00'N, 180°00'; wind, 270°, 14 kt; weather, overcast; sea, moderate. 31

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.90 | 32.81 | - | 25.86 | 0 | 5.90 | 32.81 | | 25.86 | 215 | 0.00 |
| 10 | 6.32 | 32.80 | 6.94 | 25.80 | 10 | 6.32 | 32.80 | 6.94 | 25.80 | 221 | 0.02 |
| 24 | 6.31 | 32.80 | 6.91 | 25.80 | 20 | 6.31 | 32.80 | 6.91 | 25.80 | 221 | 0.04 |
| 48 | 4.62 | 32.94 | 7.12 | 26.11 | 30 | 6.30 | 32.84 | 6.98 | 25.83 | 218 | 0.07 |
| 73 | 4.05 | 32.98 | 7.20 | 26.20 | 50 | 4.58 | 32.94 | 7.13 | 26.11 | 191 | 0.11 |
| 97 | 3.43 | 33.01 | 7.19 | 26.28 | 75 | 3.98 | 32.97 | 7.28 | 26.20 | 183 | 0.15 |
| 121 | 3.32 | 33.37 | 5.10 | 26.58 | 100 | 3.41 | 33.06 | 6.93 | 26.32 | 171 | 0.20 |
| 145 | 3.30 | 33.68 | 2.91 | 26.83 | 150 | 3.27 | 33.69 | 2.83 | 26.84 | 123 | 0.27 |
| 193 | 3.21 | 33.82 | 2.06 | 26.95 | 200 | 3.30 | 33.85 | 1.84 | 26.96 | 112 | 0.33 |
| 241 | 3.60 | 33.98 | 0.95 | 27.04 | 250 | 3.56 | 33.99 | 0.94 | 27.05 | 104 | 0.38 |
| 290 | 3.43 | 34.05 | 0.87 | 27.11 | 300 | 3.44 | 34.06 | 0.83 | 27.12 | 98 | 0.44 |
| | | | | | 400 | 3.39 | 34.16 | 0.64 | 27.20 | 91 | 0.53 |
| 374 | 3.45 | 34.14 | 0.64 | 27.18 | 500 | 3.27 | 34.23 | 0.57 | 27.27 | 85 | 0.62 |
| 466 | 3.27 | 34.21 | 0.63 | 27.25 | 600 | 3.24 | 34.29 | 0.45 | 27.32 | 81 | 0.70 |
| 655 | 3.20 | 34.32 | 0.40 | 27.35 | 700 | 3.16 | 34.34 | 0.38 | 27.37 | 77 | 0.78 |
| 1000 | 2.67 | 34.43 | 0.53 | 27.48 | 800 | 3.04 | 34.38 | 0.37 | 27.41 | 73 | 0.85 |
| | | | | | 1000 | 2.67 | 34.43 | 0.53 | 27.48 | 67 | 0.99 |

SBL

MV PIONEER

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 32 | PIONEER; July 1, 1958; 0236 GCT; 50°19'N, 179°08'W; wind, 270°, 2 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | | |
| | 0 | 6.70 | 32.75 | - | 25.71 | 0 | 6.70 | 32.75 | | 25.71 | 229 | 0.00 |
| | 10 | 6.72 | 32.75 | 6.93 | 25.71 | 10 | 6.72 | 32.75 | 6.93 | 25.71 | 230 | 0.02 |
| | 25 | 6.58 | 32.75 | 7.03 | 25.73 | 20 | 6.68 | 32.75 | 7.02 | 25.71 | 229 | 0.05 |
| | 50 | 5.27 | 32.88 | 6.84 | 25.99 | 30 | 6.31 | 32.76 | 7.03 | 25.77 | 224 | 0.07 |
| | 75 | 4.06 | 33.21 | 6.20 | 26.38 | 50 | 5.27 | 32.88 | 6.84 | 25.99 | 203 | 0.11 |
| | 100 | 4.35 | 33.41 | 4.48 | 26.51 | 75 | 4.06 | 33.21 | 6.20 | 26.38 | 166 | 0.16 |
| | 124 | 4.15 | 33.58 | 3.53 | 26.66 | 100 | 4.35 | 33.41 | 4.48 | 26.51 | 154 | 0.20 |
| | 149 | 3.78 | 33.69 | 2.91 | 26.79 | 150 | 3.78 | 33.70 | 2.87 | 26.80 | 127 | 0.27 |
| | 198 | 3.80 | 33.91 | 1.21 | 26.96 | 200 | 3.81 | 33.92 | 1.18 | 26.97 | 111 | 0.33 |
| | 248 | 3.90 | 34.02 | 0.56 | 27.04 | 250 | 3.90 | 34.02 | 0.54 | 27.04 | 105 | 0.38 |
| | 322 | 3.80 | 34.07 | 0.40 | 27.09 | 300 | 3.86 | 34.07 | 0.35 | 27.08 | 101 | 0.43 |
| 33 | PIONEER; July 1, 1958; 0728 GCT; 50°38'N, 178°28'W; wind, 270°, 2 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | | |
| | 0 | 6.30 | 32.71 | - | 25.73 | 0 | 6.30 | 32.71 | | 25.73 | 227 | 0.00 |
| | 10 | 6.65 | 32.71 | 7.02 | 25.69 | 10 | 6.65 | 32.71 | 7.02 | 25.69 | 232 | 0.02 |
| | 25 | 6.57 | 32.71 | 6.99 | 25.70 | 20 | 6.60 | 32.71 | 6.99 | 25.69 | 231 | 0.05 |
| | 50 | 4.25 | 33.04 | 6.10 | 26.23 | 30 | 6.48 | 32.74 | 6.94 | 25.73 | 228 | 0.07 |
| | 75 | 3.42 | 33.19 | 6.48 | 26.43 | 50 | 4.25 | 33.04 | 6.10 | 26.23 | 180 | 0.11 |
| | 99 | 3.55 | 33.36 | 4.97 | 26.55 | 75 | 3.42 | 33.19 | 6.48 | 26.43 | 162 | 0.15 |
| | 124 | 3.86 | 33.58 | 3.44 | 26.69 | 100 | 3.57 | 33.37 | 4.91 | 26.56 | 150 | 0.19 |
| | 149 | 3.87 | 33.75 | 2.36 | 26.83 | 150 | 3.87 | 33.75 | 2.34 | 26.83 | 124 | 0.26 |
| | 198 | 3.74 | 33.88 | 1.43 | 26.94 | 200 | 3.74 | 33.88 | 1.40 | 26.94 | 114 | 0.32 |
| | 248 | 3.80 | 33.98 | 0.81 | 27.02 | 250 | 3.80 | 33.98 | 0.78 | 27.02 | 107 | 0.37 |
| | 322 | 3.72 | 34.07 | 0.53 | 27.10 | 300 | 3.76 | 34.05 | 0.53 | 27.08 | 102 | 0.43 |
| 34 | PIONEER; July 1, 1958; 2016 GCT; 51°32'N, 176°39'W; wind, 220°, 6 kt; weather, light fog; sea, calm. | | | | | | | | | | | |
| | 0 | 6.40 | 32.78 | - | 25.77 | 0 | 6.40 | 32.78 | | 25.77 | 223 | 0.00 |
| | 10 | 6.86 | 32.78 | 6.91 | 25.71 | 10 | 6.86 | 32.78 | 6.91 | 25.71 | 229 | 0.02 |
| | 25 | 6.72 | 32.81 | 6.85 | 25.75 | 20 | 6.84 | 32.79 | 6.92 | 25.72 | 228 | 0.05 |
| | 50 | 5.00 | 33.03 | 5.78 | 26.14 | 30 | 6.25 | 32.87 | 6.56 | 25.86 | 215 | 0.07 |
| | 75 | 4.90 | 33.05 | 5.71 | 26.16 | 50 | 5.00 | 33.03 | 5.78 | 26.14 | 189 | 0.11 |
| | 100 | 4.64 | 33.14 | 5.71 | 26.26 | 75 | 4.90 | 33.05 | 5.71 | 26.16 | 187 | 0.16 |
| | 125 | 4.51 | 33.19 | 5.50 | 26.32 | 100 | 4.64 | 33.14 | 5.71 | 26.26 | 177 | 0.20 |
| | 150 | 4.42 | 33.22 | 5.21 | 26.35 | 150 | 4.42 | 33.22 | 5.21 | 26.35 | 170 | 0.29 |
| | 199 | 4.46 | 33.31 | 5.06 | 26.42 | 200 | 4.46 | 33.31 | 5.06 | 26.42 | 164 | 0.37 |
| | 248 | 4.33 | 33.36 | 4.86 | 26.47 | 250 | 4.33 | 33.37 | 4.82 | 26.48 | 158 | 0.45 |
| | 298 | 4.30 | 33.46 | 4.30 | 26.55 | 300 | (4.30) | (33.46) | (4.30) | (26.55) | (152) | (0.53) |
| 35 | PIONEER; July 6, 1958; 0850, 0740 GCT; 51°17'N, 175°53'W; wind, 270°, 16 kt; weather, sky obscured; sea, moderate. | | | | | | | | | | | |
| | 0 | 6.90 | 32.65 | - | 25.61 | 0 | 6.90 | 32.65 | | 25.61 | 239 | 0.00 |
| | 10 | 7.40 | 32.66 | 6.73 | 25.55 | 10 | 7.40 | 32.66 | 6.73 | 25.55 | 245 | 0.02 |
| | 24 | 6.32 | 32.95 | 6.68 | 25.92 | 20 | 6.61 | 32.88 | 6.74 | 25.82 | 218 | 0.05 |
| | 49 | 4.87 | 33.25 | 5.20 | 26.33 | 30 | 5.86 | 33.04 | 6.19 | 26.04 | 198 | 0.07 |
| | 74 | 4.62 | 33.38 | 5.08 | 26.46 | 50 | 4.86 | 33.26 | 5.20 | 26.34 | 170 | 0.10 |
| | 98 | 4.45 | 33.45 | 4.51 | 26.53 | 75 | 4.61 | 33.38 | 5.06 | 26.46 | 159 | 0.15 |
| | 123 | 4.52 | 33.55 | 3.60 | 26.60 | 100 | 4.46 | 33.46 | 4.42 | 26.54 | 152 | 0.18 |
| | 147 | 4.47 | 33.60 | 3.24 | 26.65 | 150 | 4.47 | 33.62 | 3.12 | 26.66 | 140 | 0.26 |
| | 197 | 4.35 | 33.83 | 1.70 | 26.84 | 200 | 4.33 | 33.84 | 1.65 | 26.85 | 122 | 0.32 |
| | 246 | 4.08 | 33.94 | 0.97 | 26.96 | 250 | 4.07 | 33.95 | 0.94 | 26.97 | 112 | 0.38 |
| | 296 | 3.96 | 34.02 | 0.62 | 27.03 | 300 | 3.95 | 34.02 | 0.62 | 27.03 | 106 | 0.44 |
| | | | | | | 400 | 3.75 | 34.12 | 0.49 | 27.13 | 97 | 0.54 |
| | 388 | 3.77 | 34.11 | 0.50 | 27.12 | 500 | 3.54 | 34.20 | 0.40 | 27.22 | 90 | 0.63 |
| | 487 | 3.57 | 34.19 | 0.40 | 27.21 | 600 | 3.31 | 34.26 | 0.43 | 27.29 | 84 | 0.72 |
| | 683 | 3.14 | 34.31 | 0.45 | 27.34 | 700 | 3.11 | 34.32 | 0.45 | 27.35 | 78 | 0.80 |
| | 1031 | 2.70 | 34.42 | 0.56 | 27.47 | 800 | 2.95 | 34.36 | 0.48 | 27.40 | 74 | 0.88 |
| | | | | | | 1000 | 2.72 | 34.42 | 0.55 | 27.47 | 68 | 1.02 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; July 7, 1958; 0052, 0120 GCT; 50°49'N, 175°27'W; wind, 290°, 18 kt; weather, sky obscured; sea, slight. | | | | | | | | | | | 36 |
| 0 | 6.40 | 32.83 | - | 25.81 | 0 | 6.40 | 32.83 | | 25.81 | 219 | 0.00 |
| 9 | 6.73 | 32.84 | 6.72 | 25.78 | 10 | 6.63 | 32.86 | 6.74 | 25.81 | 220 | 0.02 |
| 23 | 5.58 | 33.09 | 6.75 | 26.12 | 20 | 5.77 | 33.05 | 6.80 | 26.06 | 196 | 0.04 |
| 47 | 5.04 | 33.18 | 5.36 | 26.25 | 30 | 5.40 | 33.11 | 6.26 | 26.16 | 187 | 0.06 |
| 70 | 4.72 | 33.32 | 4.78 | 26.40 | 50 | 4.98 | 33.20 | 5.30 | 26.27 | 176 | 0.10 |
| 85 | 4.68 | 33.39 | 4.37 | 26.46 | 75 | 4.71 | 33.34 | 4.67 | 26.42 | 163 | 0.14 |
| 116 | 4.46 | 33.67 | 2.74 | 26.70 | 100 | 4.56 | 33.54 | 3.47 | 26.59 | 146 | 0.18 |
| 163 | 4.39 | 33.81 | 1.93 | 26.82 | 150 | 4.42 | 33.78 | 2.15 | 26.79 | 128 | 0.25 |
| | | | | | 200 | 4.21 | 33.89 | 1.19 | 26.90 | 118 | 0.31 |
| 235 | 4.05 | 33.95 | 0.76 | 26.97 | 250 | 3.98 | 33.97 | 0.66 | 26.99 | 110 | 0.37 |
| 307 | 3.75 | 34.03 | 0.74 | 27.06 | 300 | 3.78 | 34.02 | 0.69 | 27.05 | 104 | 0.42 |
| PIONEER; July 7, 1958; 0729, 0623 GCT; 50°30'N, 175°00'W; wind, 270°, 16 kt; weather, slight drizzle; sea, slight. | | | | | | | | | | | 37 |
| 0 | 7.10 | 32.71 | - | 25.63 | 0 | 7.10 | 32.71 | | 25.63 | 237 | 0.00 |
| 10 | 7.68 | 32.71 | 6.61 | 25.55 | 10 | 7.68 | 32.71 | 6.61 | 25.55 | 245 | 0.02 |
| 25 | 6.84 | 32.81 | 6.91 | 25.74 | 20 | 7.14 | 32.78 | 6.84 | 25.68 | 233 | 0.05 |
| 49 | 5.14 | 32.98 | 6.79 | 26.08 | 30 | 6.45 | 32.85 | 6.94 | 25.82 | 219 | 0.07 |
| 73 | 3.88 | 33.12 | 5.98 | 26.33 | 50 | 5.06 | 32.99 | 6.75 | 26.10 | 193 | 0.11 |
| 97 | 3.85 | 33.29 | 5.16 | 26.46 | 75 | 3.88 | 33.13 | 5.92 | 26.33 | 170 | 0.16 |
| 121 | 3.88 | 33.49 | 4.03 | 26.62 | 100 | 3.87 | 33.32 | 5.00 | 26.49 | 156 | 0.20 |
| 145 | 3.55 | 33.65 | 3.38 | 26.78 | 150 | 3.51 | 33.67 | 3.28 | 26.80 | 127 | 0.27 |
| 196 | 3.27 | 33.80 | 2.46 | 26.93 | 200 | 3.28 | 33.81 | 2.39 | 26.93 | 114 | 0.33 |
| 243 | 3.36 | 33.90 | 1.74 | 27.00 | 250 | 3.37 | 33.91 | 1.68 | 27.00 | 108 | 0.38 |
| 292 | 3.41 | 33.96 | 1.37 | 27.04 | 300 | 3.41 | 33.97 | 1.32 | 27.05 | 104 | 0.44 |
| | | | | | 400 | 3.39 | 34.08 | 0.93 | 27.14 | 97 | 0.54 |
| 390 | 3.40 | 34.07 | 0.95 | 27.13 | 500 | 3.32 | 34.16 | 0.77 | 27.21 | 91 | 0.63 |
| 488 | 3.33 | 34.15 | 0.78 | 27.20 | 600 | 3.20 | 34.24 | 0.72 | 27.28 | 84 | 0.72 |
| 684 | 3.10 | 34.29 | 0.68 | 27.33 | 700 | 3.08 | 34.30 | 0.68 | 27.34 | 79 | 0.80 |
| 1028 | 2.60 | 34.41 | 0.68 | 27.47 | 800 | 2.95 | 34.35 | 0.66 | 27.39 | 75 | 0.88 |
| | | | | | 1000 | 2.65 | 34.41 | 0.67 | 27.47 | 68 | 1.02 |
| PIONEER; July 8, 1958; 0017 GCT; 50°00'N, 175°00'W; wind, 300°, 4 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 38 |
| 0 | 7.50 | 32.74 | - | 25.59 | 0 | 7.50 | 32.74 | | 25.59 | 240 | 0.00 |
| 10 | 7.32 | 32.74 | 6.79 | 25.62 | 10 | 7.32 | 32.74 | 6.79 | 25.62 | 238 | 0.02 |
| 24 | 7.20 | 32.74 | 6.78 | 25.64 | 20 | 7.29 | 32.73 | 6.76 | 25.62 | 238 | 0.05 |
| 48 | 5.75 | 32.89 | 7.00 | 25.94 | 30 | 6.86 | 32.78 | 6.84 | 25.71 | 229 | 0.07 |
| 73 | 3.98 | 33.04 | 7.11 | 26.25 | 50 | 5.57 | 32.90 | 7.02 | 25.97 | 205 | 0.11 |
| 97 | 3.25 | 33.15 | 6.90 | 26.41 | 75 | 3.90 | 33.05 | 7.10 | 26.27 | 176 | 0.16 |
| 121 | 3.10 | 33.21 | 6.65 | 26.47 | 100 | 3.22 | 33.15 | 6.93 | 26.41 | 163 | 0.20 |
| 145 | 3.23 | 33.39 | 5.25 | 26.60 | 150 | 3.23 | 33.44 | 4.93 | 26.64 | 141 | 0.28 |
| 194 | 3.25 | 33.78 | 2.81 | 26.91 | 200 | 3.26 | 33.79 | 2.71 | 26.92 | 116 | 0.34 |
| 242 | 3.32 | 33.86 | 2.09 | 26.97 | 250 | 3.33 | 33.87 | 1.99 | 26.98 | 111 | 0.40 |
| 316 | 3.39 | 33.98 | 1.41 | 27.06 | 300 | 3.38 | 33.95 | 1.51 | 27.03 | 106 | 0.46 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |

39 PIONEER; July 8, 1958; 0741, 0633 GCT; 49°30'N, 175°00'W; wind, 300°, 14 kt; weather, sky obscured; sea, smooth.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.60 | 32.83 | - | 25.79 | 0 | 6.60 | 32.83 | | 25.79 | 222 | 0.00 |
| 10 | 7.15 | 32.81 | 6.79 | 25.70 | 10 | 7.15 | 32.81 | 6.79 | 25.70 | 230 | 0.02 |
| 25 | 6.92 | 32.83 | 6.78 | 25.74 | 20 | 7.05 | 32.82 | 6.75 | 25.72 | 229 | 0.05 |
| 50 | 5.42 | 32.89 | 7.17 | 25.98 | 30 | 6.64 | 32.84 | 6.89 | 25.79 | 222 | 0.07 |
| 74 | 3.75 | 33.00 | 7.10 | 26.24 | 50 | 5.42 | 32.89 | 7.17 | 25.98 | 204 | 0.11 |
| 99 | 3.22 | 33.11 | 6.68 | 26.38 | 75 | 3.72 | 33.00 | 7.10 | 26.25 | 179 | 0.16 |
| 124 | 3.30 | 33.32 | 5.42 | 26.54 | 100 | 3.22 | 33.12 | 6.64 | 26.39 | 165 | 0.20 |
| 148 | 3.50 | 33.62 | 3.55 | 26.76 | 150 | 3.50 | 33.63 | 3.47 | 26.77 | 130 | 0.28 |
| 198 | 3.55 | 33.85 | 1.95 | 26.94 | 200 | 3.56 | 33.85 | 1.90 | 26.94 | 114 | 0.34 |
| 247 | 3.78 | 33.95 | 1.13 | 27.00 | 250 | 3.78 | 33.96 | 1.11 | 27.00 | 108 | 0.39 |
| 296 | 3.73 | 34.03 | 0.81 | 27.06 | 300 | 3.73 | 34.04 | 0.80 | 27.07 | 102 | 0.45 |
| | | | | | 400 | 3.62 | 34.14 | 0.57 | 27.16 | 94 | 0.54 |
| 395 | 3.63 | 34.14 | 0.57 | 27.16 | 500 | 3.46 | 34.21 | 0.50 | 27.23 | 88 | 0.64 |
| 494 | 3.46 | 34.21 | 0.50 | 27.23 | 600 | 3.39 | 34.24 | 0.49 | 27.26 | 86 | 0.72 |
| 792 | 3.15 | 34.31 | 0.52 | 27.34 | 700 | 3.29 | 34.27 | 0.49 | 27.30 | 84 | 0.81 |
| 1037 | 2.61 | 34.44 | 0.63 | 27.49 | 800 | 3.14 | 34.31 | 0.52 | 27.34 | 80 | 0.89 |
| | | | | | 1000 | 2.71 | 34.42 | 0.60 | 27.47 | 68 | 1.04 |

40 PIONEER; July 9, 1958; 0109 GCT; 49°00'N, 175°00'W; wind, 220°, 22 kt; weather, sky obscured; sea, slight.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.60 | 32.77 | - | 25.74 | 0 | 6.60 | 32.77 | | 25.74 | 226 | 0.00 |
| 9 | 7.28 | 32.76 | 6.71 | 25.64 | 10 | 7.30 | 32.76 | 6.71 | 25.64 | 236 | 0.02 |
| 23 | 7.22 | 32.77 | 6.78 | 25.66 | 20 | 7.29 | 32.76 | 6.75 | 25.64 | 236 | 0.05 |
| 47 | 5.63 | 32.89 | 7.11 | 25.95 | 30 | 6.78 | 32.80 | 6.91 | 25.74 | 227 | 0.07 |
| 71 | 3.78 | 33.03 | 7.15 | 26.27 | 50 | 5.32 | 32.91 | 7.12 | 26.01 | 202 | 0.11 |
| 95 | 3.44 | 33.14 | 7.04 | 26.38 | 75 | 3.71 | 33.05 | 7.17 | 26.29 | 175 | 0.16 |
| 119 | 3.24 | 33.25 | 6.45 | 26.49 | 100 | 3.37 | 33.14 | 7.09 | 26.39 | 165 | 0.20 |
| 143 | 3.36 | 33.65 | 3.79 | 26.80 | 150 | 3.31 | 33.68 | 3.58 | 26.83 | 124 | 0.27 |
| 191 | 3.20 | 33.82 | 2.55 | 26.95 | 200 | 3.26 | 33.84 | 2.34 | 26.96 | 112 | 0.33 |
| 239 | 3.45 | 33.93 | 1.61 | 27.01 | 250 | 3.48 | 33.95 | 1.46 | 27.03 | 106 | 0.39 |
| 312 | 3.51 | 34.05 | 0.99 | 27.10 | 300 | 3.53 | 34.03 | 1.02 | 27.08 | 101 | 0.44 |

41 PIONEER; July 9, 1958; 0733 GCT; 49°20'N, 175°41'W; wind, 270°, 15 kt; weather, sky obscured; sea, slight.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.50 | 32.88 | - | 25.84 | 0 | 6.50 | 32.88 | | 25.84 | 217 | 0.00 |
| 9 | 7.10 | 32.88 | 6.83 | 25.76 | 10 | 7.10 | 32.88 | 6.82 | 25.76 | 225 | 0.02 |
| 23 | 7.10 | 32.88 | 6.76 | 25.76 | 20 | 7.10 | 32.88 | 6.76 | 25.76 | 225 | 0.04 |
| 46 | 5.56 | 32.94 | 7.09 | 26.00 | 30 | 7.00 | 32.89 | 6.89 | 25.78 | 223 | 0.07 |
| 69 | 3.99 | 33.05 | 7.17 | 26.26 | 50 | 5.22 | 32.96 | 7.11 | 26.06 | 197 | 0.11 |
| 93 | 3.34 | 33.10 | 7.04 | 26.36 | 75 | 3.78 | 33.06 | 7.16 | 26.29 | 175 | 0.15 |
| 116 | 3.15 | 33.16 | 6.69 | 26.43 | 100 | 3.24 | 33.10 | 7.01 | 26.37 | 167 | 0.20 |
| 139 | 3.33 | 33.42 | 5.60 | 26.62 | 150 | 3.34 | 33.53 | 4.72 | 26.70 | 136 | 0.27 |
| 186 | 3.40 | 33.78 | 2.60 | 26.90 | 200 | 3.44 | 33.81 | 2.28 | 26.92 | 116 | 0.34 |
| 233 | 3.50 | 33.88 | 1.69 | 26.97 | 250 | 3.52 | 33.91 | 1.47 | 26.99 | 110 | 0.39 |
| 303 | 3.52 | 34.00 | 1.12 | 27.06 | 300 | 3.52 | 34.00 | 1.12 | 27.06 | 103 | 0.44 |

42 PIONEER; July 9, 1958; 1742 GCT; 49°49'N, 176°47'W; wind, 270°, 12 kt; weather, sky obscured; sea, smooth.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.30 | 32.85 | - | 25.84 | 0 | 6.30 | 32.85 | | 25.84 | 217 | 0.00 |
| 10 | 6.93 | 32.84 | 6.84 | 25.75 | 10 | 6.93 | 32.84 | 6.84 | 25.75 | 225 | 0.02 |
| 25 | 6.93 | 32.84 | 6.82 | 25.75 | 20 | 6.93 | 32.84 | 6.82 | 25.75 | 226 | 0.04 |
| 50 | 5.33 | 32.97 | 7.00 | 26.05 | 30 | 6.85 | 32.87 | 6.87 | 25.78 | 222 | 0.07 |
| 75 | 3.80 | 33.08 | 7.09 | 26.30 | 50 | 5.33 | 32.97 | 7.00 | 26.05 | 197 | 0.11 |
| 99 | 3.20 | 33.17 | 6.93 | 26.43 | 75 | 3.80 | 33.08 | 7.09 | 26.30 | 173 | 0.16 |
| 124 | 3.15 | 33.30 | 6.19 | 26.54 | 100 | 3.19 | 33.17 | 6.93 | 26.43 | 161 | 0.20 |
| 149 | 3.29 | 33.64 | 3.95 | 26.80 | 150 | 3.29 | 33.64 | 3.92 | 26.80 | 127 | 0.27 |
| 198 | 3.20 | 33.79 | 2.65 | 26.92 | 200 | 3.21 | 33.79 | 2.63 | 26.92 | 115 | 0.33 |
| 248 | 3.32 | 33.88 | 2.14 | 26.98 | 250 | 3.32 | 33.88 | 2.13 | 26.98 | 110 | 0.39 |
| 322 | 3.39 | 33.97 | 1.93 | 27.05 | 300 | 3.38 | 33.95 | 1.93 | 27.03 | 106 | 0.44 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; July 9, 1958; 2244 GCT; 50°07'N, 177°15'W; wind, 220°, 6 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 43 |
| 0 | 6.70 | 32.83 | - | 25.77 | 0 | 6.70 | 32.83 | | 25.77 | 223 | 0.00 |
| 10 | 7.18 | 32.82 | 6.89 | 25.70 | 10 | 7.18 | 32.82 | 6.89 | 25.70 | 230 | 0.02 |
| 24 | 7.14 | 32.83 | 6.87 | 25.71 | 20 | 7.15 | 32.82 | 6.85 | 25.71 | 230 | 0.05 |
| 48 | 4.99 | 33.08 | 7.17 | 26.18 | 30 | 6.80 | 32.91 | 6.99 | 25.82 | 219 | 0.07 |
| 72 | 3.92 | 33.13 | 6.99 | 26.33 | 50 | 4.88 | 33.08 | 7.15 | 26.19 | 184 | 0.11 |
| 97 | 3.35 | 33.16 | 7.11 | 26.41 | 75 | 3.83 | 33.12 | 7.11 | 26.33 | 171 | 0.15 |
| 121 | 3.15 | 33.45 | 5.30 | 26.66 | 100 | 3.31 | 33.20 | 6.88 | 26.44 | 160 | 0.19 |
| 146 | 3.25 | 33.72 | 3.52 | 26.86 | 150 | 3.24 | 33.73 | 3.43 | 26.87 | 120 | 0.26 |
| 195 | 3.21 | 33.83 | 2.52 | 26.96 | 200 | 3.22 | 33.84 | 2.44 | 26.96 | 112 | 0.32 |
| 244 | 3.32 | 33.92 | 1.88 | 27.02 | 250 | 3.33 | 33.93 | 1.81 | 27.02 | 106 | 0.38 |
| 318 | 3.40 | 34.00 | 1.36 | 27.07 | 300 | 3.39 | 33.99 | 1.43 | 27.07 | 103 | 0.43 |
| PIONEER; July 10, 1958; 0604, 0507 GCT; 50°22'N, 177°45'W; wind, 120°, 14 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 44 |
| 0 | 6.80 | 32.80 | - | 25.74 | 0 | 6.80 | 32.80 | | 25.74 | 227 | 0.00 |
| 10 | 7.12 | 32.80 | 6.94 | 25.69 | 10 | 7.12 | 32.80 | 6.94 | 25.69 | 231 | 0.02 |
| 25 | 7.02 | 32.80 | 6.98 | 25.71 | 20 | 7.10 | 32.80 | 6.97 | 25.70 | 231 | 0.05 |
| 50 | 4.43 | 32.95 | 6.93 | 26.14 | 30 | 6.50 | 32.83 | 6.99 | 25.80 | 221 | 0.07 |
| 75 | 3.45 | 33.12 | 6.57 | 26.37 | 50 | 4.43 | 32.95 | 6.93 | 26.14 | 189 | 0.11 |
| 100 | 3.56 | 33.49 | 4.40 | 26.65 | 75 | 3.45 | 33.12 | 6.57 | 26.37 | 167 | 0.16 |
| 125 | 3.62 | 33.72 | 3.05 | 26.83 | 100 | 3.56 | 33.49 | 4.40 | 26.65 | 140 | 0.19 |
| 150 | 4.00 | 33.85 | 1.58 | 26.89 | 150 | 4.00 | 33.85 | 1.58 | 26.89 | 118 | 0.26 |
| 200 | 3.92 | 33.97 | 0.91 | 27.00 | 200 | 3.92 | 33.97 | 0.91 | 27.00 | 109 | 0.32 |
| 249 | 3.85 | 34.02 | 0.68 | 27.04 | 250 | 3.85 | 34.02 | 0.68 | 27.04 | 104 | 0.37 |
| 299 | 3.80 | 34.09 | 0.52 | 27.11 | 300 | 3.80 | 34.09 | 0.52 | 27.11 | 99 | 0.42 |
| | | | | | 400 | 3.63 | 34.16 | 0.41 | 27.18 | 93 | 0.52 |
| 394 | 3.64 | 34.16 | 0.41 | 27.18 | 500 | 3.46 | 34.23 | 0.44 | 27.25 | 87 | 0.60 |
| 493 | 3.47 | 34.23 | 0.44 | 27.25 | 600 | 3.30 | 34.29 | 0.47 | 27.31 | 81 | 0.69 |
| 691 | 3.15 | 34.33 | 0.50 | 27.36 | 700 | 3.14 | 34.33 | 0.50 | 27.36 | 77 | 0.77 |
| 1036 | 2.58 | 34.45 | 0.63 | 27.51 | 800 | 2.97 | 34.38 | 0.54 | 27.42 | 73 | 0.84 |
| | | | | | 1000 | 2.64 | 34.44 | 0.62 | 27.49 | 66 | 0.98 |
| PIONEER; July 12, 1958; 0724, 0624 GCT; 50°59'N, 178°50'E; wind, 350°, 8 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | | | 45 |
| 0 | 6.70 | 32.75 | - | 25.71 | 0 | 6.70 | 32.75 | | 25.71 | 229 | 0.00 |
| 10 | 7.32 | 32.73 | 6.79 | 25.61 | 10 | 7.32 | 32.73 | 6.79 | 25.61 | 239 | 0.02 |
| 25 | 7.20 | 32.73 | 6.78 | 25.63 | 20 | 7.29 | 32.73 | 6.78 | 25.62 | 238 | 0.05 |
| 49 | 6.04 | 32.74 | 6.82 | 25.79 | 30 | 7.00 | 32.73 | 6.82 | 25.65 | 235 | 0.07 |
| 74 | 4.28 | 32.95 | 6.43 | 26.15 | 50 | 5.95 | 32.75 | 6.81 | 25.81 | 221 | 0.12 |
| 98 | 3.70 | 33.21 | 5.62 | 26.42 | 75 | 4.24 | 32.96 | 6.42 | 26.16 | 187 | 0.17 |
| 123 | 3.90 | 33.49 | 3.62 | 26.62 | 100 | 3.72 | 33.23 | 5.44 | 26.43 | 162 | 0.21 |
| 147 | 3.95 | 33.76 | 2.14 | 26.83 | 150 | 3.96 | 33.77 | 2.06 | 26.83 | 124 | 0.28 |
| 197 | 4.04 | 33.94 | 1.13 | 26.96 | 200 | 4.04 | 33.95 | 1.11 | 26.97 | 111 | 0.34 |
| 246 | 4.00 | 34.00 | 0.86 | 27.01 | 250 | 3.97 | 34.00 | 0.86 | 27.02 | 107 | 0.40 |
| 296 | 3.74 | 34.01 | 0.85 | 27.05 | 300 | 3.74 | 34.02 | 0.83 | 27.06 | 104 | 0.45 |
| | | | | | 400 | 3.67 | 34.13 | 0.47 | 27.15 | 96 | 0.55 |
| 394 | 3.68 | 34.13 | 0.47 | 27.15 | 500 | 3.51 | 34.18 | 0.43 | 27.21 | 91 | 0.64 |
| 492 | 3.52 | 34.18 | 0.43 | 27.20 | 600 | 3.34 | 34.24 | 0.45 | 27.27 | 86 | 0.73 |
| 689 | 3.19 | 34.28 | 0.47 | 27.32 | 700 | 3.17 | 34.28 | 0.47 | 27.32 | 81 | 0.81 |
| 1033 | 2.66 | 34.41 | 0.50 | 27.47 | 800 | 3.01 | 34.33 | 0.49 | 27.37 | 77 | 0.89 |
| | | | | | 1000 | 2.71 | 34.40 | 0.50 | 27.45 | 70 | 1.04 |

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 46 | PIONEER; July 13, 1958; 0110 GCT; 50°34'N, 178°00'E; wind, 240°, 16 kt; weather, sky obscured; sea, moderate. | | | | | | | | | | | |
| | 0 | 6.70 | 32.73 | - | 25.69 | 0 | 6.70 | 32.73 | | 25.69 | 231 | 0.00 |
| | 10 | 7.29 | 32.72 | 6.79 | 25.61 | 10 | 7.29 | 32.72 | 6.79 | 25.61 | 239 | 0.02 |
| | 24 | 7.20 | 32.72 | 6.78 | 25.62 | 20 | 7.29 | 32.72 | 6.78 | 25.61 | 239 | 0.05 |
| | 48 | 5.03 | 32.85 | 6.68 | 25.99 | 30 | 6.57 | 32.74 | 6.78 | 25.72 | 229 | 0.07 |
| | 72 | 3.80 | 33.12 | 6.10 | 26.33 | 50 | 4.89 | 32.88 | 6.62 | 26.03 | 199 | 0.11 |
| | 96 | 3.47 | 33.27 | 5.63 | 26.49 | 75 | 3.73 | 33.13 | 6.10 | 26.35 | 169 | 0.16 |
| | 120 | 3.63 | 33.49 | 4.01 | 26.65 | 100 | 3.48 | 33.31 | 5.35 | 26.52 | 153 | 0.20 |
| | 144 | 4.02 | 33.72 | 2.60 | 26.79 | 150 | 3.99 | 33.75 | 2.37 | 26.82 | 125 | 0.27 |
| | 192 | 3.84 | 33.89 | 1.24 | 26.94 | 200 | 3.82 | 33.90 | 1.18 | 26.95 | 113 | 0.33 |
| | 240 | 3.73 | 33.96 | 0.91 | 27.01 | 250 | 3.71 | 33.97 | 0.85 | 27.02 | 107 | 0.38 |
| | 313 | 3.66 | 34.07 | 0.58 | 27.10 | 300 | 3.66 | 34.05 | 0.63 | 27.09 | 101 | 0.44 |
| 47 | PIONEER; July 13, 1958; 0805, 0626 GCT; 50°18'N, 177°28'E; wind, 240°, 20 kt; weather, sky obscured; sea, rough. | | | | | | | | | | | |
| | 0 | 6.70 | 32.86 | - | 25.80 | 0 | 6.70 | 32.86 | | 25.80 | 221 | 0.00 |
| | 10 | 7.32 | 32.86 | 6.69 | 25.71 | 10 | 7.32 | 32.86 | 6.69 | 25.71 | 229 | 0.02 |
| | 24 | 7.26 | 32.86 | 6.87 | 25.72 | 20 | 7.30 | 32.86 | 6.82 | 25.72 | 229 | 0.04 |
| | 49 | 4.34 | 32.94 | 7.11 | 26.14 | 30 | 6.20 | 32.88 | 6.97 | 25.88 | 214 | 0.07 |
| | 73 | 3.43 | 33.03 | 6.91 | 26.30 | 50 | 4.29 | 32.94 | 7.12 | 26.14 | 188 | 0.11 |
| | 98 | 3.32 | 33.21 | 5.70 | 26.45 | 75 | 3.40 | 33.04 | 6.85 | 26.31 | 173 | 0.15 |
| | 122 | 3.66 | 33.55 | 3.36 | 26.69 | 100 | 3.35 | 33.24 | 5.48 | 26.47 | 157 | 0.19 |
| | 146 | 3.86 | 33.81 | 1.69 | 26.88 | 150 | 3.83 | 33.82 | 1.62 | 26.89 | 118 | 0.26 |
| | 195 | 3.62 | 33.94 | 1.01 | 27.00 | 200 | 3.62 | 33.95 | 0.97 | 27.01 | 107 | 0.32 |
| | 244 | 3.65 | 34.00 | 0.76 | 27.05 | 250 | 3.65 | 34.01 | 0.74 | 27.06 | 103 | 0.37 |
| | 293 | 3.67 | 34.07 | 0.58 | 27.10 | 300 | 3.67 | 34.08 | 0.57 | 27.11 | 99 | 0.42 |
| | | | | | | 400 | 3.58 | 34.15 | 0.44 | 27.17 | 93 | 0.52 |
| | 390 | 3.60 | 34.14 | 0.44 | 27.16 | 500 | 3.41 | 34.22 | 0.41 | 27.25 | 87 | 0.61 |
| | 488 | 3.43 | 34.21 | 0.41 | 27.24 | 600 | 3.23 | 34.27 | 0.41 | 27.30 | 82 | 0.69 |
| | 686 | 3.09 | 34.31 | 0.44 | 27.35 | 700 | 3.07 | 34.32 | 0.44 | 27.36 | 77 | 0.77 |
| | 1032 | 2.55 | 34.43 | 0.62 | 27.49 | 800 | 2.90 | 34.36 | 0.48 | 27.41 | 73 | 0.85 |
| | | | | | | 1000 | 2.60 | 34.42 | 0.59 | 27.48 | 67 | 0.99 |
| 48 | PIONEER; July 14, 1958; 0036 GCT; 49°58'N, 176°50'E; wind, 200°, 12 kt; weather, sky obscured; sea, slight. | | | | | | | | | | | |
| | 0 | 6.80 | 32.87 | - | 25.79 | 0 | 6.80 | 32.87 | | 25.79 | 221 | 0.00 |
| | 10 | 7.30 | 32.87 | 6.74 | 25.72 | 10 | 7.30 | 32.87 | 6.74 | 25.72 | 228 | 0.02 |
| | 25 | 7.28 | 32.87 | 6.83 | 25.73 | 20 | 7.29 | 32.87 | 6.80 | 25.73 | 228 | 0.04 |
| | 50 | 5.24 | 32.94 | 7.11 | 26.04 | 30 | 7.28 | 32.89 | 6.91 | 25.74 | 226 | 0.07 |
| | 75 | 4.07 | 32.97 | 7.07 | 26.19 | 50 | 5.24 | 32.94 | 7.11 | 26.04 | 198 | 0.11 |
| | 99 | 3.43 | 33.06 | 6.89 | 26.32 | 75 | 4.07 | 32.97 | 7.07 | 26.19 | 184 | 0.16 |
| | 124 | 3.16 | 33.24 | 5.67 | 26.49 | 100 | 3.41 | 33.06 | 6.87 | 26.32 | 171 | 0.20 |
| | 149 | 3.56 | 33.60 | 3.34 | 26.74 | 150 | 3.57 | 33.61 | 3.27 | 26.75 | 132 | 0.28 |
| | 198 | 3.75 | 33.93 | 1.02 | 26.98 | 200 | 3.75 | 33.94 | 1.00 | 26.99 | 109 | 0.34 |
| | 248 | 3.72 | 34.04 | 0.56 | 27.07 | 250 | 3.72 | 34.04 | 0.55 | 27.07 | 102 | 0.39 |
| | 322 | 3.63 | 34.13 | 0.46 | 27.15 | 300 | 3.66 | 34.11 | 0.41 | 27.14 | 96 | 0.44 |
| 49 | PIONEER; July 14, 1958; 0710, 0614 GCT; 49°39'N, 176°11'E; wind, 140°, 4 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | | |
| | 0 | 7.00 | 32.87 | - | 25.76 | 0 | 7.00 | 32.87 | | 25.76 | 224 | 0.00 |
| | 10 | 7.33 | 32.87 | 6.83 | 25.72 | 10 | 7.33 | 32.87 | 6.83 | 25.72 | 228 | 0.02 |
| | 25 | 7.30 | 32.88 | 6.80 | 25.73 | 20 | 7.32 | 32.87 | 6.80 | 25.72 | 228 | 0.05 |
| | 50 | 4.78 | 32.94 | 7.00 | 26.09 | 30 | 7.05 | 32.89 | 6.84 | 25.77 | 224 | 0.07 |
| | 75 | 3.49 | 33.02 | 7.17 | 26.28 | 50 | 4.78 | 32.94 | 7.00 | 26.09 | 193 | 0.11 |
| | 99 | 3.34 | 33.26 | 5.42 | 26.49 | 75 | 3.49 | 33.02 | 7.17 | 26.28 | 175 | 0.16 |
| | 124 | 3.79 | 33.64 | 2.88 | 26.75 | 100 | 3.37 | 33.28 | 5.30 | 26.50 | 154 | 0.20 |
| | 148 | 3.82 | 33.80 | 1.76 | 26.87 | 150 | 3.81 | 33.81 | 1.71 | 26.88 | 119 | 0.27 |
| | 198 | 3.71 | 33.94 | 0.95 | 26.99 | 200 | 3.71 | 33.94 | 0.93 | 26.99 | 109 | 0.32 |
| | 247 | 3.75 | 34.03 | 0.60 | 27.06 | 250 | 3.75 | 34.03 | 0.60 | 27.06 | 103 | 0.38 |
| | 321 | 3.66 | 34.10 | 0.52 | 27.13 | 300 | 3.69 | 34.08 | 0.54 | 27.11 | 99 | 0.43 |
| | | | | | | 400 | 3.47 | 34.18 | 0.48 | 27.21 | 90 | 0.52 |
| | 394 | 3.48 | 34.18 | 0.49 | 27.21 | 500 | 3.31 | 34.25 | 0.39 | 27.28 | 84 | 0.61 |
| | 493 | 3.32 | 34.25 | 0.39 | 27.28 | 600 | 3.14 | 34.31 | 0.43 | 27.34 | 78 | 0.69 |
| | 690 | 3.00 | 34.35 | 0.46 | 27.39 | 700 | 2.98 | 34.35 | 0.46 | 27.39 | 74 | 0.76 |
| | 1034 | 2.48 | 34.46 | 0.67 | 27.52 | 800 | 2.83 | 34.39 | 0.52 | 27.44 | 70 | 0.84 |
| | | | | | | 1000 | 2.53 | 34.45 | 0.65 | 27.51 | 64 | 0.97 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; July 15, 1958; 0106 GCT; 49°18'N, 175°37'E; wind, 150°, 8 kt; weather, sky obscured; sea, slight. | | | | | | | | | | | 50 |
| 0 | 7.20 | 32.95 | - | 25.80 | 0 | 7.20 | 32.95 | | 25.80 | 220 | 0.00 |
| 10 | 7.50 | 32.89 | 6.72 | 25.71 | 10 | 7.50 | 32.89 | 6.72 | 25.71 | 229 | 0.02 |
| 24 | 7.37 | 32.89 | 6.84 | 25.73 | 20 | 7.42 | 32.89 | 6.80 | 25.72 | 228 | 0.04 |
| 48 | 4.98 | 32.96 | 7.17 | 26.08 | 30 | 7.30 | 32.91 | 6.96 | 25.76 | 225 | 0.07 |
| 72 | 4.08 | 32.99 | 7.16 | 26.20 | 50 | 4.90 | 32.96 | 7.22 | 26.09 | 193 | 0.11 |
| 96 | 3.44 | 33.20 | 5.70 | 26.43 | 75 | 3.95 | 33.01 | 7.04 | 26.23 | 180 | 0.16 |
| 120 | 3.72 | 33.59 | 3.05 | 26.72 | 100 | 3.50 | 33.28 | 5.15 | 26.49 | 156 | 0.20 |
| 144 | 3.76 | 33.78 | 1.90 | 26.86 | 150 | 3.77 | 33.81 | 1.69 | 26.89 | 119 | 0.27 |
| 192 | 3.84 | 33.96 | 0.66 | 27.00 | 200 | 3.85 | 33.98 | 0.63 | 27.01 | 107 | 0.32 |
| 240 | 3.84 | 34.04 | 0.53 | 27.06 | 250 | 3.83 | 34.05 | 0.52 | 27.07 | 102 | 0.38 |
| 312 | 3.65 | 34.10 | 0.50 | 27.13 | 300 | 3.70 | 34.10 | 0.49 | 27.12 | 97 | 0.43 |
| PIONEER; July 15, 1958; 0814, 0710 GCT; 49°00'N, 175°00'E; wind, 140°, 8 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | | 51 |
| 0 | 7.20 | 32.87 | - | 25.74 | 0 | 7.20 | 32.87 | | 25.74 | 226 | 0.00 |
| 10 | 7.75 | 32.86 | 6.66 | 25.65 | 10 | 7.75 | 32.86 | 6.66 | 25.65 | 235 | 0.02 |
| 24 | 7.33 | 32.84 | 6.72 | 25.70 | 20 | 7.54 | 32.84 | 6.71 | 25.67 | 234 | 0.05 |
| 49 | 4.38 | 32.98 | 6.78 | 26.17 | 30 | 6.43 | 32.88 | 6.73 | 25.85 | 216 | 0.07 |
| 74 | 3.58 | 33.03 | 6.89 | 26.28 | 50 | 4.34 | 32.98 | 6.80 | 26.17 | 186 | 0.11 |
| 98 | 3.39 | 33.15 | 6.13 | 26.40 | 75 | 3.56 | 33.03 | 6.90 | 26.29 | 175 | 0.15 |
| 123 | 3.80 | 33.64 | 2.93 | 26.75 | 100 | 3.44 | 33.20 | 5.81 | 26.43 | 161 | 0.20 |
| 147 | 3.86 | 33.88 | 1.36 | 26.93 | 150 | 3.85 | 33.88 | 1.31 | 26.93 | 114 | 0.26 |
| 196 | 3.78 | 33.96 | 0.81 | 27.00 | 200 | 3.78 | 33.97 | 0.78 | 27.01 | 107 | 0.32 |
| 245 | 3.73 | 34.05 | 0.62 | 27.08 | 250 | 3.73 | 34.05 | 0.60 | 27.08 | 101 | 0.37 |
| 294 | 3.68 | 34.08 | 0.50 | 27.11 | 300 | 3.67 | 34.09 | 0.50 | 27.12 | 98 | 0.42 |
| | | | | | 400 | 3.52 | 34.19 | 0.45 | 27.21 | 90 | 0.52 |
| 392 | 3.53 | 34.19 | 0.46 | 27.21 | 500 | 3.37 | 34.24 | 0.40 | 27.27 | 85 | 0.60 |
| 490 | 3.39 | 34.24 | 0.39 | 27.26 | 600 | 3.20 | 34.29 | 0.45 | 27.32 | 80 | 0.68 |
| 687 | 3.06 | 34.32 | 0.49 | 27.36 | 700 | 3.04 | 34.32 | 0.49 | 27.36 | 77 | 0.76 |
| 1030 | 2.55 | 34.44 | 0.57 | 27.50 | 800 | 2.88 | 34.36 | 0.54 | 27.41 | 73 | 0.84 |
| | | | | | 1000 | 2.59 | 34.43 | 0.57 | 27.49 | 66 | 0.98 |
| PIONEER; July 16, 1958; 0036 GCT; 49°30'N, 174°58'E; wind, 140°, 10 kt; weather, slight drizzle; sea, slight. | | | | | | | | | | | 52 |
| 0 | 7.20 | 32.80 | - | 25.68 | 0 | 7.20 | 32.80 | | 25.68 | 232 | 0.00 |
| 10 | 7.69 | 32.80 | 6.53 | 25.61 | 10 | 7.69 | 32.80 | 6.53 | 25.61 | 238 | 0.02 |
| 25 | 7.44 | 32.80 | 6.82 | 25.65 | 20 | 7.63 | 32.79 | 6.74 | 25.62 | 238 | 0.05 |
| 49 | 4.96 | 32.94 | 6.93 | 26.07 | 30 | 6.81 | 32.83 | 6.89 | 25.76 | 225 | 0.07 |
| 74 | 3.80 | 33.09 | 6.45 | 26.31 | 50 | 4.89 | 32.94 | 6.93 | 26.08 | 195 | 0.11 |
| 98 | 3.70 | 33.37 | 4.91 | 26.54 | 75 | 3.79 | 33.10 | 6.40 | 26.32 | 172 | 0.16 |
| 123 | 3.98 | 33.69 | 2.79 | 26.77 | 100 | 3.73 | 33.40 | 4.69 | 26.56 | 149 | 0.20 |
| 147 | 3.95 | 33.83 | 1.78 | 26.88 | 150 | 3.94 | 33.84 | 1.72 | 26.89 | 118 | 0.27 |
| 196 | 3.82 | 33.97 | 1.03 | 27.01 | 200 | 3.83 | 33.97 | 1.00 | 27.01 | 108 | 0.32 |
| 245 | 3.84 | 34.01 | 0.71 | 27.04 | 250 | 3.83 | 34.01 | 0.68 | 27.04 | 105 | 0.38 |
| 319 | 3.53 | 34.05 | 0.67 | 27.10 | 300 | 3.65 | 34.04 | 0.63 | 27.08 | 101 | 0.43 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 53 | PIONEER; July 16, 1958; 0822, 0654 GCT; 50°00'N, 175°00'E; wind, 140°, 20 kt; weather, sky obscured; sea, rough. | | | | | | | | | | |
| 0 | 7.00 | 32.82 | - | 25.73 | 0 | 7.00 | 32.82 | | 25.73 | 228 | 0.00 |
| 10 | 7.58 | 32.81 | 6.78 | 25.64 | 10 | 7.58 | 32.81 | 6.78 | 25.64 | 236 | 0.02 |
| 25 | 7.24 | 32.85 | 6.85 | 25.72 | 20 | 7.42 | 32.83 | 6.83 | 25.68 | 233 | 0.05 |
| 49 | 5.54 | 33.01 | 6.84 | 26.06 | 30 | 6.87 | 32.89 | 6.87 | 25.80 | 221 | 0.07 |
| 74 | 4.00 | 33.04 | 6.66 | 26.25 | 50 | 5.46 | 33.01 | 6.83 | 26.07 | 196 | 0.11 |
| 112 | 3.47 | 33.11 | 6.43 | 26.36 | 75 | 3.97 | 33.04 | 6.66 | 26.25 | 178 | 0.16 |
| 122 | 3.64 | 33.61 | 3.30 | 26.74 | 100 | 3.47 | 33.08 | 6.52 | 26.33 | 170 | 0.20 |
| 159 | 3.90 | 33.86 | 1.42 | 26.91 | 150 | 3.87 | 33.81 | 1.74 | 26.88 | 120 | 0.28 |
| 197 | 3.80 | 33.95 | 1.14 | 26.99 | 200 | 3.79 | 33.95 | 1.13 | 26.99 | 109 | 0.33 |
| | | | | | 250 | 3.71 | 33.99 | 0.97 | 27.03 | 105 | 0.39 |
| 392 | 3.50 | 34.12 | 0.68 | 27.16 | 300 | 3.63 | 34.03 | 0.85 | 27.07 | 102 | 0.44 |
| 490 | 3.37 | 34.22 | 0.62 | 27.25 | 400 | 3.49 | 34.13 | 0.68 | 27.17 | 94 | 0.54 |
| 686 | 3.14 | 34.33 | 0.45 | 27.36 | 500 | 3.36 | 34.23 | 0.60 | 27.26 | 86 | 0.63 |
| 1032 | 2.59 | 34.42 | 0.57 | 27.48 | 600 | 3.25 | 34.29 | 0.50 | 27.32 | 81 | 0.71 |
| | | | | | 700 | 3.12 | 34.34 | 0.45 | 27.37 | 76 | 0.79 |
| | | | | | 800 | 2.98 | 34.37 | 0.43 | 27.41 | 73 | 0.86 |
| | | | | | 1000 | 2.65 | 34.42 | 0.54 | 27.48 | 67 | 1.00 |
| 54 | PIONEER; July 17, 1958; 0128 GCT; 50°32'N, 174°58'E; wind, 100°, 8 kt; weather, sky obscured; sea, slight. | | | | | | | | | | |
| 0 | 7.30 | 32.82 | - | 25.68 | 0 | 7.30 | 32.82 | | 25.68 | 232 | 0.00 |
| 10 | 7.79 | 32.78 | 6.65 | 25.58 | 10 | 7.79 | 32.78 | 6.65 | 25.58 | 241 | 0.02 |
| 24 | 7.45 | 32.83 | 6.76 | 25.67 | 20 | 7.61 | 32.81 | 6.75 | 25.63 | 237 | 0.05 |
| 48 | 5.54 | 33.06 | 6.37 | 26.10 | 30 | 6.94 | 32.90 | 6.68 | 25.80 | 221 | 0.07 |
| 73 | 3.95 | 33.13 | 5.81 | 26.33 | 50 | 5.36 | 33.06 | 6.33 | 26.12 | 191 | 0.11 |
| 97 | 3.88 | 33.30 | 5.24 | 26.47 | 75 | 3.94 | 33.14 | 5.80 | 26.34 | 170 | 0.16 |
| 121 | 3.90 | 33.51 | 3.79 | 26.63 | 100 | 3.88 | 33.33 | 5.01 | 26.49 | 156 | 0.20 |
| 145 | 3.91 | 33.68 | 3.36 | 26.77 | 150 | 3.90 | 33.71 | 3.09 | 26.79 | 128 | 0.27 |
| 193 | 3.82 | 33.87 | 1.48 | 26.93 | 200 | 3.81 | 33.88 | 1.41 | 26.94 | 114 | 0.33 |
| 241 | 3.78 | 33.94 | 1.08 | 26.99 | 250 | 3.77 | 33.95 | 1.02 | 27.00 | 109 | 0.38 |
| 314 | 3.70 | 34.04 | 0.74 | 27.08 | 300 | 3.72 | 34.02 | 0.77 | 27.06 | 104 | 0.44 |
| 55 | PIONEER; July 17, 1958; 0822, 0722 GCT; 51°00'N, 175°00'E; wind, 090°, 12 kt; weather, sky obscured; sea, slight. | | | | | | | | | | |
| 0 | 7.20 | 32.71 | - | 25.61 | 0 | 7.20 | 32.71 | | 25.61 | 238 | 0.00 |
| 10 | 7.73 | 32.75 | 6.62 | 25.57 | 10 | 7.73 | 32.75 | 6.62 | 25.57 | 243 | 0.02 |
| 25 | 7.40 | 32.78 | 6.72 | 25.64 | 20 | 7.55 | 32.77 | 6.69 | 25.61 | 239 | 0.05 |
| 49 | 6.11 | 32.83 | 6.78 | 25.85 | 30 | 7.19 | 32.78 | 6.78 | 25.67 | 234 | 0.07 |
| 74 | 4.02 | 33.03 | 6.24 | 26.24 | 50 | 5.99 | 32.84 | 6.75 | 25.87 | 214 | 0.12 |
| 98 | 3.62 | 33.28 | 5.54 | 26.48 | 75 | 3.99 | 33.04 | 6.23 | 26.25 | 178 | 0.17 |
| 123 | 3.99 | 33.51 | 3.79 | 26.63 | 100 | 3.66 | 33.30 | 5.35 | 26.49 | 156 | 0.21 |
| 147 | 4.14 | 33.63 | 3.29 | 26.71 | 150 | 4.12 | 33.64 | 3.18 | 26.72 | 135 | 0.28 |
| 196 | 3.86 | 33.82 | 1.87 | 26.88 | 200 | 3.85 | 33.84 | 1.79 | 26.90 | 118 | 0.34 |
| 208 | 3.82 | 33.88 | 1.65 | 26.94 | 250 | 3.75 | 33.89 | 1.27 | 26.95 | 113 | 0.40 |
| 248 | 3.75 | 33.89 | 1.28 | 26.95 | 300 | 3.76 | 33.97 | 0.96 | 27.01 | 108 | 0.46 |
| | | | | | 400 | 3.68 | 34.08 | 0.68 | 27.11 | 100 | 0.56 |
| 386 | 3.71 | 34.07 | 0.67 | 27.10 | 500 | 3.54 | 34.12 | 0.68 | 27.15 | 96 | 0.66 |
| 482 | 3.55 | 34.11 | 0.71 | 27.15 | 600 | 3.45 | 34.19 | 0.60 | 27.22 | 90 | 0.75 |
| 675 | 3.38 | 34.23 | 0.56 | 27.26 | 700 | 3.35 | 34.24 | 0.55 | 27.27 | 86 | 0.84 |
| 1014 | 2.96 | 34.37 | 0.53 | 27.41 | 800 | 3.24 | 34.29 | 0.52 | 27.32 | 82 | 0.92 |
| | | | | | 1000 | 2.98 | 34.37 | 0.53 | 27.41 | 75 | 1.08 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| PIONEER; July 18, 1958; 0107 GCT; 51°33'N, 175°00'E; wind, 360°, 2 kt; weather, overcast; sea, calm. | | | | | | | | | | | 56 |
| 0 | 7.60 | 32.79 | - | 25.62 | 0 | 7.60 | 32.79 | | 25.62 | 238 | 0.00 |
| 10 | 7.38 | 32.80 | 6.73 | 25.66 | 10 | 7.38 | 32.80 | 6.73 | 25.66 | 234 | 0.02 |
| 24 | 6.98 | 32.91 | 6.80 | 25.80 | 20 | 7.13 | 32.88 | 6.79 | 25.76 | 225 | 0.05 |
| 49 | 5.45 | 33.11 | 6.72 | 26.15 | 30 | 6.55 | 32.96 | 6.91 | 25.90 | 212 | 0.07 |
| 74 | 4.66 | 33.29 | 5.25 | 26.38 | 50 | 5.41 | 33.12 | 6.64 | 26.16 | 187 | 0.11 |
| 98 | 4.50 | 33.34 | 4.93 | 26.44 | 75 | 4.65 | 33.29 | 5.24 | 26.38 | 166 | 0.15 |
| 123 | 4.34 | 33.46 | 4.35 | 26.55 | 100 | 4.49 | 33.35 | 4.86 | 26.45 | 160 | 0.19 |
| 147 | 4.08 | 33.49 | 4.20 | 26.60 | 150 | 4.07 | 33.50 | 4.13 | 26.61 | 145 | 0.27 |
| 196 | 4.00 | 33.64 | 3.33 | 26.73 | 200 | 4.00 | 33.64 | 3.29 | 26.73 | 134 | 0.34 |
| 245 | 4.01 | 33.71 | 2.84 | 26.78 | 250 | 4.01 | 33.72 | 2.79 | 26.79 | 129 | 0.41 |
| 319 | 3.98 | 33.88 | 1.74 | 26.92 | 300 | 3.99 | 33.83 | 2.06 | 26.88 | 121 | 0.47 |
| PIONEER; July 18, 1958; 0638 GCT; 52°00'N, 175°00'E; wind, 020°, 6 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 57 |
| 0 | 7.20 | 33.03 | - | 25.86 | 0 | 7.20 | 33.03 | | 25.86 | 215 | 0.00 |
| 10 | 7.61 | 33.02 | 6.69 | 25.80 | 10 | 7.61 | 33.02 | 6.69 | 25.80 | 221 | 0.02 |
| 25 | 6.58 | 33.02 | 6.85 | 25.94 | 20 | 6.92 | 33.01 | 6.83 | 25.89 | 213 | 0.04 |
| 50 | 4.92 | 33.26 | 6.43 | 26.33 | 30 | 6.17 | 33.08 | 6.78 | 26.04 | 198 | 0.06 |
| 75 | 4.20 | 33.31 | 5.87 | 26.45 | 50 | 4.92 | 33.26 | 6.43 | 26.33 | 171 | 0.10 |
| 99 | 4.15 | 33.35 | 5.41 | 26.48 | 75 | 4.20 | 33.31 | 5.87 | 26.45 | 160 | 0.14 |
| 124 | 3.98 | 33.36 | 5.29 | 26.51 | 100 | 4.14 | 33.35 | 5.41 | 26.48 | 156 | 0.18 |
| 149 | 3.92 | 33.39 | 4.98 | 26.54 | 150 | 3.92 | 33.39 | 4.95 | 26.54 | 152 | 0.26 |
| 199 | 3.92 | 33.60 | 3.65 | 26.70 | 200 | 3.92 | 33.60 | 3.63 | 26.70 | 136 | 0.33 |
| 248 | 3.92 | 33.76 | 2.84 | 26.83 | 250 | 3.92 | 33.77 | 2.86 | 26.84 | 124 | 0.40 |
| 298 | 3.88 | 33.85 | 3.02 | 26.91 | 300 | (3.88) | (33.85) | (3.02) | (26.91) | (118) | (0.46) |
| PIONEER; July 19, 1958; 0114 GCT; 52°34'N, 175°00'E; wind, 020°, 2 kt; weather, cloudy; sea, smooth. | | | | | | | | | | | 58 |
| 0 | 7.80 | 33.02 | - | 25.77 | 0 | 7.80 | 33.02 | | 25.77 | 223 | 0.00 |
| 10 | 7.46 | 32.94 | 6.92 | 25.76 | 10 | 7.46 | 32.94 | 6.92 | 25.76 | 225 | 0.02 |
| 24 | 6.86 | 32.97 | 6.94 | 25.86 | 20 | 7.05 | 32.96 | 6.97 | 25.83 | 218 | 0.04 |
| 49 | 5.36 | 33.11 | 6.32 | 26.16 | 30 | 6.40 | 33.01 | 6.78 | 25.95 | 206 | 0.06 |
| 73 | 4.92 | 33.21 | 5.94 | 26.29 | 50 | 5.35 | 33.11 | 6.31 | 26.16 | 187 | 0.10 |
| 98 | 4.26 | 33.33 | 5.25 | 26.46 | 75 | 4.85 | 33.22 | 5.87 | 26.30 | 173 | 0.15 |
| 123 | 4.20 | 33.39 | 4.96 | 26.51 | 100 | 4.26 | 33.34 | 5.23 | 26.46 | 158 | 0.19 |
| 147 | 4.12 | 33.41 | 4.74 | 26.53 | 150 | 4.10 | 33.42 | 4.67 | 26.54 | 151 | 0.27 |
| 196 | 3.94 | 33.58 | 3.66 | 26.69 | 200 | 3.94 | 33.59 | 3.58 | 26.69 | 137 | 0.34 |
| 246 | 3.95 | 33.72 | 2.76 | 26.80 | 250 | 3.95 | 33.73 | 2.69 | 26.80 | 127 | 0.40 |
| 320 | 3.84 | 33.90 | 1.78 | 26.95 | 300 | 3.88 | 33.85 | 2.00 | 26.91 | 118 | 0.47 |
| PIONEER; July 19, 1958; 0735, 0643 GCT; 53°00'N, 175°00'E; wind, 040°, 2 kt; weather, overcast; sea, calm. | | | | | | | | | | | 59 |
| 0 | 8.40 | 33.09 | - | 25.74 | 0 | 8.40 | 33.09 | | 25.74 | 226 | 0.00 |
| 10 | 7.61 | 33.08 | 6.85 | 25.85 | 10 | 7.61 | 33.08 | 6.85 | 25.85 | 216 | 0.02 |
| 24 | 6.82 | 33.09 | 6.97 | 25.96 | 20 | 7.08 | 33.08 | 6.97 | 25.92 | 210 | 0.04 |
| 49 | 4.68 | 33.19 | 6.33 | 26.30 | 30 | 6.14 | 33.12 | 6.80 | 26.07 | 195 | 0.06 |
| 74 | 4.36 | 33.23 | 5.82 | 26.37 | 50 | 4.68 | 33.19 | 6.28 | 26.30 | 174 | 0.10 |
| 98 | 3.50 | 33.26 | 6.29 | 26.47 | 75 | 4.30 | 33.23 | 5.87 | 26.37 | 167 | 0.14 |
| 123 | 3.75 | 33.37 | 5.22 | 26.54 | 100 | 3.52 | 33.27 | 6.20 | 26.48 | 157 | 0.18 |
| 147 | 3.97 | 33.47 | 4.39 | 26.60 | 150 | 3.96 | 33.47 | 4.37 | 26.60 | 146 | 0.26 |
| 196 | 3.88 | 33.55 | 3.80 | 26.67 | 200 | 3.90 | 33.57 | 3.72 | 26.68 | 138 | 0.33 |
| 245 | 4.02 | 33.72 | 2.81 | 26.79 | 250 | 4.01 | 33.74 | 2.68 | 26.81 | 127 | 0.40 |
| 295 | 3.96 | 33.86 | 1.72 | 26.91 | 300 | 3.95 | 33.87 | 1.68 | 26.92 | 117 | 0.46 |
| | | | | | 400 | 3.80 | 34.00 | 1.02 | 27.03 | 107 | 0.57 |
| 392 | 3.82 | 33.99 | 1.04 | 27.02 | 500 | 3.65 | 34.07 | 0.81 | 27.10 | 101 | 0.67 |
| 489 | 3.66 | 34.06 | 0.83 | 27.10 | 600 | 3.58 | 34.12 | 0.66 | 27.15 | 97 | 0.77 |
| 687 | 3.50 | 34.17 | 0.57 | 27.20 | 700 | 3.49 | 34.18 | 0.56 | 27.21 | 92 | 0.87 |
| 1029 | 3.04 | 34.33 | 0.50 | 27.37 | 800 | 3.37 | 34.23 | 0.49 | 27.26 | 88 | 0.96 |
| | | | | | 1000 | 3.09 | 34.32 | 0.49 | 27.36 | 80 | 1.12 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | δ cl/ton | ΔD dyn m |
| 60 | PIONEER; July 20, 1958; 0109 GCT; 53°30'N, 175°00'E; wind, 160°, 4 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 8.00 | 33.04 | - | 25.76 | 0 | 8.00 | 33.04 | | 25.76 | 225 | 0.00 |
| 10 | 7.79 | 33.02 | 6.81 | 25.77 | 10 | 7.79 | 33.02 | 6.81 | 25.77 | 223 | 0.02 |
| 24 | 6.29 | 33.06 | 6.85 | 26.01 | 20 | 6.66 | 33.05 | 6.87 | 25.95 | 206 | 0.04 |
| 49 | 5.12 | 33.14 | 6.45 | 26.21 | 30 | 6.02 | 33.08 | 6.70 | 26.06 | 196 | 0.06 |
| 73 | 3.92 | 33.17 | 6.72 | 26.36 | 50 | 5.05 | 33.14 | 6.47 | 26.22 | 181 | 0.10 |
| 98 | 3.58 | 33.22 | 6.27 | 26.44 | 75 | 3.88 | 33.17 | 6.69 | 26.37 | 167 | 0.14 |
| 123 | 3.58 | 33.29 | 5.68 | 26.49 | 100 | 3.57 | 33.22 | 6.20 | 26.44 | 161 | 0.19 |
| 147 | 3.75 | 33.39 | 5.53 | 26.55 | 150 | 3.78 | 33.40 | 5.42 | 26.56 | 150 | 0.26 |
| 196 | 4.05 | 33.53 | 3.94 | 26.64 | 200 | 4.04 | 33.54 | 3.86 | 26.64 | 142 | 0.34 |
| 245 | 3.99 | 33.66 | 3.04 | 26.74 | 250 | 3.99 | 33.67 | 2.95 | 26.75 | 132 | 0.41 |
| 319 | 3.97 | 33.86 | 1.69 | 26.91 | 300 | 3.97 | 33.81 | 2.04 | 26.87 | 122 | 0.47 |
| 61 | PIONEER; July 20, 1958; 0819, 0720 GCT; 53°15'N, 175°45'E; wind, 220°, 3 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 7.60 | 33.05 | - | 25.82 | 0 | 7.60 | 33.05 | | 25.82 | 218 | 0.00 |
| 10 | 7.72 | 33.04 | 6.87 | 25.80 | 10 | 7.72 | 33.04 | 6.87 | 25.80 | 221 | 0.02 |
| 25 | 5.84 | 33.08 | 7.09 | 26.08 | 20 | 6.41 | 33.07 | 7.04 | 26.00 | 202 | 0.04 |
| 49 | 3.88 | 33.14 | 6.85 | 26.34 | 30 | 5.30 | 33.09 | 7.04 | 26.15 | 188 | 0.06 |
| 74 | 3.50 | 33.19 | 6.57 | 26.42 | 50 | 3.86 | 33.14 | 6.84 | 26.34 | 169 | 0.10 |
| 99 | 3.45 | 33.24 | 6.04 | 26.46 | 75 | 3.49 | 33.19 | 6.55 | 26.42 | 162 | 0.14 |
| 123 | 3.56 | 33.33 | 5.41 | 26.52 | 100 | 3.46 | 33.25 | 6.00 | 26.47 | 158 | 0.18 |
| 148 | 3.50 | 33.35 | 5.31 | 26.55 | 150 | 3.51 | 33.36 | 5.24 | 26.55 | 150 | 0.26 |
| 197 | 3.80 | 33.53 | 3.82 | 26.66 | 200 | 3.82 | 33.55 | 3.72 | 26.67 | 139 | 0.33 |
| 246 | 4.02 | 33.74 | 2.49 | 26.81 | 250 | 4.02 | 33.75 | 2.42 | 26.81 | 126 | 0.39 |
| 295 | 3.98 | 33.85 | 1.75 | 26.90 | 300 | 3.97 | 33.86 | 1.71 | 26.91 | 118 | 0.46 |
| | | | | | 400 | 3.81 | 33.98 | 1.11 | 27.02 | 108 | 0.57 |
| 392 | 3.82 | 33.97 | 1.14 | 27.01 | 500 | 3.67 | 34.05 | 0.84 | 27.09 | 102 | 0.67 |
| 490 | 3.68 | 34.04 | 0.85 | 27.08 | 600 | 3.55 | 34.11 | 0.73 | 27.15 | 97 | 0.77 |
| 687 | 3.44 | 34.16 | 0.65 | 27.20 | 700 | 3.42 | 34.17 | 0.64 | 27.21 | 92 | 0.87 |
| 1032 | 3.00 | 34.33 | 0.54 | 27.37 | 800 | 3.30 | 34.22 | 0.58 | 27.26 | 88 | 0.96 |
| | | | | | 1000 | 3.04 | 34.32 | 0.54 | 27.36 | 79 | 1.12 |
| 62 | PIONEER; July 20, 1958; 2325 GCT; 53°06'N, 176°25'E; wind, 240°, 2 kt; weather, slight rain; sea, smooth. | | | | | | | | | | |
| 0 | 7.90 | 33.01 | | 25.75 | 0 | 7.90 | 33.01 | | 25.75 | 226 | 0.00 |
| 10 | 7.68 | 33.04 | | 25.80 | 10 | 7.68 | 33.04 | | 25.80 | 220 | 0.02 |
| 25 | 6.15 | 33.07 | | 26.03 | 20 | 6.67 | 33.06 | | 25.96 | 206 | 0.04 |
| 49 | 3.51 | 33.12 | | 26.36 | 30 | 5.41 | 33.08 | | 26.13 | 190 | 0.06 |
| 74 | 3.22 | 33.19 | | 26.44 | 50 | 3.49 | 33.12 | | 26.36 | 167 | 0.10 |
| 99 | 3.15 | 33.26 | | 26.51 | 75 | 3.21 | 33.19 | | 26.45 | 160 | 0.14 |
| 123 | 3.65 | 33.39 | | 26.56 | 100 | 3.18 | 33.27 | | 26.51 | 154 | 0.18 |
| 148 | 3.84 | 33.53 | | 26.66 | 150 | 3.84 | 33.54 | | 26.66 | 140 | 0.25 |
| 198 | 3.90 | 33.73 | | 26.81 | 200 | 3.90 | 33.74 | | 26.82 | 126 | 0.32 |
| 248 | 3.85 | 33.85 | | 26.91 | 250 | 3.85 | 33.85 | | 26.91 | 117 | 0.38 |
| 322 | 3.77 | 33.97 | | 27.01 | 300 | 3.79 | 33.94 | | 26.99 | 110 | 0.44 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

63

PIONEER; July 21, 1958; 0334, 0232 GCT; 53°07'N, 176°55'E; wind, 320°, 8 kt; weather, sky obscured; sea, slight.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.90 | 33.07 | - | 25.80 | 0 | 7.90 | 33.07 | | 25.80 | 221 | 0.00 |
| 10 | 7.68 | 33.07 | 6.87 | 25.83 | 10 | 7.68 | 33.07 | 6.87 | 25.83 | 218 | 0.02 |
| 24 | 6.81 | 33.08 | 7.13 | 25.96 | 20 | 7.12 | 33.08 | 7.07 | 25.91 | 210 | 0.04 |
| 49 | 3.72 | 33.14 | 7.28 | 26.36 | 30 | 5.84 | 33.10 | 7.20 | 26.09 | 193 | 0.06 |
| 73 | 3.07 | 33.17 | 7.04 | 26.44 | 50 | 3.68 | 33.14 | 7.27 | 26.36 | 168 | 0.10 |
| 98 | 2.95 | 33.23 | 7.02 | 26.50 | 75 | 3.07 | 33.18 | 7.04 | 26.45 | 159 | 0.14 |
| 122 | 2.68 | 33.26 | 6.90 | 26.55 | 100 | 2.92 | 33.23 | 7.04 | 26.50 | 154 | 0.18 |
| 147 | 2.72 | 33.35 | 5.79 | 26.62 | 150 | 2.82 | 33.38 | 5.53 | 26.63 | 142 | 0.25 |
| 196 | 3.84 | 33.71 | 2.65 | 26.80 | 200 | 3.84 | 33.72 | 2.56 | 26.81 | 126 | 0.32 |
| 245 | 3.84 | 33.85 | 1.69 | 26.91 | 250 | 3.84 | 33.86 | 1.65 | 26.92 | 116 | 0.38 |
| 294 | 3.84 | 33.93 | - | 26.97 | 300 | 3.83 | 33.94 | 1.27 | 26.98 | 111 | 0.44 |
| | | | | | 400 | 3.67 | 34.05 | 0.77 | 27.09 | 102 | 0.54 |
| 390 | 3.68 | 34.04 | 0.80 | 27.08 | 500 | 3.54 | 34.13 | 0.62 | 27.16 | 95 | 0.64 |
| 488 | 3.56 | 34.12 | 0.63 | 27.15 | 600 | 3.41 | 34.19 | 0.56 | 27.22 | 90 | 0.74 |
| 683 | 3.29 | 34.24 | 0.53 | 27.27 | 700 | 3.27 | 34.25 | 0.52 | 27.28 | 85 | 0.82 |
| 1026 | 2.78 | 34.44 | 0.50 | 27.48 | 800 | 3.12 | 34.31 | 0.49 | 27.35 | 79 | 0.90 |
| | | | | | 1000 | 2.82 | 34.43 | 0.50 | 27.47 | 68 | 1.05 |

64

PIONEER; July 22, 1958; 0007 GCT; 53°03'N, 177°26'E; wind, 300°, 8 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.00 | 33.14 | | 25.84 | 0 | 8.00 | 33.14 | | 25.84 | 217 | 0.00 |
| 10 | 7.62 | 33.14 | | 25.89 | 10 | 7.62 | 33.14 | | 25.89 | 212 | 0.02 |
| 25 | 6.47 | 33.17 | | 26.07 | 20 | 6.90 | 33.16 | | 26.01 | 201 | 0.04 |
| 50 | 3.69 | 33.21 | | 26.42 | 30 | 5.73 | 33.18 | | 26.17 | 186 | 0.06 |
| 74 | 3.14 | 33.23 | | 26.48 | 50 | 3.69 | 33.21 | | 26.42 | 162 | 0.10 |
| 99 | 2.89 | 33.25 | | 26.52 | 75 | 3.13 | 33.23 | | 26.48 | 156 | 0.14 |
| 124 | 2.75 | 33.32 | | 26.59 | 100 | 2.87 | 33.25 | | 26.52 | 152 | 0.18 |
| 148 | 3.36 | 33.53 | | 26.70 | 150 | 3.39 | 33.54 | | 26.71 | 135 | 0.25 |
| 198 | 3.80 | 33.78 | | 26.86 | 200 | 3.80 | 33.78 | | 26.86 | 122 | 0.31 |
| 247 | 3.78 | 33.88 | | 26.94 | 250 | 3.78 | 33.89 | | 26.95 | 114 | 0.37 |
| 321 | 3.70 | 34.00 | | 27.04 | 300 | 3.73 | 33.97 | | 27.02 | 108 | 0.42 |

65

PIONEER; July 22, 1958; 0615, 0516 GCT; 53°00'N, 178°00'E; wind, 220°, 15 kt; weather, sky obscured; sea, slight.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.00 | 33.11 | - | 25.81 | 0 | 8.00 | 33.11 | | 25.81 | 219 | 0.00 |
| 10 | 7.15 | 33.11 | 7.00 | 25.93 | 10 | 7.15 | 33.11 | 7.00 | 25.93 | 208 | 0.02 |
| 25 | 5.71 | 33.12 | 7.15 | 26.13 | 20 | 6.17 | 33.11 | 7.10 | 26.06 | 196 | 0.04 |
| 49 | 3.75 | 33.18 | 7.29 | 26.39 | 30 | 5.20 | 33.14 | 7.19 | 26.20 | 183 | 0.06 |
| 74 | 2.96 | 33.19 | 7.22 | 26.47 | 50 | 3.71 | 33.18 | 7.30 | 26.39 | 165 | 0.10 |
| 99 | 2.72 | 33.25 | 6.72 | 26.54 | 75 | 2.95 | 33.19 | 7.21 | 26.47 | 158 | 0.14 |
| 123 | 2.67 | 33.36 | 5.64 | 26.63 | 100 | 2.70 | 33.25 | 6.70 | 26.54 | 151 | 0.17 |
| 148 | 3.76 | 33.65 | 3.20 | 26.76 | 150 | 3.76 | 33.66 | 3.14 | 26.77 | 130 | 0.24 |
| 197 | 3.80 | 33.82 | 1.95 | 26.89 | 200 | 3.80 | 33.83 | 1.90 | 26.90 | 118 | 0.31 |
| 246 | 3.77 | 33.92 | 1.30 | 26.97 | 250 | 3.77 | 33.93 | 1.27 | 26.98 | 110 | 0.36 |
| 295 | 3.77 | 34.00 | 0.95 | 27.04 | 300 | 3.76 | 34.00 | 0.94 | 27.04 | 106 | 0.42 |
| | | | | | 400 | 3.62 | 34.10 | 0.71 | 27.13 | 97 | 0.52 |
| 380 | 3.65 | 34.08 | 0.74 | 27.11 | 500 | 3.47 | 34.18 | 0.57 | 27.21 | 91 | 0.61 |
| 478 | 3.51 | 34.17 | 0.58 | 27.20 | 600 | 3.31 | 34.24 | 0.54 | 27.27 | 85 | 0.70 |
| 673 | 3.20 | 34.27 | 0.52 | 27.31 | 700 | 3.16 | 34.28 | 0.52 | 27.32 | 81 | 0.78 |
| 1014 | 2.72 | 34.39 | 0.56 | 27.45 | 800 | 3.01 | 34.32 | 0.50 | 27.36 | 78 | 0.86 |
| | | | | | 1000 | 2.74 | 34.39 | 0.55 | 27.44 | 71 | 1.01 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 66 | PIONEER; July 24, 1958; 0537, 0442 GCT; 53°00'N, 179°48'E; wind, 050°, 15 kt; weather, sky obscured; sea, moderate. | | | | | | | | | | |
| 0 | 7.20 | 33.03 | - | 25.86 | 0 | 7.20 | 33.03 | | 25.86 | 215 | 0.00 |
| 10 | 7.82 | 33.01 | 6.75 | 25.76 | 10 | 7.82 | 33.01 | 6.75 | 25.76 | 224 | 0.02 |
| 25 | 6.58 | 33.11 | 7.04 | 26.01 | 20 | 7.02 | 33.08 | 6.96 | 25.93 | 209 | 0.04 |
| 50 | 3.92 | 33.14 | 7.28 | 26.34 | 30 | 5.90 | 33.12 | 7.12 | 26.10 | 192 | 0.06 |
| 75 | 3.14 | 33.17 | 7.11 | 26.44 | 50 | 3.92 | 33.14 | 7.28 | 26.34 | 170 | 0.10 |
| 99 | 3.14 | 33.23 | 6.75 | 26.48 | 75 | 3.14 | 33.17 | 7.11 | 26.44 | 161 | 0.14 |
| 124 | 2.43 | 33.25 | 6.69 | 26.56 | 100 | 3.09 | 33.23 | 6.78 | 26.49 | 156 | 0.18 |
| 149 | 2.78 | 33.36 | 5.51 | 26.62 | 150 | 2.82 | 33.37 | 5.43 | 26.62 | 143 | 0.26 |
| 198 | 4.00 | 33.73 | 2.48 | 26.80 | 200 | 4.00 | 33.74 | 2.42 | 26.81 | 127 | 0.32 |
| 248 | 3.92 | 33.87 | 1.52 | 26.92 | 250 | 3.92 | 33.87 | 1.51 | 26.92 | 116 | 0.38 |
| 297 | 3.87 | 33.93 | 1.23 | 26.97 | 300 | 3.86 | 33.93 | 1.21 | 26.97 | 112 | 0.44 |
| | | | | | 400 | 3.61 | 34.06 | 0.67 | 27.10 | 100 | 0.55 |
| 392 | 3.62 | 34.05 | 0.67 | 27.09 | 500 | 3.47 | 34.13 | 0.63 | 27.17 | 94 | 0.64 |
| 490 | 3.48 | 34.12 | 0.64 | 27.16 | 600 | 3.35 | 34.18 | 0.56 | 27.22 | 90 | 0.74 |
| 686 | 3.25 | 34.23 | 0.52 | 27.27 | 700 | 3.23 | 34.24 | 0.52 | 27.28 | 85 | 0.82 |
| 1029 | 2.80 | 34.36 | 0.54 | 27.41 | 800 | 3.11 | 34.28 | 0.49 | 27.32 | 82 | 0.91 |
| | | | | | 1000 | 2.84 | 34.35 | 0.53 | 27.40 | 75 | 1.06 |
| 67 | PIONEER; July 25, 1958; 0038 GCT; 53°04'N, 179°16'W; wind, 100°, 11 kt; weather, cloudy; sea, slight. | | | | | | | | | | |
| 0 | 7.10 | 33.07 | | 25.91 | 0 | 7.10 | 33.07 | | 25.91 | 210 | 0.00 |
| 10 | 6.61 | 33.11 | | 26.01 | 10 | 6.61 | 33.11 | | 26.01 | 201 | 0.02 |
| 24 | 5.24 | 33.13 | | 26.19 | 20 | 5.53 | 33.12 | | 26.15 | 188 | 0.04 |
| 48 | 5.18 | 33.30 | | 26.33 | 30 | 5.24 | 33.19 | | 26.24 | 179 | 0.06 |
| 74 | 4.95 | 33.31 | | 26.36 | 50 | 5.16 | 33.30 | | 26.33 | 170 | 0.09 |
| 95 | 4.77 | 33.35 | | 26.42 | 75 | 4.94 | 33.31 | | 26.37 | 168 | 0.14 |
| 119 | 4.62 | 33.38 | | 26.46 | 100 | 4.75 | 33.36 | | 26.43 | 162 | 0.18 |
| 143 | 4.39 | 33.39 | | 26.49 | 150 | 4.27 | 33.39 | | 26.50 | 155 | 0.26 |
| 192 | 3.84 | 33.44 | | 26.58 | 200 | 3.86 | 33.47 | | 26.61 | 146 | 0.33 |
| 240 | 3.91 | 33.61 | | 26.71 | 250 | 3.91 | 33.64 | | 26.74 | 134 | 0.40 |
| 268 | 3.88 | 33.70 | | 26.79 | | | | | | | |
| 68 | PIONEER; July 25, 1958; 0759, 0633 GCT; 53°00'N, 178°30'W; wind, 120°, 14 kt; weather, sky obscured; sea, slight. | | | | | | | | | | |
| 0 | 6.90 | 33.08 | - | 25.94 | 0 | 6.90 | 33.08 | | 25.94 | 207 | 0.00 |
| 10 | 7.50 | 33.06 | 6.75 | 25.85 | 10 | 7.50 | 33.06 | 6.75 | 25.85 | 216 | 0.02 |
| 25 | 7.28 | 33.05 | 6.90 | 25.87 | 20 | 7.49 | 33.05 | 6.84 | 25.84 | 217 | 0.04 |
| 50 | 4.25 | 33.11 | 7.20 | 26.28 | 30 | 6.49 | 33.06 | 7.02 | 25.98 | 204 | 0.06 |
| 74 | 3.50 | 33.16 | 6.76 | 26.40 | 50 | 4.25 | 33.11 | 7.20 | 26.28 | 175 | 0.10 |
| 99 | 3.57 | 33.22 | 6.45 | 26.44 | 75 | 3.49 | 33.16 | 6.76 | 26.40 | 164 | 0.14 |
| 124 | 4.06 | 33.32 | 5.62 | 26.47 | 100 | 3.60 | 33.22 | 6.42 | 26.43 | 161 | 0.18 |
| 148 | 3.99 | 33.40 | 5.08 | 26.54 | 150 | 3.97 | 33.40 | 5.11 | 26.54 | 152 | 0.26 |
| 198 | 3.68 | 33.48 | 4.94 | 26.63 | 200 | 3.69 | 33.49 | 4.86 | 26.64 | 142 | 0.34 |
| 247 | 3.91 | 33.64 | 3.28 | 26.74 | 250 | 3.91 | 33.65 | 3.21 | 26.74 | 133 | 0.40 |
| 296 | 3.92 | 33.75 | 2.40 | 26.82 | 300 | 3.91 | 33.76 | 2.37 | 26.83 | 125 | 0.47 |
| | | | | | 400 | 3.66 | 33.92 | 1.76 | 26.98 | 111 | 0.59 |
| 391 | 3.67 | 33.90 | 1.86 | 26.97 | 500 | 3.53 | 34.07 | 1.00 | 27.12 | 99 | 0.69 |
| 489 | 3.54 | 34.06 | 1.02 | 27.11 | 600 | 3.43 | 34.14 | 0.78 | 27.18 | 94 | 0.79 |
| 685 | 3.33 | 34.20 | 0.65 | 27.24 | 700 | 3.31 | 34.21 | 0.63 | 27.25 | 88 | 0.88 |
| 1028 | 2.85 | 34.35 | 0.55 | 27.40 | 800 | 3.18 | 34.26 | 0.54 | 27.30 | 84 | 0.97 |
| | | | | | 1000 | 2.89 | 34.34 | 0.53 | 27.39 | 76 | 1.13 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |

69

PIONEER; July 26, 1958; 0105 GCT; 52°59'N, 177°35'W; wind, 140°, 18 kt; weather, sky obscured; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.40 | 33.12 | 25.91 | 0 | 7.40 | 33.12 | 25.91 | 210 | 0.00 |
| 10 | 7.88 | 33.11 | 25.83 | 10 | 7.88 | 33.11 | 25.83 | 218 | 0.02 |
| 25 | 7.20 | 33.12 | 25.93 | 20 | 7.50 | 33.11 | 25.88 | 213 | 0.04 |
| 49 | 4.73 | 33.21 | 26.31 | 30 | 6.55 | 33.15 | 26.04 | 198 | 0.06 |
| 74 | 3.93 | 33.22 | 26.40 | 50 | 4.68 | 33.21 | 26.32 | 172 | 0.10 |
| 98 | 4.09 | 33.30 | 26.45 | 75 | 3.94 | 33.22 | 26.40 | 164 | 0.14 |
| 122 | 4.05 | 33.32 | 26.47 | 100 | 4.10 | 33.30 | 26.45 | 160 | 0.18 |
| 146 | 3.70 | 33.32 | 26.50 | 150 | 3.58 | 33.31 | 26.51 | 154 | 0.26 |
| 195 | 2.95 | 33.30 | 26.56 | 200 | 3.07 | 33.32 | 26.56 | 149 | 0.34 |
| 244 | 3.80 | 33.50 | 26.64 | 250 | 3.86 | 33.52 | 26.65 | 142 | 0.41 |
| 317 | 3.85 | 33.71 | 26.80 | 300 | 3.97 | 33.67 | 26.75 | 132 | 0.48 |

70

PIONEER; July 26, 1958; 0750, 0650 GCT; 53°01'N, 176°54'W; wind, 120°, 15 kt; weather, sky obscured; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.30 | 33.07 | - | 25.88 | 0 | 7.30 | 33.07 | | 25.88 | 213 | 0.00 |
| 10 | 7.93 | 33.06 | 6.66 | 25.78 | 10 | 7.93 | 33.06 | 6.66 | 25.78 | 222 | 0.02 |
| 25 | 7.84 | 33.05 | 6.75 | 25.79 | 20 | 7.90 | 33.05 | 6.72 | 25.78 | 223 | 0.04 |
| 50 | 4.18 | 33.09 | 7.03 | 26.27 | 30 | 7.70 | 33.06 | 6.84 | 25.82 | 219 | 0.07 |
| 74 | 3.85 | 33.11 | 6.85 | 26.32 | 50 | 4.18 | 33.09 | 7.03 | 26.27 | 176 | 0.11 |
| 99 | 3.70 | 33.12 | 6.70 | 26.34 | 75 | 3.84 | 33.11 | 6.85 | 26.32 | 172 | 0.15 |
| 124 | 3.62 | 33.15 | 6.47 | 26.38 | 100 | 3.70 | 33.12 | 6.69 | 26.34 | 170 | 0.19 |
| 148 | 3.53 | 33.21 | 6.14 | 26.43 | 150 | 3.53 | 33.21 | 6.14 | 26.43 | 162 | 0.28 |
| 198 | 3.40 | 33.28 | 6.07 | 26.50 | 200 | 3.38 | 33.28 | 6.09 | 26.50 | 155 | 0.35 |
| 247 | 3.18 | 33.31 | 6.03 | 26.54 | 250 | 3.21 | 33.32 | 5.95 | 26.55 | 151 | 0.43 |
| 296 | 3.63 | 33.44 | 4.80 | 26.61 | 300 | 3.65 | 33.46 | 4.67 | 26.62 | 145 | 0.50 |
| | | | | | 400 | 3.91 | 33.78 | 2.30 | 26.85 | 124 | 0.64 |
| 393 | 3.93 | 33.77 | 2.37 | 26.84 | 500 | 3.69 | 33.94 | 1.40 | 27.00 | 111 | 0.76 |
| 491 | 3.70 | 33.93 | 1.44 | 26.99 | 600 | 3.53 | 34.06 | 0.97 | 27.11 | 101 | 0.86 |
| 688 | 3.40 | 34.14 | 0.71 | 27.18 | 700 | 3.38 | 34.15 | 0.67 | 27.19 | 93 | 0.96 |
| 1033 | 2.90 | 34.33 | 0.53 | 27.38 | 800 | 3.23 | 34.23 | 0.49 | 27.27 | 86 | 1.05 |
| | | | | | 1000 | 2.95 | 34.32 | 0.48 | 27.37 | 78 | 1.22 |

71

PIONEER; July 27, 1958; 0049 GCT; 53°00'N, 176°04'W; wind, 060°, 8 kt; weather, sky obscured; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.90 | 33.13 | 25.84 | 0 | 7.90 | 33.13 | 25.84 | 216 | 0.00 |
| 10 | 8.15 | 33.12 | 25.80 | 10 | 8.15 | 33.12 | 25.80 | 221 | 0.02 |
| 25 | 7.26 | 33.08 | 25.89 | 20 | 7.61 | 33.09 | 25.85 | 216 | 0.04 |
| 50 | 4.62 | 33.12 | 26.25 | 30 | 6.58 | 33.09 | 25.99 | 203 | 0.06 |
| 74 | 3.93 | 33.12 | 26.32 | 50 | 4.62 | 33.12 | 26.25 | 178 | 0.10 |
| 99 | 3.74 | 33.17 | 26.38 | 75 | 3.92 | 33.12 | 26.32 | 172 | 0.15 |
| 124 | 3.52 | 33.22 | 26.44 | 100 | 3.73 | 33.17 | 26.38 | 166 | 0.19 |
| 148 | 3.40 | 33.25 | 26.48 | 150 | 3.38 | 33.25 | 26.48 | 157 | 0.27 |
| 198 | 3.19 | 33.31 | 26.54 | 200 | 3.22 | 33.32 | 26.55 | 151 | 0.35 |
| 247 | 3.75 | 33.49 | 26.63 | 250 | 3.77 | 33.50 | 26.64 | 143 | 0.42 |
| 321 | 3.74 | 33.67 | 26.78 | 300 | 3.85 | 33.63 | 26.73 | 134 | 0.49 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| **72** | PIONEER; July 27, 1958; 0740, 0642 GCT; 52°58'N, 175°13'W; wind, 010°, 4 kt; weather, fog; sea, smooth. | | | | | | | | | | |
| 0 | 7.70 | 33.10 | - | 25.85 | 0 | 7.70 | 33.10 | | 25.85 | 216 | 0.00 |
| 10 | 7.74 | 33.10 | 6.72 | 25.84 | 10 | 7.74 | 33.10 | 6.72 | 25.84 | 217 | 0.02 |
| 25 | 7.44 | 33.10 | 6.76 | 25.88 | 20 | 7.65 | 33.10 | 6.75 | 25.86 | 216 | 0.04 |
| 50 | 4.80 | 33.18 | 6.71 | 26.28 | 30 | 6.81 | 33.12 | 6.73 | 25.99 | 203 | 0.06 |
| 74 | 3.49 | 33.21 | 6.92 | 26.44 | 50 | 4.80 | 33.18 | 6.71 | 26.28 | 176 | 0.10 |
| 99 | 3.46 | 33.25 | 6.44 | 26.47 | 75 | 3.49 | 33.21 | 6.90 | 26.44 | 161 | 0.14 |
| 123 | 3.26 | 33.30 | 6.29 | 26.53 | 100 | 3.45 | 33.25 | 6.44 | 26.47 | 157 | 0.18 |
| 148 | 3.22 | 33.32 | 5.90 | 26.55 | 150 | 3.24 | 33.33 | 5.84 | 26.55 | 150 | 0.26 |
| 197 | 3.64 | 33.47 | 4.50 | 26.63 | 200 | 3.65 | 33.47 | 4.45 | 26.63 | 143 | 0.34 |
| 246 | 3.74 | 33.59 | 3.45 | 26.71 | 250 | 3.75 | 33.63 | 3.33 | 26.74 | 133 | 0.40 |
| 295 | 3.82 | 33.93 | 2.23 | 26.98 | 300 | 3.81 | 33.93 | 2.16 | 26.98 | 111 | 0.46 |
| | | | | | 400 | 3.68 | 33.99 | 1.23 | 27.04 | 106 | 0.57 |
| 392 | 3.69 | 33.98 | 1.27 | 27.03 | 500 | 3.53 | 34.08 | 0.90 | 27.12 | 99 | 0.68 |
| 490 | 3.54 | 34.07 | 0.92 | 27.11 | 600 | 3.38 | 34.15 | 0.72 | 27.19 | 93 | 0.77 |
| 687 | 3.26 | 34.21 | 0.60 | 27.25 | 700 | 3.24 | 34.22 | 0.59 | 27.26 | 87 | 0.86 |
| 1032 | 2.78 | 34.35 | 0.50 | 27.41 | 800 | 3.10 | 34.27 | 0.50 | 27.32 | 82 | 0.95 |
| | | | | | 1000 | 2.82 | 34.34 | 0.49 | 27.40 | 75 | 1.10 |
| **73** | PIONEER; July 28, 1958; 0113 GCT; 52°38'N, 175°45'W; wind, 360°, 2 kt; weather, fog; sea, smooth. | | | | | | | | | | |
| 0 | 8.00 | 33.13 | | 25.83 | 0 | 8.00 | 33.13 | | 25.83 | 218 | 0.00 |
| 10 | 7.92 | 33.13 | | 25.84 | 10 | 7.92 | 33.13 | | 25.84 | 217 | 0.02 |
| 24 | 7.25 | 33.13 | | 25.93 | 20 | 7.48 | 33.13 | | 25.90 | 211 | 0.04 |
| 48 | 5.26 | 33.21 | | 26.25 | 30 | 6.65 | 33.15 | | 26.03 | 199 | 0.06 |
| 73 | 4.32 | 33.25 | | 26.39 | 50 | 5.17 | 33.21 | | 26.26 | 177 | 0.10 |
| 97 | 3.70 | 33.25 | | 26.45 | 75 | 4.25 | 33.25 | | 26.39 | 165 | 0.14 |
| 121 | 3.44 | 33.28 | | 26.50 | 100 | 3.66 | 33.25 | | 26.45 | 159 | 0.19 |
| 146 | 3.22 | 33.30 | | 26.53 | 150 | 3.24 | 33.32 | | 26.55 | 151 | 0.26 |
| 175 | 3.40 | 33.41 | | 26.60 | 200 | 3.61 | 33.49 | | 26.65 | 142 | 0.34 |
| 244 | 3.85 | 33.62 | | 26.73 | 250 | 3.87 | 33.64 | | 26.74 | 133 | 0.40 |
| 316 | 3.88 | 33.83 | | 26.89 | 300 | 3.91 | 33.78 | | 26.85 | 124 | 0.47 |
| **74** | PIONEER; July 28, 1958; 0735, 0635 GCT; 52°22'N, 176°17'W; wind, 320°, 2 kt; weather, fog; sea, smooth. | | | | | | | | | | |
| 0 | 7.60 | 33.12 | - | 25.88 | 0 | 7.60 | 33.12 | | 25.88 | 213 | 0.00 |
| 10 | 7.80 | 33.12 | 6.71 | 25.85 | 10 | 7.80 | 33.12 | 6.71 | 25.85 | 216 | 0.02 |
| 25 | 7.52 | 33.13 | 6.82 | 25.90 | 20 | 7.71 | 33.13 | 6.79 | 25.87 | 214 | 0.04 |
| 50 | 5.20 | 33.17 | 6.97 | 26.23 | 30 | 6.98 | 33.14 | 6.89 | 25.98 | 204 | 0.06 |
| 74 | 3.90 | 33.21 | 6.72 | 26.40 | 50 | 5.20 | 33.17 | 6.97 | 26.23 | 181 | 0.10 |
| 99 | 3.40 | 33.22 | 6.70 | 26.45 | 75 | 3.87 | 33.21 | 6.72 | 26.40 | 164 | 0.14 |
| 124 | 3.36 | 33.28 | 6.47 | 26.50 | 100 | 3.40 | 33.22 | 6.69 | 26.45 | 159 | 0.18 |
| 149 | 3.07 | 33.29 | 6.34 | 26.54 | 150 | 3.07 | 33.29 | 6.32 | 26.54 | 151 | 0.26 |
| 198 | 3.29 | 33.40 | 5.01 | 26.61 | 200 | 3.32 | 33.41 | 4.93 | 26.61 | 145 | 0.34 |
| 248 | 3.80 | 33.60 | 3.42 | 26.72 | 250 | 3.80 | 33.61 | 3.37 | 26.72 | 135 | 0.41 |
| 297 | 3.83 | 33.75 | 2.43 | 26.83 | 300 | 3.83 | 33.76 | 2.40 | 26.84 | 124 | 0.47 |
| | | | | | 400 | 3.71 | 33.92 | 1.47 | 26.98 | 112 | 0.59 |
| 390 | 3.72 | 33.91 | 1.51 | 26.97 | 500 | 3.56 | 34.03 | 1.09 | 27.08 | 103 | 0.70 |
| 488 | 3.58 | 34.02 | 1.12 | 27.07 | 600 | 3.41 | 34.13 | 0.83 | 27.18 | 94 | 0.80 |
| 684 | 3.28 | 34.20 | 0.67 | 27.24 | 700 | 3.26 | 34.21 | 0.65 | 27.25 | 88 | 0.89 |
| 1025 | 2.78 | 34.35 | 0.56 | 27.41 | 800 | 3.11 | 34.27 | 0.54 | 27.31 | 82 | 0.97 |
| | | | | | 1000 | 2.82 | 34.35 | 0.54 | 27.40 | 74 | 1.13 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | $\delta$<br>cl/ton | $\Delta D$<br>dyn m |

PIONEER; August 5, 1958; 0527, 0546 GCT; 51°40'N, 175°00'W; wind, 270°, 2 kt; weather, sky obscured; sea, slight. 75

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.80 | 33.15 | - | 26.14 | 0 | 5.80 | 33.15 | | 26.14 | 188 | 0.00 |
| 10 | 6.05 | 33.15 | 6.35 | 26.11 | 10 | 6.05 | 33.15 | 6.35 | 26.11 | 191 | 0.02 |
| 25 | 5.89 | 33.21 | 6.16 | 26.18 | 20 | 5.95 | 33.19 | 6.26 | 26.15 | 187 | 0.04 |
| 50 | 5.40 | 33.26 | 5.04 | 26.27 | 30 | 5.78 | 33.22 | 5.92 | 26.20 | 183 | 0.06 |
| 75 | 5.04 | 33.32 | 4.07 | 26.36 | 50 | 5.40 | 33.26 | 5.04 | 26.27 | 176 | 0.09 |
| 100 | 4.96 | 33.39 | 3.96 | 26.43 | 75 | 5.04 | 33.32 | 4.07 | 26.36 | 168 | 0.14 |
| 125 | 4.84 | 33.40 | 3.92 | 26.45 | 100 | 4.96 | 33.39 | 3.96 | 26.43 | 162 | 0.18 |
| 150 | 4.67 | 33.48 | 3.73 | 26.53 | 150 | 4.67 | 33.48 | 3.73 | 26.53 | 153 | 0.26 |
| 200 | 4.58 | 33.58 | 3.17 | 26.62 | 200 | 4.58 | 33.58 | 3.17 | 26.62 | 145 | 0.33 |
| | | | | | 250 | 4.20 | 33.79 | 1.98 | 26.83 | 125 | 0.40 |
| 250 | 4.20 | 33.79 | 1.98 | 26.83 | 300 | 4.05 | 33.93 | 1.22 | 26.95 | 114 | 0.46 |
| 316 | 4.05 | 33.96 | 1.06 | 26.98 | | | | | | | |

PIONEER; August 5, 1958; 0910, 0818 GCT; 51°30'N, 175°00'W; wind, 270°, 7 kt; weather, sky obscured; sea, smooth. 76

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.50 | 32.40 | - | 25.18 | 0 | 8.50 | 32.40 | | 25.18 | 279 | 0.00 |
| 10 | 8.71 | 32.40 | 6.53 | 25.15 | 10 | 8.71 | 32.40 | 6.53 | 25.15 | 282 | 0.03 |
| 25 | 8.26 | 32.44 | 6.53 | 25.25 | 20 | 8.52 | 32.41 | 6.55 | 25.19 | 279 | 0.06 |
| 50 | 5.35 | 32.82 | 6.04 | 25.93 | 30 | 7.49 | 32.52 | 6.47 | 25.42 | 257 | 0.08 |
| 74 | 4.72 | 33.12 | 5.07 | 26.24 | 50 | 5.35 | 32.82 | 6.04 | 25.93 | 209 | 0.13 |
| 99 | 4.52 | 33.49 | 3.58 | 26.55 | 75 | 4.71 | 33.14 | 5.00 | 26.26 | 178 | 0.18 |
| 124 | 4.30 | 33.67 | 2.89 | 26.72 | 100 | 4.51 | 33.50 | 3.56 | 26.56 | 149 | 0.22 |
| 149 | 4.12 | 33.73 | 2.15 | 26.79 | 150 | 4.12 | 33.73 | 2.13 | 26.79 | 128 | 0.29 |
| 198 | 4.17 | 33.91 | 1.16 | 26.92 | 200 | 4.17 | 33.91 | 1.14 | 26.92 | 116 | 0.35 |
| 247 | 4.12 | 34.00 | 0.72 | 27.00 | 250 | 4.11 | 34.00 | 0.71 | 27.00 | 109 | 0.40 |
| 296 | 3.92 | 34.05 | 0.58 | 27.06 | 300 | 3.91 | 34.05 | 0.57 | 27.06 | 103 | 0.46 |
| | | | | | 400 | 3.64 | 34.15 | 0.46 | 27.17 | 94 | 0.56 |
| 384 | 3.67 | 34.13 | 0.46 | 27.15 | 500 | 3.48 | 34.23 | 0.44 | 27.25 | 87 | 0.65 |
| 482 | 3.50 | 34.22 | 0.45 | 27.24 | 600 | 3.35 | 34.29 | 0.40 | 27.31 | 82 | 0.73 |
| 679 | 3.24 | 34.33 | 0.39 | 27.35 | 700 | 3.21 | 34.34 | 0.39 | 27.36 | 77 | 0.81 |
| 1024 | 2.68 | 34.43 | 0.57 | 27.48 | 800 | 3.06 | 34.38 | 0.41 | 27.41 | 74 | 0.89 |
| | | | | | 1000 | 2.72 | 34.43 | 0.55 | 27.48 | 67 | 1.03 |

PIONEER; August 6, 1958; 0045 GCT; 50°45'N, 175°00'W; wind, 200°, 4 kt; weather, slight drizzle; sea, smooth. 77

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.60 | 32.56 | - | 25.29 | 0 | 8.60 | 32.56 | | 25.29 | 269 | 0.00 |
| 10 | 9.05 | 32.56 | 6.50 | 25.22 | 10 | 9.05 | 32.56 | 6.50 | 25.22 | 276 | 0.03 |
| 25 | 8.84 | 32.57 | 6.57 | 25.26 | 20 | 9.00 | 32.57 | 6.55 | 25.24 | 274 | 0.05 |
| 50 | 4.85 | 32.82 | 6.63 | 25.99 | 30 | 8.10 | 32.61 | 6.68 | 25.41 | 258 | 0.08 |
| 75 | 4.10 | 33.09 | 5.54 | 26.28 | 50 | 4.85 | 32.82 | 6.63 | 25.99 | 203 | 0.13 |
| 99 | 4.19 | 33.63 | 2.61 | 26.70 | 75 | 4.10 | 33.09 | 5.54 | 26.28 | 176 | 0.17 |
| 124 | 4.13 | 33.84 | 1.61 | 26.87 | 100 | 4.19 | 33.64 | 2.56 | 26.71 | 135 | 0.21 |
| 149 | 4.07 | 33.95 | 0.87 | 26.97 | 150 | 4.07 | 33.95 | 0.86 | 26.97 | 111 | 0.28 |
| 198 | 4.02 | 34.00 | 0.55 | 27.01 | 200 | 4.01 | 34.00 | 0.55 | 27.01 | 107 | 0.33 |
| 247 | 3.86 | 34.07 | 0.50 | 27.08 | 250 | 3.85 | 34.07 | 0.50 | 27.08 | 101 | 0.38 |
| 321 | 3.71 | 34.11 | 0.57 | 27.13 | 300 | 3.74 | 34.11 | 0.54 | 27.13 | 97 | 0.43 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 78 | PIONEER; August 6, 1958; 0919, 0817 GCT; 50°00'N, 175°00'W; wind, 270°, 4 kt; weather, fog in patches; sea, smooth. | | | | | | | | | | |
| 0 | 8.50 | 32.54 | - | 25.29 | 0 | 8.50 | 32.54 | | 25.29 | 269 | 0.00 |
| 10 | 9.00 | 32.54 | 6.55 | 25.22 | 10 | 9.00 | 32.54 | 6.55 | 25.22 | 276 | 0.03 |
| 25 | 8.94 | 32.54 | 6.55 | 25.23 | 20 | 8.98 | 32.54 | 6.55 | 25.22 | 276 | 0.06 |
| 50 | 5.78 | 32.89 | 7.04 | 25.94 | 30 | 8.60 | 32.58 | 6.64 | 25.31 | 268 | 0.08 |
| 74 | 3.71 | 33.09 | 7.08 | 26.32 | 50 | 5.78 | 32.89 | 7.04 | 25.94 | 208 | 0.13 |
| 99 | 3.18 | 33.18 | 6.75 | 26.44 | 75 | 3.68 | 33.09 | 7.09 | 26.32 | 172 | 0.18 |
| 124 | 3.28 | 33.44 | 5.10 | 26.64 | 100 | 3.18 | 33.19 | 6.69 | 26.45 | 160 | 0.22 |
| 148 | 3.35 | 33.69 | 3.57 | 26.83 | 150 | 3.34 | 33.70 | 3.53 | 26.84 | 123 | 0.29 |
| 198 | 3.25 | 33.81 | 2.62 | 26.94 | 200 | 3.25 | 33.81 | 2.59 | 26.94 | 114 | 0.35 |
| 247 | 3.34 | 33.91 | 1.90 | 27.01 | 250 | 3.34 | 33.92 | 1.87 | 27.01 | 107 | 0.40 |
| 297 | 3.40 | 34.00 | 1.42 | 27.07 | 300 | 3.40 | 34.00 | 1.41 | 27.07 | 102 | 0.46 |
| | | | | | 400 | 3.40 | 34.11 | 1.00 | 27.16 | 94 | 0.55 |
| 393 | 3.40 | 34.10 | 1.02 | 27.15 | 500 | 3.34 | 34.20 | 0.78 | 27.24 | 88 | 0.64 |
| 492 | 3.35 | 34.19 | 0.78 | 27.23 | 600 | 3.20 | 34.26 | 0.73 | 27.30 | 83 | 0.73 |
| 689 | 3.08 | 34.31 | 0.71 | 27.35 | 700 | 3.06 | 34.32 | 0.71 | 27.36 | 77 | 0.81 |
| 1034 | 2.59 | 34.46 | 0.74 | 27.51 | 800 | 2.92 | 34.37 | 0.69 | 27.41 | 73 | 0.88 |
| | | | | | 1000 | 2.64 | 34.45 | 0.73 | 27.50 | 65 | 1.02 |
| 79 | PIONEER; August 7, 1958; 0013 GCT; 49°30'N, 175°00'W; wind, 160°, 8 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 9.00 | 32.67 | - | 25.32 | 0 | 9.00 | 32.67 | | 25.32 | 266 | 0.00 |
| 10 | 9.07 | 32.67 | 6.56 | 25.31 | 10 | 9.07 | 32.67 | 6.56 | 25.31 | 268 | 0.03 |
| 24 | 9.03 | 32.67 | 6.69 | 25.31 | 20 | 9.07 | 32.67 | 6.65 | 25.31 | 268 | 0.05 |
| 49 | 5.07 | 32.93 | 6.74 | 26.05 | 30 | 8.90 | 32.70 | 6.79 | 25.36 | 263 | 0.08 |
| 73 | 4.33 | 33.14 | 5.88 | 26.30 | 50 | 5.03 | 32.94 | 6.69 | 26.06 | 196 | 0.13 |
| 98 | 3.81 | 33.22 | 5.85 | 26.41 | 75 | 4.27 | 33.14 | 5.90 | 26.30 | 173 | 0.17 |
| 122 | 3.68 | 33.35 | 5.30 | 26.53 | 100 | 3.80 | 33.23 | 5.82 | 26.42 | 162 | 0.22 |
| 146 | 3.55 | 33.55 | 4.24 | 26.70 | 150 | 3.52 | 33.57 | 4.10 | 26.72 | 134 | 0.29 |
| 195 | 3.28 | 33.78 | 2.81 | 26.91 | 200 | 3.28 | 33.79 | 2.73 | 26.92 | 116 | 0.35 |
| 244 | 3.34 | 33.87 | 2.11 | 26.97 | 250 | 3.35 | 33.88 | 2.03 | 26.98 | 110 | 0.41 |
| 317 | 3.50 | 34.01 | 1.19 | 27.07 | 300 | 3.46 | 33.98 | 1.39 | 27.05 | 104 | 0.46 |
| 80 | PIONEER; August 7, 1958; 0648, 0522 GCT; 49°00'N, 175°00'W; wind, 170°, 4 kt; weather, fog; sea, smooth. | | | | | | | | | | |
| 0 | 9.10 | 32.71 | - | 25.33 | 0 | 9.10 | 32.71 | | 25.33 | 265 | 0.00 |
| 10 | 9.18 | 32.71 | 6.60 | 25.32 | 10 | 9.18 | 32.71 | 6.60 | 25.32 | 266 | 0.03 |
| 25 | 9.04 | 32.72 | 6.69 | 25.35 | 20 | 9.15 | 32.71 | 6.64 | 25.33 | 266 | 0.05 |
| 50 | 5.24 | 32.87 | 7.10 | 25.98 | 30 | 8.80 | 32.76 | 6.81 | 25.42 | 257 | 0.08 |
| 74 | 3.96 | 32.95 | 7.06 | 26.18 | 50 | 5.24 | 32.87 | 7.10 | 25.98 | 204 | 0.13 |
| 100 | 3.28 | 33.06 | 6.96 | 26.34 | 75 | 3.92 | 32.95 | 7.06 | 26.19 | 184 | 0.17 |
| 117 | 3.26 | 33.12 | 6.68 | 26.39 | 100 | 3.28 | 33.06 | 6.96 | 26.34 | 170 | 0.22 |
| 159 | 3.50 | 33.56 | 3.90 | 26.71 | 150 | 3.49 | 33.48 | 4.37 | 26.65 | 141 | 0.30 |
| 196 | 3.35 | 33.78 | 2.72 | 26.90 | 200 | 3.36 | 33.79 | 2.65 | 26.91 | 117 | 0.36 |
| 289 | 3.56 | 33.99 | - | 27.05 | 250 | 3.50 | 33.92 | 1.93 | 27.00 | 109 | 0.42 |
| | | | | | 300 | 3.57 | 34.00 | 1.36 | 27.06 | 104 | 0.47 |
| 392 | 3.55 | 34.09 | 0.74 | 27.13 | 400 | 3.54 | 34.10 | 0.74 | 27.14 | 97 | 0.57 |
| 490 | 3.40 | 34.17 | 0.68 | 27.21 | 500 | 3.39 | 34.18 | 0.68 | 27.22 | 90 | 0.66 |
| 687 | 3.11 | 34.32 | 0.60 | 27.35 | 600 | 3.24 | 34.26 | 0.63 | 27.29 | 83 | 0.75 |
| 1030 | 2.60 | 34.43 | 0.62 | 27.49 | 700 | 3.09 | 34.33 | 0.60 | 27.36 | 77 | 0.83 |
| | | | | | 800 | 2.94 | 34.38 | 0.58 | 27.42 | 72 | 0.90 |
| | | | | | 1000 | 2.64 | 34.43 | 0.60 | 27.48 | 67 | 1.04 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; August 8, 1958; 0638, 0651 GCT; 49°59'N, 173°32'W; wind, 230°, 14 kt; weather, fog; sea, rough. | | | | | | | | | | | 81 |
| 0 | 8.80 | 32.62 | - | 25.31 | 0 | 8.80 | 32.62 | | 25.31 | 267 | 0.00 |
| 10 | 9.31 | 32.60 | 6.61 | 25.21 | 10 | 9.31 | 32.60 | 6.61 | 25.21 | 276 | 0.03 |
| 25 | 8.87 | 32.64 | 6.69 | 25.31 | 20 | 9.17 | 32.62 | 6.68 | 25.25 | 273 | 0.05 |
| 50 | 5.12 | 32.86 | 6.62 | 25.99 | 30 | 7.89 | 32.68 | 6.76 | 25.49 | 250 | 0.08 |
| 75 | 4.23 | 33.18 | 5.47 | 26.34 | 50 | 5.12 | 32.86 | 6.62 | 25.99 | 203 | 0.12 |
| 100 | 3.72 | 33.38 | 4.82 | 26.55 | 75 | 4.23 | 33.18 | 5.47 | 26.34 | 170 | 0.17 |
| 125 | 4.02 | 33.57 | 3.62 | 26.67 | 100 | 3.72 | 33.38 | 4.82 | 26.55 | 150 | 0.21 |
| 149 | 4.20 | 33.80 | 2.26 | 26.83 | 150 | 4.19 | 33.80 | 2.25 | 26.84 | 124 | 0.28 |
| | | | | | 200 | 3.80 | 33.89 | 1.56 | 26.95 | 113 | 0.34 |
| 196 | 3.79 | 33.88 | 1.64 | 26.94 | 250 | 3.81 | 34.02 | 0.86 | 27.05 | 104 | 0.39 |
| 245 | 3.82 | 34.01 | 0.91 | 27.04 | 300 | 3.66 | 34.06 | 0.74 | 27.10 | 100 | 0.44 |
| 319 | 3.55 | 34.06 | 0.84 | 27.11 | | | | | | | |
| PIONEER; August 8, 1958; 1810 GCT; 49°37'N, 171°40'W; wind, 210°, 10 kt; weather, fog; sea, moderate. | | | | | | | | | | | 82 |
| 0 | 8.80 | 32.64 | - | 25.32 | 0 | 8.80 | 32.64 | | 25.32 | 266 | 0.00 |
| 9 | 9.27 | 32.63 | 6.73 | 25.24 | 10 | 9.28 | 32.63 | 6.72 | 25.24 | 274 | 0.03 |
| 23 | 8.86 | 32.65 | 6.65 | 25.32 | 20 | 9.06 | 32.64 | 6.65 | 25.28 | 270 | 0.05 |
| 47 | 5.00 | 32.68 | 6.93 | 25.86 | 30 | 7.44 | 32.66 | 6.76 | 25.54 | 246 | 0.08 |
| 71 | 4.00 | 32.96 | 6.96 | 26.19 | 50 | 4.85 | 32.72 | 6.99 | 25.91 | 211 | 0.13 |
| 94 | 3.40 | 33.14 | 6.12 | 26.39 | 75 | 3.84 | 32.98 | 6.89 | 26.22 | 181 | 0.18 |
| 118 | 3.65 | 33.51 | 4.03 | 26.66 | 100 | 3.49 | 33.24 | 5.53 | 26.46 | 159 | 0.22 |
| 142 | 3.60 | 33.78 | 2.55 | 26.88 | 150 | 3.59 | 33.80 | 2.35 | 26.90 | 118 | 0.29 |
| 190 | 3.58 | 33.90 | 1.58 | 26.98 | 200 | 3.59 | 33.91 | 1.49 | 26.98 | 110 | 0.34 |
| 238 | 3.60 | 33.96 | 1.19 | 27.02 | 250 | 3.60 | 33.98 | 1.11 | 27.04 | 105 | 0.40 |
| 309 | 3.60 | 34.05 | 0.85 | 27.09 | 300 | 3.60 | 34.04 | 0.87 | 27.09 | 101 | 0.45 |
| PIONEER; August 9, 1958; 0642, 0543 GCT; 49°00'N, 170°00'W; wind, 220°, 17 kt; weather, fog; sea, moderate. | | | | | | | | | | | 83 |
| 0 | 9.20 | 32.72 | - | 25.33 | 0 | 9.20 | 32.72 | | 25.33 | 266 | 0.00 |
| 10 | 9.47 | 32.72 | 6.68 | 25.28 | 10 | 9.47 | 32.72 | 6.68 | 25.28 | 270 | 0.03 |
| 25 | 8.98 | 32.73 | 6.61 | 25.37 | 20 | 9.27 | 32.72 | 6.62 | 25.31 | 267 | 0.05 |
| 49 | 5.89 | 32.84 | - | 25.88 | 30 | 8.20 | 32.75 | 6.73 | 25.50 | 250 | 0.08 |
| 74 | 4.45 | 32.93 | 7.06 | 26.12 | 50 | 5.81 | 32.84 | 7.04 | 25.89 | 212 | 0.13 |
| 98 | 3.98 | 33.04 | 6.66 | 26.25 | 75 | 4.43 | 32.93 | 7.07 | 26.12 | 191 | 0.18 |
| 122 | 3.68 | 33.44 | 5.02 | 26.60 | 100 | 3.95 | 33.08 | 6.56 | 26.29 | 175 | 0.22 |
| 146 | 3.64 | 33.76 | 2.50 | 26.86 | 150 | 3.63 | 33.77 | 2.42 | 26.87 | 120 | 0.30 |
| 195 | 3.60 | 33.87 | 1.72 | 26.95 | 200 | 3.60 | 33.88 | 1.67 | 26.96 | 112 | 0.35 |
| 244 | 3.62 | 33.94 | 1.30 | 27.00 | 250 | 3.62 | 33.95 | 1.27 | 27.01 | 108 | 0.41 |
| 293 | 3.61 | 34.03 | 1.03 | 27.08 | 300 | 3.60 | 34.04 | 1.00 | 27.09 | 101 | 0.46 |
| | | | | | 400 | 3.53 | 34.14 | 0.69 | 27.17 | 94 | 0.56 |
| 371 | 3.55 | 34.12 | 0.73 | 27.15 | 500 | 3.43 | 34.20 | 0.59 | 27.23 | 89 | 0.65 |
| 465 | 3.48 | 34.18 | 0.63 | 27.21 | 600 | 3.30 | 34.27 | 0.53 | 27.30 | 83 | 0.74 |
| 653 | 3.22 | 34.30 | 0.50 | 27.33 | 700 | 3.17 | 34.31 | 0.50 | 27.34 | 79 | 0.82 |
| 982 | 2.69 | 34.44 | 0.60 | 27.49 | 800 | 3.03 | 34.35 | 0.53 | 27.39 | 75 | 0.89 |
| | | | | | 1000 | (2.65) | (34.45) | (0.62) | (27.50) | (65) | (1.03) |
| PIONEER; August 10, 1958; 0041 GCT; 49°29'N, 170°00'W; wind, 220°, 13 kt; weather, fog; sea, slight. | | | | | | | | | | | 84 |
| 0 | 9.30 | 32.58 | - | 25.20 | 0 | 9.30 | 32.58 | | 25.20 | 278 | 0.00 |
| 10 | 9.62 | 32.59 | 6.63 | 25.16 | 10 | 9.62 | 32.59 | 6.63 | 25.16 | 282 | 0.03 |
| 25 | 8.90 | 32.61 | 6.60 | 25.29 | 20 | 9.28 | 32.59 | 6.57 | 25.21 | 277 | 0.06 |
| 50 | 5.00 | 32.89 | 7.13 | 26.03 | 30 | 7.85 | 32.68 | 6.75 | 25.50 | 250 | 0.08 |
| 75 | 4.47 | 32.94 | 7.08 | 26.12 | 50 | 5.00 | 32.89 | 7.13 | 26.03 | 200 | 0.13 |
| 100 | 4.00 | 33.00 | 6.76 | 26.22 | 75 | 4.47 | 32.94 | 7.08 | 26.12 | 190 | 0.18 |
| 110 | 3.68 | 33.19 | 5.73 | 26.40 | 100 | 4.00 | 33.00 | 6.76 | 26.22 | 181 | 0.22 |
| 141 | 3.84 | 33.73 | 2.62 | 26.82 | 150 | 3.76 | 33.75 | 2.49 | 26.84 | 123 | 0.30 |
| 191 | 3.55 | 33.85 | 1.90 | 26.94 | 200 | 3.54 | 33.87 | 1.78 | 26.96 | 112 | 0.36 |
| 244 | 3.65 | 33.96 | 1.19 | 27.02 | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 85 | PIONEER; August 10, 1958; 0650, 0557 GCT; 50°00'N, 170°00'W; wind, 210°, 15 kt; weather, fog; sea, slight. | | | | | | | | | | |
| 0 | 9.20 | 32.60 | - | 25.23 | 0 | 9.20 | 32.60 | | 25.23 | 275 | 0.00 |
| 10 | 9.75 | 32.60 | 6.70 | 25.14 | 10 | 9.75 | 32.60 | 6.70 | 25.14 | 283 | 0.03 |
| 25 | 9.22 | 32.61 | 6.85 | 25.24 | 20 | 9.58 | 32.59 | 6.83 | 25.16 | 282 | 0.06 |
| 49 | 4.89 | 32.88 | 6.53 | 26.03 | 30 | 8.03 | 32.67 | 6.80 | 25.46 | 253 | 0.08 |
| 74 | 4.15 | 33.05 | 6.00 | 26.24 | 50 | 4.84 | 32.88 | 6.54 | 26.04 | 199 | 0.13 |
| 98 | 4.20 | 33.38 | 4.17 | 26.50 | 75 | 4.15 | 33.06 | 5.92 | 26.25 | 178 | 0.18 |
| 123 | 4.27 | 33.73 | 2.22 | 26.77 | 100 | 4.21 | 33.42 | 3.96 | 26.53 | 152 | 0.22 |
| 147 | 4.23 | 33.87 | 1.56 | 26.89 | 150 | 4.22 | 33.88 | 1.50 | 26.90 | 118 | 0.28 |
| 197 | 4.08 | 33.96 | 0.78 | 26.97 | 200 | 4.07 | 33.97 | 0.76 | 26.98 | 110 | 0.34 |
| 246 | 3.96 | 34.04 | 0.52 | 27.05 | 250 | 3.96 | 34.04 | 0.50 | 27.05 | 104 | 0.39 |
| 320 | 3.88 | 34.08 | 0.45 | 27.09 | 300 | 3.93 | 34.07 | 0.44 | 27.08 | 102 | 0.45 |
| | | | | | 400 | 3.52 | 34.16 | 0.66 | 27.19 | 92 | 0.54 |
| 388 | 3.54 | 34.15 | 0.67 | 27.18 | 500 | 3.38 | 34.21 | 0.59 | 27.24 | 87 | 0.63 |
| 485 | 3.40 | 34.20 | 0.60 | 27.23 | 600 | 3.26 | 34.28 | 0.50 | 27.31 | 82 | 0.72 |
| 679 | 3.15 | 34.33 | 0.47 | 27.36 | 700 | 3.12 | 34.34 | 0.47 | 27.37 | 76 | 0.80 |
| 1020 | 2.62 | 34.45 | 0.60 | 27.50 | 800 | 2.98 | 34.39 | 0.46 | 27.42 | 72 | 0.87 |
| | | | | | 1000 | 2.65 | 34.45 | 0.58 | 27.50 | 65 | 1.01 |
| 86 | PIONEER; August 11, 1958; 0726, 0632 GCT; 51°00'N, 170°00'W; wind, 220°, 20 kt; weather, fog; sea, rough. | | | | | | | | | | |
| 0 | 9.50 | 32.44 | - | 25.06 | 0 | 9.50 | 32.44 | | 25.06 | 291 | 0.00 |
| 10 | 9.98 | 32.44 | 6.35 | 24.98 | 10 | 9.98 | 32.44 | 6.35 | 24.98 | 299 | 0.03 |
| 25 | 9.78 | 32.48 | 6.53 | 25.04 | 20 | 9.92 | 32.45 | 6.48 | 25.00 | 297 | 0.06 |
| 50 | 4.90 | 32.90 | 6.45 | 26.05 | 30 | 8.49 | 32.58 | 6.55 | 25.33 | 266 | 0.09 |
| 74 | 3.86 | 33.11 | 5.95 | 26.32 | 50 | 4.90 | 32.90 | 6.45 | 26.05 | 198 | 0.13 |
| 99 | 4.00 | 33.38 | 4.54 | 26.52 | 75 | 3.87 | 33.12 | 5.89 | 26.33 | 171 | 0.18 |
| 124 | 3.90 | 33.62 | 3.16 | 26.72 | 100 | 4.00 | 33.39 | 4.47 | 26.53 | 152 | 0.22 |
| 148 | 3.82 | 33.77 | 2.51 | 26.85 | 150 | 3.83 | 33.78 | 2.43 | 26.86 | 122 | 0.29 |
| 198 | 4.00 | 33.94 | 1.12 | 26.97 | 200 | 4.00 | 33.94 | 1.10 | 26.97 | 112 | 0.34 |
| 247 | 3.95 | 34.01 | 0.72 | 27.03 | 250 | 3.93 | 34.01 | 0.72 | 27.03 | 106 | 0.40 |
| 296 | 3.75 | 34.07 | 0.68 | 27.09 | 300 | 3.75 | 34.07 | 0.67 | 27.09 | 100 | 0.45 |
| | | | | | 400 | 3.67 | 34.16 | 0.45 | 27.17 | 93 | 0.55 |
| 393 | 3.68 | 34.15 | 0.45 | 27.16 | 500 | 3.50 | 34.23 | 0.41 | 27.25 | 87 | 0.64 |
| 490 | 3.52 | 34.22 | 0.41 | 27.24 | 600 | 3.33 | 34.29 | 0.40 | 27.31 | 82 | 0.72 |
| 687 | 3.18 | 34.33 | 0.40 | 27.36 | 700 | 3.16 | 34.34 | 0.40 | 27.37 | 77 | 0.80 |
| 1031 | 2.63 | 34.43 | 0.56 | 27.49 | 800 | 2.99 | 34.38 | 0.43 | 27.41 | 73 | 0.88 |
| | | | | | 1000 | 2.68 | 34.43 | 0.54 | 27.48 | 67 | 1.02 |
| 87 | PIONEER; August 13, 1958; 0123, 0025 GCT; 52°00'N, 170°00'W; wind, 260°, 25 kt; weather, sky obscured; sea, rough. | | | | | | | | | | |
| 0 | 9.20 | 32.17 | - | 24.90 | 0 | 9.20 | 32.17 | | 24.90 | 307 | 0.00 |
| 10 | 9.80 | 32.17 | 6.72 | 24.80 | 10 | 9.80 | 32.17 | 6.72 | 24.80 | 316 | 0.03 |
| 24 | 9.40 | 32.21 | 6.74 | 24.90 | 20 | 9.62 | 32.18 | 6.74 | 24.84 | 313 | 0.06 |
| 49 | 6.02 | 32.84 | 6.66 | 25.87 | 30 | 8.40 | 32.41 | 6.74 | 25.21 | 278 | 0.09 |
| 73 | 4.74 | 32.91 | 6.44 | 26.07 | 50 | 5.95 | 32.84 | 6.68 | 25.88 | 214 | 0.14 |
| 98 | 4.25 | 33.10 | 4.82 | 26.27 | 75 | 4.69 | 32.91 | 6.33 | 26.08 | 195 | 0.19 |
| 122 | 4.05 | 33.58 | 2.77 | 26.67 | 100 | 4.22 | 33.15 | 4.60 | 26.32 | 172 | 0.24 |
| 146 | 4.08 | 33.78 | 1.80 | 26.83 | 150 | 4.07 | 33.80 | 1.68 | 26.85 | 122 | 0.31 |
| 195 | 3.98 | 33.95 | 0.67 | 26.98 | 200 | 3.98 | 33.96 | 0.65 | 26.98 | 110 | 0.37 |
| 244 | 3.98 | 34.00 | 0.50 | 27.02 | 250 | 3.97 | 34.01 | 0.52 | 27.02 | 106 | 0.42 |
| 293 | 3.91 | 34.05 | 0.55 | 27.06 | 300 | 3.91 | 34.06 | 0.55 | 27.07 | 102 | 0.48 |
| | | | | | 400 | 3.82 | 34.14 | 0.54 | 27.14 | 96 | 0.58 |
| 394 | 3.83 | 34.14 | 0.55 | 27.14 | 500 | 3.62 | 34.19 | 0.44 | 27.20 | 91 | 0.67 |
| 492 | 3.63 | 34.19 | 0.44 | 27.20 | 600 | 3.44 | 34.25 | 0.40 | 27.27 | 86 | 0.76 |
| 690 | 3.28 | 34.30 | 0.39 | 27.32 | 700 | 3.26 | 34.30 | 0.39 | 27.32 | 81 | 0.84 |
| 1035 | 2.70 | 34.42 | 0.54 | 27.47 | 800 | 3.09 | 34.35 | 0.40 | 27.38 | 76 | 0.92 |
| | | | | | 1000 | 2.76 | 34.41 | 0.52 | 27.46 | 69 | 1.06 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| PIONEER; August 14, 1958; 0040 GCT; 52°42'N, 166°46'W; wind, 270°, 26 kt; weather, cloudy; sea, rough. | | | | | | | | | | | 88 |
| 0 | 10.20 | 32.18 | - | 24.74 | 0 | 10.20 | 32.18 | | 24.74 | 321 | 0.00 |
| 10 | 10.82 | 32.15 | 6.56 | 24.61 | 10 | 10.82 | 32.15 | 6.56 | 24.61 | 334 | 0.03 |
| 24 | 10.73 | 32.17 | 6.38 | 24.64 | 20 | 10.82 | 32.16 | 6.41 | 24.62 | 333 | 0.07 |
| 49 | 6.21 | 32.82 | 6.72 | 25.83 | 30 | 10.00 | 32.22 | 6.41 | 24.81 | 316 | 0.10 |
| 73 | 4.66 | 32.95 | 6.28 | 26.11 | 50 | 6.13 | 32.82 | 6.73 | 25.84 | 218 | 0.15 |
| 98 | 4.08 | 33.31 | 4.39 | 26.46 | 75 | 4.59 | 32.98 | 6.15 | 26.14 | 189 | 0.20 |
| 122 | 4.08 | 33.69 | 2.14 | 26.76 | 100 | 4.08 | 33.35 | 4.16 | 26.49 | 156 | 0.24 |
| 146 | 4.08 | 33.87 | 1.13 | 26.90 | 150 | 4.07 | 33.88 | 1.06 | 26.91 | 116 | 0.31 |
| 195 | 4.01 | 33.96 | 0.56 | 26.98 | 200 | 4.00 | 33.97 | 0.54 | 26.99 | 109 | 0.37 |
| 243 | 3.95 | 34.04 | 0.39 | 27.05 | 250 | 3.94 | 34.05 | 0.38 | 27.06 | 103 | 0.42 |
| 316 | 3.85 | 34.10 | 0.46 | 27.11 | 300 | 3.87 | 34.09 | 0.41 | 27.10 | 100 | 0.47 |
| PIONEER; August 14, 1958; 0721, 0623 GCT; 52°51'N, 166°00'W; wind, 270°, 28 kt; weather, partly cloudy; sea, rough. | | | | | | | | | | | 89 |
| 0 | 9.90 | 32.12 | - | 24.74 | 0 | 9.90 | 32.12 | | 24.74 | 321 | 0.00 |
| 10 | 10.68 | 32.10 | 6.46 | 24.60 | 10 | 10.68 | 32.10 | 6.46 | 24.60 | 335 | 0.03 |
| 25 | 10.62 | 32.11 | 6.65 | 24.62 | 20 | 10.66 | 32.10 | 6.61 | 24.60 | 335 | 0.07 |
| 50 | 5.21 | 32.87 | 6.66 | 25.99 | 30 | 10.00 | 32.16 | 6.65 | 24.76 | 320 | 0.10 |
| 74 | 4.20 | 33.11 | 5.47 | 26.29 | 50 | 5.21 | 32.87 | 6.66 | 25.99 | 203 | 0.15 |
| 99 | 4.08 | 33.41 | 3.98 | 26.54 | 75 | 4.19 | 33.12 | 5.42 | 26.30 | 174 | 0.20 |
| 123 | 4.08 | 33.73 | 2.02 | 26.79 | 100 | 4.08 | 33.43 | 3.88 | 26.55 | 150 | 0.24 |
| 148 | 4.08 | 33.88 | 0.97 | 26.91 | 150 | 4.07 | 33.89 | 0.94 | 26.92 | 116 | 0.30 |
| 197 | 3.98 | 33.99 | 0.44 | 27.01 | 200 | 3.98 | 33.99 | 0.43 | 27.01 | 108 | 0.36 |
| 246 | 3.94 | 34.05 | 0.36 | 27.06 | 250 | 3.94 | 34.05 | 0.36 | 27.06 | 103 | 0.41 |
| 295 | 3.88 | 34.08 | 0.37 | 27.09 | 300 | 3.87 | 34.08 | 0.37 | 27.09 | 101 | 0.46 |
| | | | | | 400 | 3.69 | 34.15 | 0.43 | 27.16 | 94 | 0.56 |
| 388 | 3.72 | 34.14 | 0.39 | 27.15 | 500 | 3.47 | 34.24 | 0.53 | 27.26 | 86 | 0.65 |
| 485 | 3.49 | 34.23 | 0.55 | 27.25 | 600 | 3.31 | 34.29 | 0.40 | 27.31 | 82 | 0.74 |
| 678 | 3.18 | 34.32 | 0.35 | 27.35 | 700 | 3.14 | 34.33 | 0.34 | 27.36 | 77 | 0.82 |
| 1018 | 2.63 | 34.44 | 0.62 | 27.49 | 800 | 2.98 | 34.37 | 0.35 | 27.41 | 73 | 0.89 |
| | | | | | 1000 | 2.66 | 34.43 | 0.58 | 27.48 | 67 | 1.03 |
| PIONEER; August 16, 1958; 0754 GCT; 53°31'N, 165°03'W; wind, 260°, 2 kt; weather, overcast; sea, smooth. | | | | | | | | | | | 90 |
| 0 | 8.40 | 31.92 | - | 24.82 | 0 | 8.40 | 31.92 | | 24.82 | 314 | 0.00 |
| 10 | 8.89 | 31.94 | 6.82 | 24.76 | 10 | 8.89 | 31.94 | 6.82 | 24.76 | 319 | 0.03 |
| 25 | 8.67 | 31.97 | 6.50 | 24.82 | 20 | 8.87 | 31.95 | 6.63 | 24.78 | 318 | 0.06 |
| 50 | 5.82 | 32.29 | 5.53 | 25.46 | 30 | 7.87 | 32.03 | 6.18 | 24.99 | 298 | 0.10 |
| 75 | 5.82 | 32.70 | 6.13 | 25.78 | 50 | 5.82 | 32.29 | 5.53 | 25.46 | 254 | 0.15 |
| 99 | 5.14 | 33.01 | 4.98 | 26.11 | 75 | 5.82 | 32.70 | 6.13 | 25.78 | 223 | 0.21 |
| 124 | 4.95 | 33.28 | 3.99 | 26.34 | 100 | 5.13 | 33.02 | 4.94 | 26.12 | 192 | 0.26 |
| 149 | 4.81 | 33.54 | 3.12 | 26.56 | 150 | 4.81 | 33.55 | 3.09 | 26.57 | 149 | 0.35 |
| 198 | 4.61 | 33.85 | 1.88 | 26.83 | 200 | 4.60 | 33.85 | 1.86 | 26.83 | 125 | 0.42 |
| 247 | 4.45 | 33.91 | 1.41 | 26.89 | 250 | 4.44 | 33.91 | 1.39 | 26.90 | 119 | 0.48 |
| 321 | 4.19 | 34.00 | 0.91 | 26.99 | 300 | 4.27 | 33.97 | 1.03 | 26.96 | 113 | 0.53 |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |
| 91 | PIONEER; August 19, 1958; 0302, 0214 GCT; 54°07'N, 160°00'W; wind, 190°, 6 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 10.90 | 32.25 | - | 24.68 | 0 | 10.90 | 32.25 | | 24.68 | 328 | 0.00 |
| 10 | 11.44 | 32.23 | 6.25 | 24.56 | 10 | 11.44 | 32.23 | 6.25 | 24.56 | 338 | 0.03 |
| 25 | 10.76 | 32.29 | 6.23 | 24.73 | 20 | 11.17 | 32.25 | 6.23 | 24.63 | 332 | 0.07 |
| 49 | 6.18 | 32.69 | 6.36 | 25.73 | 30 | 9.53 | 32.39 | 6.28 | 25.02 | 296 | 0.10 |
| 74 | 4.94 | 32.84 | 6.17 | 25.99 | 50 | 6.11 | 32.69 | 6.37 | 25.74 | 227 | 0.15 |
| 98 | 4.65 | 33.13 | 5.23 | 26.26 | 75 | 4.92 | 32.85 | 6.14 | 26.00 | 202 | 0.20 |
| 123 | 4.82 | 33.46 | 3.74 | 26.50 | 100 | 4.68 | 33.16 | 5.10 | 26.28 | 176 | 0.25 |
| 147 | 4.52 | 33.73 | 2.56 | 26.74 | 150 | 4.52 | 33.74 | 2.49 | 26.75 | 132 | 0.33 |
| 196 | 4.41 | 33.90 | 1.61 | 26.89 | 200 | 4.39 | 33.90 | 1.58 | 26.89 | 119 | 0.39 |
| 245 | 4.22 | 33.96 | 1.24 | 26.96 | 250 | 4.20 | 33.97 | 1.20 | 26.97 | 112 | 0.45 |
| 294 | 4.06 | 34.05 | - | 27.05 | 300 | 4.04 | 34.05 | 0.85 | 27.05 | 105 | 0.50 |
| | | | | | 400 | 3.84 | 34.12 | 0.47 | 27.13 | 98 | 0.60 |
| 387 | 3.85 | 34.11 | 0.48 | 27.12 | 500 | 3.70 | 34.18 | 0.43 | 27.19 | 93 | 0.70 |
| 483 | 3.74 | 34.17 | 0.44 | 27.17 | 600 | 3.49 | 34.25 | 0.39 | 27.26 | 86 | 0.79 |
| 677 | 3.34 | 34.29 | 0.38 | 27.31 | 700 | 3.30 | 34.30 | 0.38 | 27.32 | 81 | 0.87 |
| 1015 | 2.76 | 34.41 | 0.45 | 27.46 | 800 | 3.11 | 34.35 | 0.38 | 27.38 | 76 | 0.95 |
| | | | | | 1000 | 2.78 | 34.41 | 0.44 | 27.46 | 70 | 1.10 |
| 92 | PIONEER; August 19, 1958; 2304 GCT; 53°48'N, 160°00'W; wind, 140°, 10 kt; weather, intermittent slight drizzle; sea, slight. | | | | | | | | | | |
| 0 | 11.00 | 32.29 | - | 24.69 | 0 | 11.00 | 32.29 | | 24.69 | 326 | 0.00 |
| 10 | 11.58 | 32.28 | 6.26 | 24.58 | 10 | 11.58 | 32.28 | 6.26 | 24.58 | 337 | 0.03 |
| 24 | 11.16 | 32.32 | 6.24 | 24.68 | 20 | 11.47 | 32.29 | 6.22 | 24.61 | 335 | 0.07 |
| 49 | 5.78 | 32.83 | 6.78 | 25.89 | 30 | 9.51 | 32.47 | 6.48 | 25.08 | 290 | 0.10 |
| 73 | 4.32 | 32.99 | 6.07 | 26.18 | 50 | 5.70 | 32.83 | 6.78 | 25.90 | 212 | 0.15 |
| 97 | 3.95 | 33.40 | 3.68 | 26.54 | 75 | 4.27 | 33.03 | 5.86 | 26.22 | 182 | 0.20 |
| 121 | 4.02 | 33.75 | 1.70 | 26.81 | 100 | 3.96 | 33.46 | 3.37 | 26.59 | 146 | 0.24 |
| 145 | 4.06 | 33.89 | 0.83 | 26.92 | 150 | 4.05 | 33.90 | 0.77 | 26.93 | 115 | 0.30 |
| 194 | 4.00 | 33.98 | 0.46 | 27.00 | 200 | 4.00 | 33.99 | 0.45 | 27.01 | 108 | 0.36 |
| 243 | 3.95 | 34.04 | 0.40 | 27.05 | 250 | 3.94 | 34.05 | 0.40 | 27.06 | 103 | 0.41 |
| 316 | 3.82 | 34.12 | 0.39 | 27.13 | 300 | 3.85 | 34.10 | 0.39 | 27.11 | 99 | 0.46 |
| 93 | PIONEER; August 20, 1958; 0311, 0221 GCT; 53°30'N, 160°00'W; wind, 140°, 2 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 11.10 | 32.56 | - | 24.88 | 0 | 11.10 | 32.56 | | 24.88 | 308 | 0.00 |
| 10 | 11.40 | 32.54 | 6.54 | 24.81 | 10 | 11.40 | 32.54 | 6.54 | 24.81 | 315 | 0.03 |
| 25 | 10.63 | 32.65 | 6.17 | 25.03 | 20 | 11.07 | 32.61 | 6.23 | 24.93 | 304 | 0.06 |
| 50 | 5.60 | 32.83 | 6.82 | 25.91 | 30 | 9.31 | 32.69 | 6.40 | 25.28 | 270 | 0.09 |
| 75 | 4.45 | 32.93 | 6.24 | 26.12 | 50 | 5.60 | 32.83 | 6.82 | 25.91 | 211 | 0.14 |
| 99 | 3.98 | 33.48 | 3.15 | 26.60 | 75 | 4.45 | 32.93 | 6.24 | 26.12 | 191 | 0.19 |
| 124 | 4.08 | 33.80 | 1.41 | 26.85 | 100 | 3.99 | 33.50 | 3.06 | 26.62 | 144 | 0.23 |
| 148 | 4.06 | 33.93 | 0.65 | 26.95 | 150 | 4.05 | 33.93 | 0.63 | 26.95 | 112 | 0.30 |
| 197 | 3.95 | 34.02 | 0.34 | 27.03 | 200 | 3.95 | 34.02 | 0.34 | 27.03 | 105 | 0.35 |
| 246 | 3.91 | 34.07 | 0.32 | 27.08 | 250 | 3.90 | 34.07 | 0.32 | 27.08 | 101 | 0.40 |
| 295 | 3.81 | 34.12 | 0.31 | 27.13 | 300 | 3.80 | 34.12 | 0.31 | 27.13 | 97 | 0.45 |
| | | | | | 400 | 3.64 | 34.17 | 0.36 | 27.18 | 92 | 0.55 |
| 393 | 3.65 | 34.17 | 0.36 | 27.18 | 500 | 3.46 | 34.24 | 0.36 | 27.26 | 86 | 0.64 |
| 491 | 3.47 | 34.23 | 0.36 | 27.25 | 600 | 3.30 | 34.29 | 0.37 | 27.31 | 81 | 0.72 |
| 687 | 3.16 | 34.33 | 0.38 | 27.36 | 700 | 3.14 | 34.34 | 0.38 | 27.37 | 77 | 0.80 |
| 1031 | 2.60 | 34.44 | 0.52 | 27.50 | 800 | 2.98 | 34.38 | 0.41 | 27.41 | 73 | 0.87 |
| | | | | | 1000 | 2.65 | 34.43 | 0.49 | 27.48 | 67 | 1.01 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |

PIONEER; August 21, 1958; 0029 GCT; 52°50'N, 160°00'W; wind, 020°, 18 kt; weather, moderate; rain; sea, rough. 94

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.50 | 32.59 | - | 25.01 | 0 | 10.50 | 32.59 | | 25.01 | 296 | 0.00 |
| 10 | 11.00 | 32.59 | 6.29 | 24.92 | 10 | 11.00 | 32.59 | 6.29 | 24.92 | 304 | 0.03 |
| 25 | 10.98 | 32.60 | 6.26 | 24.93 | 20 | 10.99 | 32.59 | 6.24 | 24.92 | 304 | 0.06 |
| 49 | 6.37 | 32.79 | 6.78 | 25.78 | 30 | 10.90 | 32.64 | 6.46 | 24.98 | 299 | 0.09 |
| 74 | 4.45 | 32.96 | 6.12 | 26.14 | 50 | 6.27 | 32.79 | 6.79 | 25.80 | 222 | 0.14 |
| 98 | 3.98 | 33.41 | 3.63 | 26.55 | 75 | 4.42 | 32.98 | 6.00 | 26.16 | 187 | 0.19 |
| 122 | 4.16 | 33.79 | 1.65 | 26.83 | 100 | 4.00 | 33.45 | 3.40 | 26.58 | 148 | 0.24 |
| 146 | 4.15 | 33.88 | 1.14 | 26.90 | 150 | 4.14 | 33.89 | 1.08 | 26.91 | 116 | 0.30 |
| 195 | 4.02 | 33.97 | 0.53 | 26.99 | 200 | 4.02 | 33.98 | 0.50 | 27.00 | 109 | 0.36 |
| 244 | 3.98 | 34.04 | 0.35 | 27.05 | 250 | 3.97 | 34.05 | 0.34 | 27.06 | 104 | 0.41 |
| 317 | 3.85 | 34.11 | 0.37 | 27.12 | 300 | 3.89 | 34.10 | 0.34 | 27.10 | 99 | 0.46 |

PIONEER; August 21, 1958; 0640 GCT; 52°10'N, 160°00'W; wind, 290°, 20 kt; weather, intermittent slight drizzle; sea, rough. 95

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.00 | 32.63 | - | 25.12 | 0 | 10.00 | 32.63 | | 25.12 | 285 | 0.00 |
| 8 | 10.46 | 32.63 | 6.33 | 25.05 | 10 | 10.57 | 32.63 | 6.32 | 25.03 | 294 | 0.03 |
| 22 | 10.23 | 32.68 | 6.26 | 25.13 | 20 | 10.41 | 32.67 | 6.26 | 25.09 | 289 | 0.06 |
| 45 | 4.65 | 32.91 | 6.32 | 26.08 | 30 | 7.71 | 32.75 | 6.46 | 25.57 | 243 | 0.08 |
| 67 | 4.09 | 33.20 | 4.84 | 26.37 | 50 | 4.47 | 32.97 | 6.00 | 26.15 | 188 | 0.13 |
| 90 | 4.10 | 33.53 | 3.02 | 26.63 | 75 | 4.09 | 33.32 | 4.16 | 26.46 | 158 | 0.17 |
| 113 | 4.16 | 33.77 | 1.71 | 26.81 | 100 | 4.14 | 33.65 | 2.36 | 26.72 | 134 | 0.21 |
| 136 | 4.14 | 33.87 | 1.13 | 26.90 | 150 | 4.12 | 33.91 | 0.94 | 26.93 | 115 | 0.27 |
| 181 | 4.08 | 33.98 | 0.62 | 26.99 | 200 | 4.05 | 34.00 | 0.52 | 27.01 | 108 | 0.33 |
| 225 | 4.00 | 34.03 | 0.43 | 27.04 | 250 | 3.94 | 34.06 | 0.40 | 27.07 | 102 | 0.38 |
| 293 | 3.83 | 34.11 | 0.39 | 27.12 | 300 | (3.81) | (34.12) | (0.39) | (27.13) | (97) | (0.43) |

PIONEER; August 22, 1958; 0633, 0653 GCT; 51°54'N, 157°40'W; wind, 180°, 10 kt; weather, overcast; sea, moderate. 96

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.50 | 32.66 | - | 25.23 | 0 | 9.50 | 32.66 | | 25.23 | 275 | 0.00 |
| 9 | 10.02 | 32.66 | 6.35 | 25.15 | 10 | 10.03 | 32.66 | 6.35 | 25.14 | 283 | 0.03 |
| 23 | 9.95 | 32.65 | 6.50 | 25.15 | 20 | 10.00 | 32.65 | 6.44 | 25.14 | 284 | 0.06 |
| 47 | 5.21 | 32.83 | 7.11 | 25.96 | 30 | 8.17 | 32.71 | 6.61 | 25.47 | 252 | 0.08 |
| 70 | 4.26 | 32.93 | 6.65 | 26.14 | 50 | 5.05 | 32.82 | 7.21 | 25.97 | 205 | 0.13 |
| 94 | 3.97 | 33.53 | 3.17 | 26.64 | 75 | 4.18 | 33.08 | 5.75 | 26.27 | 177 | 0.18 |
| 117 | 3.97 | 33.78 | 1.92 | 26.84 | 100 | 3.98 | 33.61 | 2.78 | 26.71 | 135 | 0.22 |
| 140 | 3.90 | 33.87 | 1.29 | 26.92 | 150 | 3.90 | 33.89 | 1.06 | 26.94 | 114 | 0.28 |
| 187 | 3.90 | 33.96 | 0.50 | 26.99 | 200 | 3.90 | 33.98 | 0.45 | 27.01 | 108 | 0.33 |
| 234 | 3.88 | 34.02 | 0.36 | 27.04 | 250 | 3.86 | 34.04 | 0.34 | 27.06 | 103 | 0.39 |
| | | | | | 300 | 3.75 | 34.09 | 0.34 | 27.11 | 99 | 0.44 |
| 305 | 3.74 | 34.10 | 0.35 | 27.12 | | | | | | | |

PIONEER; August 22, 1958; 1818, 1850 GCT; 51°41'N, 155°30'W; wind, 090°, 26 kt; weather, moderate rain; sea, rough. 97

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.40 | 32.71 | - | 25.29 | 0 | 9.40 | 32.71 | | 25.29 | 270 | 0.00 |
| 9 | 9.97 | 32.71 | 6.33 | 25.19 | 10 | 9.98 | 32.71 | 6.33 | 25.19 | 279 | 0.03 |
| 23 | 9.93 | 32.72 | 6.38 | 25.21 | 20 | 9.96 | 32.71 | 6.35 | 25.19 | 279 | 0.06 |
| 45 | 5.45 | 32.84 | 7.11 | 25.94 | 30 | 9.70 | 32.76 | 6.74 | 25.28 | 271 | 0.08 |
| 66 | 4.78 | 32.90 | 6.75 | 26.06 | 50 | 5.29 | 32.82 | 7.18 | 25.94 | 208 | 0.13 |
| 88 | 4.06 | 33.35 | 4.57 | 26.49 | 75 | 4.43 | 33.10 | 5.78 | 26.25 | 178 | 0.18 |
| | | | | | 100 | 3.91 | 33.54 | 3.60 | 26.66 | 140 | 0.22 |
| 112 | 3.80 | 33.68 | 2.92 | 26.78 | 150 | 3.65 | 33.81 | 2.21 | 26.90 | 118 | 0.28 |
| 135 | 3.68 | 33.78 | 2.45 | 26.87 | 200 | 3.64 | 33.90 | 1.43 | 26.97 | 111 | 0.34 |
| 180 | 3.62 | 33.86 | 1.75 | 26.94 | 250 | 3.65 | 33.98 | 0.94 | 27.03 | 106 | 0.39 |
| 225 | 3.65 | 33.94 | 1.13 | 27.00 | 300 | (3.63) | (34.05) | (0.75) | (27.09) | (100) | (0.44) |
| 270 | 3.64 | 34.01 | 0.83 | 27.06 | | | | | | | |

SBL

MV PIONEER

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
| 98 | PIONEER; August 24, 1958; 1945 GCT; 50°26'N, 147°25'W; wind, 230°, 14 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | | |
| 0 | 11.30 | 32.54 | | 24.83 | 0 | 11.30 | 32.54 | | 24.83 | 313 | 0.00 |
| 10 | 11.76 | 32.54 | | 24.75 | 10 | 11.76 | 32.54 | | 24.75 | 321 | 0.03 |
| 25 | 11.76 | 32.53 | | 24.74 | 20 | 11.76 | 32.53 | | 24.74 | 322 | 0.06 |
| 49 | 6.93 | 32.78 | | 25.70 | 30 | 11.76 | 32.60 | | 24.79 | 317 | 0.10 |
| 74 | 5.82 | 32.82 | | 25.88 | 50 | 6.87 | 32.78 | | 25.71 | 230 | 0.15 |
| 98 | 5.34 | 32.83 | | 25.94 | 75 | 5.81 | 32.81 | | 25.87 | 215 | 0.21 |
| 122 | 4.55 | 33.28 | | 26.38 | 100 | 5.27 | 32.87 | | 25.98 | 204 | 0.26 |
| 146 | 3.92 | 33.60 | | 26.70 | 150 | 3.89 | 33.62 | | 26.72 | 134 | 0.34 |
| 195 | 3.64 | 33.77 | | 26.87 | 200 | 3.64 | 33.78 | | 26.87 | 120 | 0.41 |
| 294 | 3.65 | 33.92 | | 26.98 | 250 | 3.65 | 33.86 | | 26.94 | 114 | 0.47 |
| 517 | 3.54 | 34.17 | | 27.19 | 300 | 3.65 | 33.93 | | 26.99 | 110 | 0.52 |
| | | | | | 400 | 3.62 | 34.05 | | 27.09 | 101 | 0.63 |
| | | | | | 500 | 3.55 | 34.16 | | 27.19 | 93 | 0.72 |
| 99 | PIONEER; August 25, 1958; 0616, 0527 GCT; 49°43'N, 146°10'W; wind, 260°, 6 kt; weather, cloudy; sea, slight. | | | | | | | | | | |
| 0 | 11.80 | 32.65 | | 24.82 | 0 | 11.80 | 32.65 | | 24.82 | 313 | 0.00 |
| 10 | 12.20 | 32.64 | | 24.74 | 10 | 12.20 | 32.64 | | 24.74 | 322 | 0.03 |
| 25 | 12.18 | 32.65 | | 24.75 | 20 | 12.19 | 32.64 | | 24.74 | 322 | 0.06 |
| 50 | 7.55 | 32.97 | | 25.77 | 30 | 12.15 | 32.74 | | 24.83 | 314 | 0.10 |
| 75 | 6.45 | 33.01 | | 25.95 | 50 | 7.55 | 32.97 | | 25.77 | 224 | 0.15 |
| 100 | 5.76 | 33.03 | | 26.05 | 75 | 6.45 | 33.01 | | 25.95 | 208 | 0.20 |
| 124 | 5.60 | 33.29 | | 26.27 | 100 | 5.76 | 33.03 | | 26.05 | 198 | 0.26 |
| 149 | 5.22 | 33.69 | | 26.63 | 150 | 5.20 | 33.69 | | 26.64 | 143 | 0.34 |
| 199 | 4.34 | 33.76 | | 26.79 | 200 | 4.33 | 33.76 | | 26.79 | 128 | 0.41 |
| 248 | 3.98 | 33.82 | | 26.87 | 250 | 3.97 | 33.82 | | 26.87 | 121 | 0.47 |
| 298 | 3.81 | 33.88 | | 26.94 | 300 | 3.81 | 33.88 | | 26.94 | 115 | 0.53 |
| | | | | | 400 | 3.74 | 34.02 | | 27.06 | 105 | 0.64 |
| 390 | 3.75 | 34.01 | | 27.05 | 500 | 3.61 | 34.12 | | 27.15 | 96 | 0.74 |
| 488 | 3.62 | 34.11 | | 27.14 | 600 | 3.49 | 34.20 | | 27.22 | 90 | 0.83 |
| 683 | 3.38 | 34.25 | | 27.27 | 700 | 3.36 | 34.26 | | 27.28 | 85 | 0.92 |
| 1025 | 2.78 | 34.38 | | 27.43 | 800 | 3.20 | 34.31 | | 27.34 | 80 | 1.00 |
| | | | | | 1000 | 2.83 | 34.38 | | 27.43 | 72 | 1.16 |
| 100 | PIONEER; August 26, 1958; 0603 GCT; 50°24'N, 144°05'W; wind, 280°, 4 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 12.60 | 32.62 | | 24.65 | 0 | 12.60 | 32.62 | | 24.65 | 330 | 0.00 |
| 10 | 13.12 | 32.60 | | 24.53 | 10 | 13.12 | 32.60 | | 24.53 | 341 | 0.03 |
| 25 | 12.96 | 32.62 | | 24.58 | 20 | 13.04 | 32.61 | | 24.56 | 339 | 0.07 |
| 50 | 7.28 | 32.81 | | 25.68 | 30 | 12.85 | 32.67 | | 24.64 | 332 | 0.10 |
| 75 | 5.90 | 32.86 | | 25.90 | 50 | 7.28 | 32.81 | | 25.68 | 233 | 0.16 |
| 100 | 5.49 | 32.94 | | 26.01 | 75 | 5.90 | 32.86 | | 25.90 | 212 | 0.21 |
| 125 | 5.24 | 33.25 | | 26.28 | 100 | 5.49 | 32.94 | | 26.01 | 202 | 0.27 |
| 149 | 4.80 | 33.67 | | 26.67 | 150 | 4.78 | 33.67 | | 26.67 | 140 | 0.35 |
| 198 | 4.14 | 33.77 | | 26.82 | 200 | 4.13 | 33.77 | | 26.82 | 126 | 0.42 |
| 297 | 3.72 | 33.88 | | 26.95 | 250 | 3.89 | 33.83 | | 26.89 | 119 | 0.48 |
| 521 | 3.60 | 34.14 | | 27.16 | 300 | 3.71 | 33.88 | | 26.95 | 114 | 0.54 |
| | | | | | 400 | 3.52 | 34.00 | | 27.06 | 104 | 0.64 |
| | | | | | 500 | 3.56 | 34.11 | | 27.14 | 97 | 0.74 |
| 101 | PIONEER; August 26, 1958; 1756 GCT; 51°00'N, 142°00'W; wind, 320°, 5 kt; weather, sky obscured; sea, smooth. | | | | | | | | | | |
| 0 | 13.70 | 32.61 | | 24.42 | 0 | 13.70 | 32.61 | | 24.42 | 352 | 0.00 |
| 10 | 14.32 | 32.59 | | 24.28 | 10 | 14.32 | 32.59 | | 24.28 | 365 | 0.04 |
| 24 | 14.10 | 32.61 | | 24.34 | 20 | 14.15 | 32.60 | | 24.32 | 362 | 0.07 |
| 48 | 8.09 | 32.82 | | 25.57 | 30 | 14.10 | 32.68 | | 24.40 | 355 | 0.11 |
| 72 | 6.92 | 32.81 | | 25.73 | 50 | 7.97 | 32.82 | | 25.59 | 241 | 0.17 |
| 97 | 6.25 | 32.90 | | 25.89 | 75 | 6.83 | 32.80 | | 25.73 | 228 | 0.23 |
| 121 | 5.73 | 33.32 | | 26.28 | 100 | 6.18 | 32.96 | | 25.94 | 208 | 0.28 |
| 145 | 5.32 | 33.58 | | 26.54 | 150 | 5.27 | 33.60 | | 26.56 | 150 | 0.37 |
| 193 | 4.88 | 33.76 | | 26.73 | 200 | 4.81 | 33.77 | | 26.74 | 133 | 0.44 |
| 290 | 4.08 | 33.87 | | 26.90 | 250 | 4.36 | 33.82 | | 26.83 | 125 | 0.51 |
| 508 | 3.78 | 34.12 | | 27.13 | 300 | 4.02 | 33.88 | | 26.92 | 117 | 0.57 |
| | | | | | 400 | 3.67 | 34.00 | | 27.05 | 105 | 0.68 |
| | | | | | 500 | 3.75 | 34.11 | | 27.13 | 99 | 0.78 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |

102

PIONEER; August 27, 1958; 0627, 0516 GCT; 51°30'N, 140°00'W; wind, 320°, 2 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.90 | 32.43 | 24.04 | 0 | 14.90 | 32.43 | 24.04 | 388 | 0.00 |
| 10 | 15.42 | 32.41 | 23.91 | 10 | 15.42 | 32.41 | 23.91 | 401 | 0.04 |
| 25 | 15.39 | 32.41 | 23.91 | 20 | 15.40 | 32.41 | 23.91 | 401 | 0.08 |
| 50 | 8.13 | 32.57 | 25.37 | 30 | 15.33 | 32.44 | 23.95 | 398 | 0.12 |
| 74 | 7.15 | 32.69 | 25.60 | 50 | 8.13 | 32.57 | 25.37 | 262 | 0.18 |
| 99 | 6.57 | 32.84 | 25.80 | 75 | 7.13 | 32.69 | 25.61 | 240 | 0.25 |
| 124 | 5.65 | 33.24 | 26.23 | 100 | 6.52 | 32.86 | 25.82 | 220 | 0.30 |
| 149 | 5.18 | 33.53 | 26.51 | 150 | 5.18 | 33.54 | 26.52 | 154 | 0.40 |
| 198 | 4.96 | 33.77 | 26.73 | 200 | 4.95 | 33.77 | 26.73 | 134 | 0.47 |
| 248 | 4.67 | 33.87 | 26.84 | 250 | 4.66 | 33.87 | 26.84 | 124 | 0.54 |
| 298 | 4.42 | 33.93 | 26.91 | 300 | 4.41 | 33.93 | 26.91 | 118 | 0.60 |
| | | | | 400 | 4.17 | 34.02 | 27.01 | 109 | 0.71 |
| 391 | 4.18 | 34.02 | 27.01 | 500 | 4.02 | 34.09 | 27.08 | 103 | 0.81 |
| 489 | 4.04 | 34.08 | 27.07 | 600 | 3.84 | 34.18 | 27.17 | 95 | 0.91 |
| 684 | 3.68 | 34.24 | 27.24 | 700 | 3.65 | 34.25 | 27.25 | 89 | 1.00 |
| 1026 | 2.90 | 34.36 | 27.41 | 800 | 3.44 | 34.30 | 27.31 | 84 | 1.09 |
| | | | | 1000 | 2.97 | 34.36 | 27.40 | 75 | 1.25 |

103

PIONEER; August 29, 1958; 2133 GCT; 49°00'N, 130°40'W; wind, 300°, 14 kt; weather, cloudy; sea, rough.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 17.20 | 32.31 | 23.43 | 0 | 17.20 | 32.31 | 23.43 | 447 | 0.00 |
| 10 | 17.70 | 32.29 | 23.29 | 10 | 17.70 | 32.29 | 23.29 | 460 | 0.04 |
| 25 | 17.67 | 32.30 | 23.31 | 20 | 17.69 | 32.29 | 23.30 | 460 | 0.09 |
| 50 | 12.24 | 32.44 | 24.58 | 30 | 17.63 | 32.34 | 23.35 | 455 | 0.14 |
| 74 | 9.06 | 32.43 | 25.12 | 50 | 12.24 | 32.44 | 24.58 | 338 | 0.22 |
| 98 | 8.04 | 32.64 | 25.44 | 75 | 9.01 | 32.44 | 25.14 | 285 | 0.29 |
| 123 | 7.14 | 32.98 | 25.83 | 100 | 7.94 | 32.67 | 25.48 | 253 | 0.36 |
| 147 | 6.94 | 33.30 | 26.11 | 150 | 6.91 | 33.33 | 26.14 | 190 | 0.47 |
| 196 | 6.44 | 33.74 | 26.52 | 200 | 6.41 | 33.75 | 26.54 | 154 | 0.56 |
| 294 | 5.72 | 33.88 | 26.72 | 250 | 6.03 | 33.82 | 26.64 | 144 | 0.63 |
| 515 | 4.38 | 34.04 | 27.01 | 300 | 5.68 | 33.89 | 26.74 | 135 | 0.70 |
| | | | | 400 | 5.03 | 33.98 | 26.89 | 122 | 0.83 |
| | | | | 500 | 4.46 | 34.04 | 27.00 | 112 | 0.95 |

104

PIONEER; August 30, 1958; 0625 GCT; 48°52'N, 129°10'W; wind, 240°, 14 kt; weather, overcast; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.90 | 32.17 | 23.39 | 0 | 16.90 | 32.17 | 23.39 | 450 | 0.00 |
| 9 | 17.48 | 32.17 | 23.25 | 10 | 17.48 | 32.17 | 23.25 | 463 | 0.05 |
| 23 | 17.40 | 32.20 | 23.30 | 20 | 17.43 | 32.19 | 23.28 | 461 | 0.09 |
| 46 | 11.91 | 32.20 | 24.46 | 30 | 17.35 | 32.20 | 23.31 | 459 | 0.14 |
| 69 | 9.06 | 32.47 | 25.15 | 50 | 11.29 | 32.25 | 24.61 | 335 | 0.22 |
| 93 | 7.88 | 32.64 | 25.46 | 75 | 8.74 | 32.50 | 25.22 | 276 | 0.29 |
| 116 | 7.00 | 32.91 | 25.80 | 100 | 7.54 | 32.72 | 25.57 | 244 | 0.36 |
| 139 | 6.82 | 33.22 | 26.06 | 150 | 6.73 | 33.34 | 26.17 | 187 | 0.47 |
| 186 | 6.44 | 33.65 | 26.45 | 200 | 6.35 | 33.69 | 26.50 | 157 | 0.55 |
| 279 | 5.85 | 33.89 | 26.72 | 250 | 6.04 | 33.83 | 26.65 | 144 | 0.63 |
| 489 | 4.33 | 34.02 | 26.99 | 300 | 5.65 | 33.91 | 26.76 | 133 | 0.70 |
| | | | | 400 | 4.84 | 34.00 | 26.92 | 118 | 0.82 |
| | | | | 500 | (4.28) | (34.02) | (27.00) | (111) | (0.94) |

105

PIONEER; August 30, 1958; 1426 GCT; 48°45'N, 127°50'W; wind, 200°, 14 kt; weather, intermittent slight drizzle; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.90 | 32.10 | 23.56 | 0 | 15.90 | 32.10 | 23.56 | 434 | 0.00 |
| 10 | 16.24 | 32.08 | 23.47 | 10 | 16.24 | 32.08 | 23.47 | 442 | 0.04 |
| 25 | 12.94 | 32.19 | 24.25 | 20 | 13.89 | 32.15 | 24.03 | 389 | 0.09 |
| 50 | 10.44 | 32.35 | 24.83 | 30 | 12.38 | 32.22 | 24.38 | 356 | 0.12 |
| 74 | 8.72 | 32.57 | 25.28 | 50 | 10.44 | 32.35 | 24.83 | 314 | 0.19 |
| 98 | 7.64 | 32.92 | 25.72 | 75 | 8.66 | 32.58 | 25.30 | 269 | 0.26 |
| 123 | 7.18 | 33.37 | 26.13 | 100 | 7.59 | 32.96 | 25.75 | 226 | 0.32 |
| 147 | 7.20 | 33.69 | 26.38 | 150 | 7.18 | 33.71 | 26.40 | 166 | 0.42 |
| 196 | 6.82 | 33.91 | 26.61 | 200 | 6.78 | 33.91 | 26.61 | 146 | 0.50 |
| 295 | 5.96 | 33.97 | 26.77 | 250 | 6.32 | 33.94 | 26.70 | 139 | 0.57 |
| 518 | 4.80 | 34.11 | 27.01 | 300 | 5.92 | 33.97 | 26.77 | 132 | 0.64 |
| | | | | 400 | 5.28 | 34.04 | 26.90 | 120 | 0.77 |
| | | | | 500 | 4.85 | 34.10 | 27.00 | 112 | 0.88 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; April 29, 1958; 0441 GCT; 54°20'N, 165°06'W; sounding, 77 fm; wind, 090°, 18 kt; weather, overcast; sea, rough.

| | | |
|---|---|---|
| 0 | 4.4 | 32.43 |
| 12 | 4.55 | 32.39 |
| 27 | 4.33 | 32.41 |
| 67 | 4.24 | 32.45 |
| 132 | 4.06 | 32.57 |

TORDENSKJOLD; April 29, 1958; 0743 GCT; 54°30'N, 164°55'W; sounding, 12 fm; wind, 090°, 5 kt; weather, partly cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.3 | 31.74 |
| 20 | 4.31 | 31.73 |

TORDENSKJOLD; April 30, 1958; 0025 GCT; 54°40'N, 164°48'W; sounding, 15 fm; wind, 360°, 16 kt; weather, partly cloudy; sea, rough.

| | | |
|---|---|---|
| 0 | 4.4 | 31.89 |
| 10 | 4.37 | 31.91 |
| 20 | 4.25 | 31.96 |

TORDENSKJOLD; April 30, 1958; 0310 GCT; 54°53'N, 165°03'W; sounding, 50 fm; wind, 360°, 12 kt; weather, partly cloudy; sea, moderate.

| | | |
|---|---|---|
| 0 | 4.2 | 31.96 |
| 20 | 4.24 | 32.16 |
| 31 | 4.26 | 32.23 |
| 86 | 4.22 | 32.41 |

TORDENSKJOLD; April 30, 1958; 1945 GCT; 54°48'N, 164°40'W; sounding, 35 fm; wind, 020°, 10 kt; weather, overcast; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.38 | 31.76 |
| 15 | 4.06 | 31.96 |
| 30 | 3.19 | 32.00 |
| 55 | 3.16 | 31.98 |

TORDENSKJOLD; May 1, 1958; 0350 GCT; 55°09'N, 163°50'W; sounding, 20 fm; wind, 360°, 8 kt; weather, sky obscured; sea, slight.

| | | |
|---|---|---|
| 0 | 4.23 | 31.47 |
| 6 | 4.18 | 31.49 |
| 21 | 3.60 | 31.56 |
| 31 | 3.58 | 31.56 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; April 29, 1958; 0613 GCT; 54°23'N, 165°02'W; sounding, 53 fm; wind, 070°, 12 kt; weather, cloudy; sea, moderate.

| | | |
|---|---|---|
| 0 | 4.45 | 32.34 |
| 15 | 4.42 | 32.27 |
| 30 | 4.42 | 32.27 |
| 85 | 4.30 | 32.34 |

TORDENSKJOLD; April 29, 1958; 0745 GCT; 54°40'N, 165°10'W; sounding, 48 fm; wind, 340°, 10 kt; weather, partly cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 4.4 | 32.14 |
| 15 | 4.30 | 32.14 |
| 30 | 4.34 | 32.14 |
| 75 | 4.32 | 32.23 |

TORDENSKJOLD; April 30, 1958; 0120 GCT; 54°44'N, 164°54'W; sounding, 35 fm; wind, 360°, 12 kt; weather, partly cloudy; sea, moderate.

| | | |
|---|---|---|
| 0 | 4.4 | 32.10 |
| 12 | 4.27 | 32.12 |
| 27 | 4.20 | 32.16 |
| 57 | 4.19 | 32.29 |

TORDENSKJOLD; April 30, 1958; 0635 GCT; 55°02'N, 165°14'W; sounding, 62 fm; wind, 360°, 12 kt; weather, partly cloudy; sea, moderate.

| | | |
|---|---|---|
| 0 | 4.20 | 31.74 |
| 5 | 4.25 | 31.83 |
| 20 | 4.10 | 32.20 |
| 50 | 4.17 | 32.34 |
| 95 | 4.20 | 32.54 |

TORDENSKJOLD; May 1, 1958; 0210 GCT; 55°19'N, 164°02'W; sounding, 42 fm; wind, 020°, 12 kt; weather, sky obscured; sea, slight.

| | | |
|---|---|---|
| 0 | 4.20 | 31.62 |
| 20 | 4.17 | 31.64 |
| 30 | 4.01 | 31.60 |
| 70 | 3.81 | 31.87 |

TORDENSKJOLD; May 1, 1958; 0455 GCT; 55°04'N, 163°47'W; sounding, 10 fm; wind, 360°, 2 kt; weather, sky obscured; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.58 | 31.18 |
| 5 | 4.43 | 31.20 |
| 10 | 4.25 | 31.26 |

9

10

TORDENSKJOLD; May 1, 1958; 0555 GCT; 55°06'N, 163°37'W; sounding, 15 fm; wind, calm; weather, sky obscured; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.13 | 31.65 |
| 10 | 3.57 | 31.62 |
| 20 | 3.48 | 31.69 |

11

B8

TORDENSKJOLD; May 1, 1958; 0755 GCT; 55°08'N, 163°20'W; sounding, 10 fm; wind, 360°, 5 kt; weather, missing; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.70 | 31.58 |
| 8 | 4.25 | 31.58 |
| 13 | 3.80 | 31.64 |

C8

C9

TORDENSKJOLD; May 2, 1958; 0220 GCT; 55°48'N, 163°20'W; sounding, 48 fm; wind, 050°, 15 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 3.65 | 31.87 |
| 20 | 3.54 | 31.85 |
| 35 | 3.00 | 31.89 |
| 80 | 2.42 | 31.92 |

D9

D10

TORDENSKJOLD; May 2, 1958; 2325 GCT; 55°59'N, 162°45'W; sounding, 44 fm; wind, 050°, 5 kt; weather, missing; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.10 | 31.80 |
| 15 | 3.49 | 31.83 |
| 30 | 2.80 | 31.87 |
| 70 | 2.78 | 31.87 |

D11

E11

TORDENSKJOLD; May 3, 1958; 1930 GCT; 56°02'N, 161°38'W; sounding, 22 fm; wind, 320°, 10 kt; weather, light fog; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 3.50 | 31.66 |
| 18 | 3.49 | 31.56 |
| 33 | 3.45 | 31.58 |

E12

F12

TORDENSKJOLD; May 4, 1958; 0450 GCT; 56°20'N, 161°00'W; sounding, 28 fm; wind, 320°, 20 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.65 | 31.15 |
| 5 | 4.65 | 31.13 |
| 20 | 3.00 | 31.63 |
| 40 | 2.90 | 31.64 |

TORDENSKJOLD; May 1, 1958; 0655 GCT; 55°06'N, 163°28'W; sounding, 10 fm; wind, calm; weather, missing; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.49 | 31.49 |
| 13 | 3.90 | 31.60 |

TORDENSKJOLD; May 1, 1958; 1940 GCT; 55°20'N, 163°26'W; sounding, 30 fm; wind, 020°, 25 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.20 | 31.51 |
| 19 | 3.77 | 31.56 |
| 49 | 3.08 | 31.80 |

TORDENSKJOLD; May 2, 1958; 1910 GCT; 55°39'N, 162°49'W; sounding, 27 fm; wind, 050°, 10 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 3.90 | 31.56 |
| 4 | 3.72 | 31.55 |
| 19 | 3.68 | 31.56 |
| 49 | 3.41 | 31.58 |

TORDENSKJOLD; May 3, 1958; 0425 GCT; 56°00'N, 162°08'W; sounding, 36 fm; wind, 360°, 5 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.25 | 31.35 |
| 14 | 3.59 | 31.35 |
| 29 | 3.14 | 31.73 |
| 59 | 2.96 | 31.82 |

TORDENSKJOLD; May 4, 1958; 0045 GCT; 56°20'N, 161°38'W; sounding, 35 fm; wind, 320°, 15 kt; weather, partly cloudy; sea, moderate.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 4.21 | 31.60 |
| 14 | 3.35 | 31.78 |
| 29 | 2.65 | 31.93 |
| 59 | 2.60 | 31.95 |

TORDENSKJOLD; May 4, 1958; 2025 GCT; 56°40'N, 161°00'W; sounding, 36 fm; wind, 020°, 10 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 3.52 | 31.79 |
| 15 | 3.17 | 31.82 |
| 30 | 2.68 | 31.84 |
| 60 | 2.57 | 31.86 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; May 5, 1958; 0115 GCT; 56°39'N, 160°19'W; sounding, 33 fm; wind, 020°, 15 kt; weather, overcast; sea, slight.

| | | |
|---|---|---|
| 0 | 3.60 | 31.62 |
| 30 | 2.94 | 31.67 |
| 49 | 2.57 | 31.71 |

TORDENSKJOLD; May 5, 1958; 1944 GCT; 56°40'N, 159°45'W; sounding, 21 fm; wind, 320°, 10 kt; weather, light fog; sea, slight.

| | | |
|---|---|---|
| 0 | 2.79 | 31.45 |
| 15 | 2.71 | 31.47 |
| 31 | 2.62 | 31.50 |

TORDENSKJOLD; May 6, 1958; 0040 GCT; 56°58'N, 159°42'W; sounding, 30 fm; wind, 320°, 15 kt; weather, sky obscured; sea, slight.

| | | |
|---|---|---|
| 0 | 2.65 | 31.58 |
| 19 | 2.52 | 31.62 |
| 49 | 2.50 | 31.69 |

TORDENSKJOLD; May 6, 1958; 1945 GCT; 57°20'N, 159°05'W; sounding, 29 fm; wind, 270°, 18 kt; weather, slight fall of snowflakes; sea, slight.

| | | |
|---|---|---|
| 0 | 2.30 | 31.64 |
| 20 | 2.37 | 31.65 |
| 40 | 2.33 | 31.65 |

TORDENSKJOLD; May 7, 1958; 0515 GCT; 57°40'N, 159°40'W; sounding, 25 fm; wind, 270°, 20 kt; weather, slight fall of snowflakes; sea, slight.

| | | |
|---|---|---|
| 0 | 2.15 | 31.82 |
| 20 | 2.20 | 31.81 |
| 40 | 2.18 | 31.80 |

TORDENSKJOLD; May 8, 1958; 0130 GCT; 58°01'N, 160°16'W; sounding, 25 fm; wind, 090°, 20 kt; weather, heavy fall of snowflakes; sea, moderate.

| | | |
|---|---|---|
| 0 | 1.45 | 31.42 |
| 20 | 1.47 | 31.41 |
| 40 | 1.43 | 31.41 |

TORDENSKJOLD; May 8, 1958; 1640 GCT; 58°26'N, 161°02'W; sounding, 12 fm; wind, calm; weather, sky obscured; sea, smooth.

| | | |
|---|---|---|
| 0 | 3.29 | 30.44 |
| 8 | 3.21 | 30.47 |
| 13 | 3.12 | 30.52 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

F13

TORDENSKJOLD; May 5, 1958; 0410 GCT; 56°28'N, 160°02'W; sounding, 10 fm; wind, 360°, 12 kt; weather, sky obscured; sea, slight.

I2

| | | |
|---|---|---|
| 0 | 3.48 | - |
| 3 | 3.42 | 31.16 |
| 13 | 3.42 | 31.16 |

F14

TORDENSKJOLD; May 5, 1958; 2110 GCT; 56°50'N, 159°46'W; sounding, 27 fm; wind, 320°, 10 kt; weather, light fog; sea, slight.

I3

| | | |
|---|---|---|
| 0 | 2.60 | 31.56 |
| 20 | 2.60 | 31.58 |
| 40 | 2.60 | 31.59 |

G14

TORDENSKJOLD; May 6, 1958; 0440 GCT; 57°00'N, 159°08'W; sounding, 19 fm; wind, 320°, 15 kt; weather, sky obscured; sea, slight.

G15

| | | |
|---|---|---|
| 0 | 3.05 | 31.34 |
| 10 | 2.92 | 31.45 |
| 20 | 2.83 | 31.50 |

H15

TORDENSKJOLD; May 7, 1958; 0030 GCT; 57°21'N, 159°38'W; sounding, 30 fm; wind, 270°, 15 kt; weather, sky obscured; sea, slight.

H14

| | | |
|---|---|---|
| 0 | 2.37 | 31.86 |
| 19 | 2.29 | 31.82 |
| 49 | 2.27 | 31.83 |

I14

TORDENSKJOLD; May 7, 1958; 1945 GCT; 57°40'N, 160°23'W; sounding, 30 fm; wind, 090°, 15 kt; weather, heavy fall of snowflakes; sea, moderate.

I13

| | | |
|---|---|---|
| 0 | 1.90 | 31.85 |
| 19 | 1.95 | 31.85 |
| 49 | 1.93 | 31.85 |

J13

TORDENSKJOLD; May 8, 1958; 0245 GCT; 58°01'N, 160°51'W; sounding, 23 fm; wind, 110°, 20 kt; weather, intermittent heavy fall of snowflakes; sea, slight.

J12

| | | |
|---|---|---|
| 0 | 2.55 | 31.56 |
| 16 | 1.54 | 31.56 |
| 31 | 1.51 | 31.56 |

I4

TORDENSKJOLD; May 8, 1958; 1755 GCT; 58°32'N, 161°16'W; sounding, 5 fm; wind, 230°, 5 kt; weather, slight fall of snowflakes; sea, smooth.

I5

| | | |
|---|---|---|
| 0 | 3.65 | 29.80 |
| 9 | 3.62 | 29.81 |

| | OBSERVED | | |
|---|---|---|---|
| | Z | T | S |
| | m | °C | ‰ |
| I6 | TORDENSKJOLD; May 8, 1958; 1805 GCT; 58°37'N, 161°28'W; sounding, 5 fm; wind, 250°, 5 kt; weather, heavy fall of snowflakes; sea, smooth. | | |
| K11 | 0 | 3.47 | 29.98 |
| | 10 | 3.46 | 30.02 |
| I7 | TORDENSKJOLD; May 10, 1958; 0150 GCT; 58°35'N, 161°39'W; sounding, 5 fm; wind, 320°, 30 kt; weather, sky obscured; sea, smooth. | | |
| J11 | 0 | 1.7 | 30.48 |
| | 5 | 2.13 | 30.48 |
| I11 | TORDENSKJOLD; May 10, 1958; 2315 GCT; 57°39'N, 161°35'W; sounding, 25 fm; wind, 290°, 7 kt; weather, partly cloudy; sea, smooth. | | |
| I12 | 0 | 2.72 | 32.19 |
| | 20 | 2.44 | 32.18 |
| | 40 | 2.42 | 32.19 |
| H13 | TORDENSKJOLD; May 11, 1958; 0755 GCT; 57°20'N, 160°19'W; sounding, 30 fm; wind, 050°, 12 kt; weather, partly cloudy; sea, smooth. | | |
| G13 | 0 | 2.69 | 32.03 |
| | 19 | 2.51 | 32.03 |
| | 49 | 2.48 | 32.03 |
| F11 | TORDENSKJOLD; May 13, 1958; 0028 GCT; 56°39'N, 161°38'W; sounding, 44 fm; wind, 340°, 6 kt; weather, partly cloudy; sea, smooth. | | |
| F10 | 0 | 3.50 | 31.89 |
| | 15 | 3.15 | 31.88 |
| | 30 | 3.00 | 31.88 |
| | 70 | 2.50 | 32.01 |
| E10 | TORDENSKJOLD; May 13, 1958; 1930 GCT; 56°20'N, 162°10'W; sounding, 40 fm; wind, 320°, 5 kt; weather, clear; sea, smooth. | | |
| E9 | 0 | 3.25 | 32.01 |
| | 13 | 2.97 | 32.01 |
| | 28 | 2.90 | 31.99 |
| | 68 | 2.90 | 32.00 |

| | OBSERVED | | |
|---|---|---|---|
| | Z | T | S |
| | m | °C | ‰ |
| | TORDENSKJOLD; May 8, 1958; 2325 GCT; 58°20'N, 161°28'W; sounding, 21 fm; wind, 320°, 28 kt; weather, sky obscured; sea, moderate. | | |
| | 0 | 1.37 | 31.51 |
| | 16 | - | 31.50 |
| | 31 | 1.30 | 31.50 |
| | TORDENSKJOLD; May 10, 1958; 1900 GCT; 57°58'N, 161°30'W; sounding, 27 fm; wind, 290°, 15 kt; weather, partly cloudy; sea, slight. | | |
| | 0 | 1.47 | 31.69 |
| | 20 | 1.49 | 31.69 |
| | 40 | 1.76 | 31.81 |
| | TORDENSKJOLD; May 11, 1958; 0335 GCT; 57°36'N, 160°52'W; sounding, 30 fm; wind, calm; weather, partly cloudy; sea, calm. | | |
| | 0 | 3.12 | 32.07 |
| | 19 | 2.36 | 32.06 |
| | 49 | 2.33 | 32.05 |
| | TORDENSKJOLD; May 11, 1958; 1730 GCT; 57°01'N, 160°25'W; sounding, 35 fm; wind, 050°, 25 kt; weather, sky obscured; sea, slight. | | |
| | 0 | 2.64 | 32.00 |
| | 29 | 2.60 | 32.00 |
| | 59 | 2.60 | 32.00 |
| | TORDENSKJOLD; May 13, 1958; 0450 GCT; 56°39'N, 162°10'W; sounding, 41 fm; wind, 320°, 10 kt; weather, clear; sea, smooth. | | |
| | 0 | 3.21 | 32.08 |
| | 13 | 2.57 | 32.09 |
| | 28 | 2.55 | 32.10 |
| | 68 | 2.56 | 32.10 |
| | TORDENSKJOLD; May 13, 1958; 2355 GCT; 56°18'N, 162°50'W; sounding, 44 fm; wind, 360°, 5 kt; weather, cloudy; sea, smooth. | | |
| | 0 | 4.20 | 31.88 |
| | 15 | 3.46 | 31.88 |
| | 30 | 3.25 | 31.88 |
| | 70 | 2.56 | 31.96 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; May 19, 1958; 2125 GCT; 55°01'N, 165°51'W; sounding, 73 fm; wind, 050°, 6 kt; weather, sky obscured; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.61 | 32.31 |
| 35 | 4.50 | 32.34 |
| 70 | 4.39 | 32.50 |
| 130 | 3.84 | 32.83 |

TORDENSKJOLD; May 20, 1958; 0609 GCT; 55°20'N, 165°13'W; sounding, 60 fm; wind, 140°, 15 kt; weather, sky obscured; sea, slight.

| | | |
|---|---|---|
| 0 | 4.90 | 32.20 |
| 30 | 4.50 | 32.22 |
| 60 | 4.50 | 32.25 |
| 115 | 4.17 | 32.59 |

TORDENSKJOLD; May 21, 1958; 0113 GCT; 55°41'N, 164°37'W; sounding, 55 fm; wind, 090°, 15 kt; weather, sky obscured; sea, slight.

| | | |
|---|---|---|
| 0 | 4.32 | 31.93 |
| 25 | 4.08 | 31.93 |
| 55 | 3.81 | 31.94 |
| 95 | 3.43 | 32.32 |

TORDENSKJOLD; May 23, 1958; 2230 GCT; 56°00'N, 164°00'W; sounding, 48 fm; wind, 070°, 10 kt; weather, partly cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 4.30 | 31.96 |
| 20 | 3.82 | 31.96 |
| 35 | 3.71 | 31.96 |
| 80 | 1.84 | 32.08 |

TORDENSKJOLD; May 26, 1958; 2318 GCT; 57°00'N, 160°57'W; sounding, 33 fm; wind, 180°, 6 kt; weather, overcast; sea, slight.

| | | |
|---|---|---|
| 0 | 3.69 | 32.03 |
| 20 | 3.43 | 32.03 |
| 50 | 3.22 | 32.03 |

TORDENSKJOLD; May 27, 1958; 0805 GCT; 57°20'N, 161°32'W; sounding, 27 fm; wind, 180°, 8 kt; weather, overcast; sea, smooth.

| | | |
|---|---|---|
| 0 | 3.69 | 32.17 |
| 20 | 3.60 | 32.16 |
| 40 | 3.56 | 32.16 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

A4

TORDENSKJOLD; May 20, 1958; 0145 GCT; 55°20'N, 165°46'W; sounding, 68 fm; wind, 050°, 6 kt; weather, sky obscured; sea, smooth.

B4

| | | |
|---|---|---|
| 0 | 5.19 | 32.24 |
| 30 | 4.50 | 32.23 |
| 65 | 4.48 | 32.26 |
| 115 | 3.90 | 32.86 |

B5

TORDENSKJOLD; May 20, 1958; 2012 GCT; 55°21'N, 164°36'W; sounding, 57 fm; wind, 140°, 20 kt; weather, overcast; sea, slight.

B6

| | | |
|---|---|---|
| 0 | 4.45 | 31.96 |
| 25 | 4.35 | 31.97 |
| 55 | 4.34 | 31.96 |
| 95 | 3.72 | 32.46 |

C6

TORDENSKJOLD; May 23, 1958; 1822 GCT; 55°42'N, 164°00'W; sounding, 52 fm; wind, calm; weather, partly cloudy; sea, smooth.

C7

| | | |
|---|---|---|
| 0 | 4.48 | 31.88 |
| 15 | 4.20 | 31.89 |
| 30 | 4.08 | 31.89 |
| 85 | 3.17 | 31.98 |

D7

TORDENSKJOLD; May 24, 1958; 0245 GCT; 56°00'N, 163°24'W; sounding, 48 fm; wind, 070°, 20 kt; weather, sky obscured; sea, moderate.

D8

| | | |
|---|---|---|
| 0 | 4.15 | 31.90 |
| 20 | 4.04 | 31.91 |
| 35 | 3.79 | 31.93 |
| 80 | 2.68 | 32.02 |

GI2

TORDENSKJOLD; May 27, 1958; 0345 GCT; 57°20'N, 160°58'W; sounding, 32 fm; wind, 180°, 5 kt; weather, overcast; sea, smooth.

HI2

| | | |
|---|---|---|
| 0 | 3.47 | 32.12 |
| 20 | 3.29 | 32.11 |
| 50 | 3.23 | 32.11 |

HI1

TORDENSKJOLD; May 27, 1958; 2105 GCT; 57°01'N, 161°35'W; sounding, 35 fm; wind, 140°, 12 kt; weather, sky obscured; sea, slight.

GI1

| | | |
|---|---|---|
| 0 | 3.69 | 32.03 |
| 30 | 3.59 | 32.03 |
| 60 | 3.30 | 32.06 |

| | OBSERVED | | |
|---|---|---|---|
| | Z | T | S |
| | m | °C | ‰ |

G10

TORDENSKJOLD; May 28, 1958; 0022 GCT; 57°01'N, 162°10'W; sounding, 33 fm; wind, 110°, 15 kt; weather, overcast; sea, slight.

H10

| Z | T | S |
|---|---|---|
| 0 | 3.60 | 32.05 |
| 20 | 3.54 | 32.05 |
| 50 | 3.10 | 32.10 |

I10

TORDENSKJOLD; May 28, 1958; 1915 GCT; 57°40'N, 162°10'W; sounding, 25 fm; wind, 090°, 12 kt; weather, overcast; sea, slight.

I9

| Z | T | S |
|---|---|---|
| 0 | 3.40 | 32.08 |
| 20 | 3.32 | 32.08 |
| 40 | 3.33 | 32.08 |

H9

TORDENSKJOLD; May 29, 1958; 0422 GCT; 57°19'N, 162°48'W; sounding, 26 fm; wind, 090°, 10 kt; weather, overcast; sea, slight.

G9

| Z | T | S |
|---|---|---|
| 0 | 3.40 | 32.17 |
| 20 | 3.28 | 32.16 |
| 40 | 3.27 | 32.17 |

F9

TORDENSKJOLD; May 29, 1958; 2317 GCT; 56°40'N, 162°48'W; sounding, 38 fm; wind, calm; weather, cloudy; sea, smooth.

F8

| Z | T | S |
|---|---|---|
| 0 | 4.30 | 31.93 |
| 15 | 4.04 | 31.93 |
| 30 | 3.85 | 31.88 |
| 60 | 2.50 | 32.06 |

E8

TORDENSKJOLD; May 30, 1958; 0723 GCT; 56°20'N, 163°27'W; sounding, 46 fm; wind, 070°, 4 kt; weather, partly cloudy; sea, slight.

E7

| Z | T | S |
|---|---|---|
| 0 | 5.10 | 31.94 |
| 17 | 4.18 | 31.94 |
| 32 | 4.09 | 31.94 |
| 77 | 2.47 | 32.03 |

F7

TORDENSKJOLD; May 30, 1958; 2227 GCT; 56°40'N, 164°04'W; sounding, 41 fm; wind, 110°, 8 kt; weather, partly cloudy; sea, slight.

G7

| Z | T | S |
|---|---|---|
| 0 | 4.60 | 31.98 |
| 13 | 4.32 | 31.98 |
| 28 | 3.58 | 32.01 |
| 68 | 2.80 | 32.09 |

| | OBSERVED | | |
|---|---|---|---|
| | Z | T | S |
| | m | °C | ‰ |

TORDENSKJOLD; May 28, 1958; 0405 GCT; 57°19'N, 162°13'W; sounding, 25 fm; wind, 110°, 15 kt; weather, overcast; sea, slight.

| Z | T | S |
|---|---|---|
| 0 | 3.19 | 32.12 |
| 20 | 3.11 | 32.12 |
| 40 | 3.14 | 32.12 |

TORDENSKJOLD; May 28, 1958; 2250 GCT; 57°40'N, 162°47'W; sounding, 23 fm; wind, 090°, 10 kt; weather, intermittent slight drizzle; sea, slight.

| Z | T | S |
|---|---|---|
| 0 | 3.20 | 32.09 |
| 20 | 3.09 | 32.09 |
| 35 | 3.11 | 32.09 |

TORDENSKJOLD; May 29, 1958; 1903 GCT; 57°00'N, 162°47'W; sounding, 32 fm; wind, 090°, 8 kt; weather, intermittent slight drizzle; sea, smooth.

| Z | T | S |
|---|---|---|
| 0 | 3.80 | 31.99 |
| 20 | 3.68 | 32.01 |
| 50 | 2.78 | 32.16 |

TORDENSKJOLD; May 30, 1958; 0320 GCT; 56°39'N, 163°27'W; sounding, 40 fm; wind, 090°, 5 kt; weather, partly cloudy; sea, smooth.

| Z | T | S |
|---|---|---|
| 0 | 4.74 | 32.01 |
| 15 | 3.86 | 32.01 |
| 30 | 3.79 | 32.01 |
| 70 | 2.34 | 32.06 |

TORDENSKJOLD; May 30, 1958; 1935 GCT; 56°22'N, 164°00'W; sounding, 47 fm; wind, 090°, 8 kt; weather, partly cloudy; sea, slight.

| Z | T | S |
|---|---|---|
| 0 | 4.75 | 32.00 |
| 17 | 4.03 | 32.00 |
| 32 | 3.98 | 31.98 |
| 77 | 2.39 | 32.10 |

TORDENSKJOLD; May 31, 1958; 0250 GCT; 57°01'N, 163°54'W; sounding, 37 fm; wind, 090°, 5 kt; weather, cloudy; sea, slight.

| Z | T | S |
|---|---|---|
| 0 | 4.51 | 32.07 |
| 15 | 3.39 | 32.07 |
| 30 | 3.34 | 32.07 |
| 60 | 2.95 | 32.07 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; May 31, 1958; 0648 GCT; 57°02'N, 163°22'W; sounding, 35 fm; wind, 090°, 5 kt; weather, cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.69 | 31.98 |
| 14 | 3.86 | 31.94 |
| 29 | 3.64 | 31.97 |
| 59 | 2.42 | 32.06 |

TORDENSKJOLD; May 31, 1958; 2232 GCT; 57°42'N, 163°24'W; sounding, 23 fm; wind, calm; weather, partly cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 3.00 | 31.96 |
| 20 | 2.63 | 31.96 |
| 35 | 2.61 | 31.95 |

TORDENSKJOLD; June 1, 1958; 1836 GCT; 56°58'N, 164°36'W; sounding, 38 fm; wind, 090°, 10 kt; weather, cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 3.89 | 32.06 |
| 15 | 3.42 | 32.05 |
| 30 | 2.51 | 32.02 |
| 60 | 2.53 | 32.02 |

TORDENSKJOLD; June 2, 1958; 0413 GCT; 56°19'N, 164°40'W; sounding, 46 fm; wind, 090°, 15 kt; weather, cloudy; sea, very rough.

| | | |
|---|---|---|
| 0 | 5.01 | 31.98 |
| 20 | 4.89 | 31.98 |
| 35 | 4.18 | 31.97 |
| 80 | 2.26 | 32.07 |

TORDENSKJOLD; June 3, 1958; 0115 GCT; 56°39'N, 165°18'W; sounding, 42 fm; wind, 090°, 5 kt; weather, cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.11 | 31.98 |
| 15 | 3.46 | 31.98 |
| 30 | 2.44 | 32.01 |
| 70 | 1.91 | 32.03 |

TORDENSKJOLD; June 3, 1958; 2310 GCT; 56°02'N, 165°12'W; sounding, 53 fm; wind, 090°, 18 kt; weather, overcast; sea, slight.

| | | |
|---|---|---|
| 0 | 5.51 | 32.05 |
| 16 | 5.46 | 32.05 |
| 31 | - | 32.03 |
| 86 | 3.34 | 32.01 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; May 31, 1958; 1835 GCT; 57°21'N, 163°21'W; sounding, 28 fm; wind, 090°, 3 kt; weather, cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.08 | 32.14 |
| 20 | 3.29 | 32.15 |
| 40 | 3.24 | 32.15 |

TORDENSKJOLD; June 1, 1958; 0433 GCT; 57°13'N, 164°07'W; sounding, 35 fm; wind, 140°, 2 kt; weather, cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 4.96 | 32.07 |
| 15 | 3.53 | 32.06 |
| 30 | 3.18 | 32.06 |
| 60 | 2.52 | 32.05 |

TORDENSKJOLD; June 1, 1958; 2310 GCT; 56°41'N, 164°41'W; sounding, 42 fm; wind, 090°, 15 kt; weather, overcast; sea, slight.

| | | |
|---|---|---|
| 0 | 4.40 | 32.01 |
| 13 | 4.28 | 32.00 |
| 28 | 3.18 | 32.02 |
| 68 | 2.76 | 32.10 |

TORDENSKJOLD; June 2, 1958; 2010 GCT; 56°20'N, 165°15'W; sounding, 47 fm; wind, 090°, 5 kt; weather, cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 4.74 | 32.00 |
| 20 | 4.50 | 31.99 |
| 35 | 2.12 | 31.98 |
| 80 | 2.06 | 31.98 |

TORDENSKJOLD; June 3, 1958; 0628 GCT; 56°19'N, 165°52'W; sounding, 51 fm; wind, 090°, 10 kt; weather, partly cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 5.70 | 32.08 |
| 16 | 5.25 | 32.08 |
| 31 | 4.90 | 32.06 |
| 86 | 2.83 | 32.03 |

TORDENSKJOLD; June 7, 1958; 2023 GCT; 55°22'N, 165°49'W; sounding, 65 fm; wind, 140°, 20 kt; weather, sky obscured; sea, slight.

| | | |
|---|---|---|
| 0 | 5.77 | 32.26 |
| 27 | 5.04 | 32.37 |
| 62 | 5.30 | 32.49 |
| 112 | 4.54 | 32.62 |

G8

H8

I8

H7

G6

F6

E6

E5

F5

E4

D5

B4

C4

C5

TORDENSKJOLD; June 8, 1958; 0132 GCT; 55°40'N, 165°50'W; sounding, 65 fm; wind, 110°, 15 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.94 | 32.26 |
| 15 | 5.74 | 32.26 |
| 30 | 5.75 | 32.28 |
| 75 | 4.70 | 32.38 |
| 115 | 4.36 | 32.65 |

C6

D6

TORDENSKJOLD; June 10, 1958; 0002 GCT; 55°42'N, 164°33'W; sounding, 51 fm; wind, 180°, 10 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.95 | 32.04 |
| 15 | 5.67 | 32.02 |
| 30 | 5.21 | 32.04 |
| 90 | 3.52 | 32.20 |

D4

D5

TORDENSKJOLD; June 12, 1958; 0241 GCT; 56°02'N, 165°48'W; sounding, 55 fm; wind, 090°, 15 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.83 | 32.10 |
| 15 | 5.71 | 32.08 |
| 30 | 5.67 | 32.10 |
| 60 | 5.34 | 32.25 |
| 95 | 3.49 | 32.24 |

E5

E6

TORDENSKJOLD; June 13, 1958; 1936 GCT; 56°18'N, 165°12'W; sounding, 48 fm; wind, 270°, 10 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.63 | 32.03 |
| 15 | 5.62 | 32.02 |
| 30 | 5.60 | 32.03 |
| 86 | 2.15 | 32.04 |

E7

E8

TORDENSKJOLD; June 14, 1958; 0556 GCT; 56°20'N, 163°57'W; sounding, 46 fm; wind, 270°, 5 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.70 | 31.94 |
| 15 | 5.68 | 31.92 |
| 30 | 5.60 | 31.93 |
| 83 | 2.65 | 32.00 |

F8

F7

TORDENSKJOLD; June 15, 1958; 0139 GCT; 56°41'N, 163°24'W; sounding, 40 fm; wind, 200°, 5 kt; weather, fog, depositing rime; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.75 | 31.92 |
| 15 | - | 31.93 |
| 30 | 5.39 | 31.93 |
| 75 | 2.86 | 32.00 |

TORDENSKJOLD; June 9, 1958; 0700 GCT; 55°40'N, 165°12'W; sounding, 59 fm; wind, 090°, 15 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.90 | 32.09 |
| 15 | 5.84 | 32.07 |
| 30 | 5.48 | 32.11 |
| 60 | 5.08 | 32.16 |
| 100 | 4.08 | 32.46 |

TORDENSKJOLD; June 10, 1958; 0438 GCT; 56°00'N, 164°35'W; sounding, 51 fm; wind, 140°, 15 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.73 | 31.97 |
| 15 | 5.68 | 31.93 |
| 30 | 5.41 | 31.97 |
| 90 | 2.51 | 32.04 |

TORDENSKJOLD; June 13, 1958; 0340 GCT; 55°59'N, 165°16'W; sounding, 53 fm; wind, 020°, 15 kt; weather, slight rain; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.90 | 32.09 |
| 15 | 5.86 | 32.10 |
| 30 | 5.85 | 32.10 |
| 60 | 4.26 | 32.17 |
| 95 | 3.58 | 32.22 |

TORDENSKJOLD; June 14, 1958; 0008 GCT; 56°13'N, 164°39'W; sounding, 49 fm; wind, 270°, 15 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.78 | 31.96 |
| 15 | 5.68 | 31.95 |
| 30 | 5.61 | 31.96 |
| 88 | 2.49 | 32.05 |

TORDENSKJOLD; June 14, 1958; 1938 GCT; 56°20'N, 163°22'W; sounding, 45 fm; wind, 230°, 5 kt; weather, cloudy; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.38 | 31.94 |
| 15 | 5.33 | 31.92 |
| 30 | 5.30 | 31.93 |
| 81 | 2.67 | 32.03 |

TORDENSKJOLD; June 15, 1958; 0613 GCT; 56°41'N, 164°00'W; sounding, 40 fm; wind, 230°, 5 kt; weather, sky obscured; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 5.69 | 31.97 |
| 15 | 5.34 | 31.96 |
| 30 | 5.26 | 31.97 |
| 75 | 2.89 | 32.06 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; June 15, 1958; 1930 GCT; 56°42'N, 164°35'W; sounding, 39 fm; wind, 180°, 2 kt; weather, fog; sea, smooth.

| | | |
|---|---|---|
| 0 | 5.34 | 31.98 |
| 15 | 5.04 | 31.99 |
| 30 | 4.82 | 31.99 |
| 69 | 2.94 | 32.09 |

TORDENSKJOLD; June 16, 1958; 0547 GCT; 57°00'N, 163°24'W; sounding, 35 fm; wind, calm; weather, cloudy; sea, calm.

| | | |
|---|---|---|
| 0 | 6.51 | 31.97 |
| 15 | 6.53 | 31.97 |
| 30 | 4.19 | 32.00 |
| 65 | 2.91 | 32.02 |

TORDENSKJOLD; June 17, 1958; 0004 GCT; 57°18'N, 162°46'W; sounding, 26 fm; wind, calm; weather, cloudy; sea, calm.

| | | |
|---|---|---|
| 0 | 6.80 | 32.00 |
| 15 | 5.30 | 32.05 |
| 30 | 4.12 | 32.09 |
| 46 | 4.08 | 32.11 |

TORDENSKJOLD; June 17, 1958; 1920 GCT; 57°41'N, 162°07'W; sounding, 25 fm; wind, 320°, 5 kt; weather, partly cloudy; sea, calm.

| | | |
|---|---|---|
| 0 | 7.04 | 32.00 |
| 15 | 4.64 | 32.08 |
| 30 | 4.63 | 32.08 |
| 45 | 4.61 | 32.10 |

TORDENSKJOLD; June 18, 1958; 0333 GCT; 57°18'N, 161°32'W; sounding, 29 fm; wind, 050°, 8 kt; weather, cloudy; sea, calm.

| | | |
|---|---|---|
| 0 | 7.20 | 32.11 |
| 15 | 5.36 | 32.14 |
| 30 | 4.28 | 32.14 |
| 53 | 4.24 | 32.15 |

TORDENSKJOLD; June 20, 1958; 0105 GCT; 56°00'N, 164°00'W; sounding, 49 fm; wind, 140°, 5 kt; weather, partly cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 6.60 | 31.94 |
| 15 | 6.09 | 31.93 |
| 30 | 6.02 | 31.93 |
| 90 | 2.84 | 32.01 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

F6

TORDENSKJOLD; June 16, 1958; 0108 GCT; 57°00'N, 164°00'W; sounding, 36 fm; wind, calm; weather, cloudy; sea, smooth.

G7

| | | |
|---|---|---|
| 0 | 6.39 | 32.00 |
| 15 | 5.47 | 31.98 |
| 30 | 5.04 | 31.98 |
| 63 | 3.04 | 32.07 |

G8

TORDENSKJOLD; June 16, 1958; 1955 GCT; 57°20'N, 163°21'W; sounding, 29 fm; wind, calm; weather, sky obscured; sea, calm.

H8

| | | |
|---|---|---|
| 0 | 5.67 | 32.01 |
| 15 | 4.88 | 32.05 |
| 30 | 3.94 | 32.05 |
| 50 | 3.91 | 32.06 |

H9

TORDENSKJOLD; June 17, 1958; 0455 GCT; 57°38'N, 162°44'W; sounding, 23 fm; wind, calm; weather, partly cloudy; sea, calm.

I9

| | | |
|---|---|---|
| 0 | 7.20 | 32.11 |
| 10 | 4.76 | 32.12 |
| 25 | 4.56 | 32.12 |
| 40 | 4.53 | 32.09 |

I10

TORDENSKJOLD; June 17, 1958; 2330 GCT; 57°37'N, 161°28'W; sounding, 29 fm; wind, 050°, 8 kt; weather, partly cloudy; sea, calm.

I11

| | | |
|---|---|---|
| 0 | 6.66 | 32.02 |
| 15 | 4.45 | 32.04 |
| 30 | 4.43 | 32.05 |
| 53 | 4.40 | 32.06 |

H11

TORDENSKJOLD; June 19, 1958; 2100 GCT; 56°00'N, 163°28'W; sounding, 48 fm; wind, 140°, 10 kt; weather, partly cloudy; sea, calm.

D8

| | | |
|---|---|---|
| 0 | 6.22 | 31.90 |
| 15 | 6.11 | 31.89 |
| 30 | 6.08 | 31.90 |
| 87 | 2.33 | 32.05 |

D7

TORDENSKJOLD; June 20, 1958; 0530 GCT; 55°40'N, 164°00'W; sounding, 52 fm; wind, 050°, 5 kt; weather, cloudy; sea, slight.

C7

| | | |
|---|---|---|
| 0 | 7.02 | 32.05 |
| 15 | 6.78 | 32.03 |
| 30 | 6.38 | 32.02 |
| 94 | 3.66 | 32.32 |

B7

TORDENSKJOLD; June 20, 1958; 1840 GCT; 55°20'N, 164°03'W; sounding, 42 fm; wind, 340°, 15 kt; weather, sky obscured; sea, slight.

B6

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 6.52 | 31.90 |
| 15 | 6.74 | 31.96 |
| 30 | 6.70 | 31.99 |
| 77 | 5.17 | 32.34 |

TORDENSKJOLD; June 20, 1958; 2356 GCT; 55°20'N, 164°36'W; sounding, 57 fm; wind, 340°, 20 kt; weather, moderate rain; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 6.55 | 32.01 |
| 15 | 6.09 | 32.09 |
| 30 | 6.01 | 32.54 |
| 60 | 5.90 | 32.64 |
| 102 | 4.90 | 32.81 |

B5

TORDENSKJOLD; June 21, 1958; 0435 GCT; 55°18'N, 165°13'W; sounding, 62 fm; wind, 320°, 15 kt; weather, moderate rain; sea, slight.

H10

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 6.29 | 32.05 |
| 15 | 6.26 | 32.12 |
| 30 | 5.99 | 32.59 |
| 70 | 5.50 | 32.60 |
| 115 | 4.77 | 32.84 |

TORDENSKJOLD; June 28, 1958; 0035 GCT; 57°20'N, 162°09'W; sounding, 28 fm; wind, 090°, 15 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.55 | 32.01 |
| 15 | 5.65 | 32.05 |
| 30 | 5.41 | 32.06 |
| 49 | 5.37 | 32.07 |

G10

TORDENSKJOLD; June 28, 1958; 0527 GCT; 57°01'N, 162°13'W; sounding, 33 fm; wind, 090°, 15 kt; weather, moderate rain; sea, slight.

G9

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | - | 31.85 |
| 15 | 7.54 | 31.90 |
| 30 | 3.91 | 32.03 |
| 60 | 3.87 | 32.04 |

TORDENSKJOLD; June 28, 1958; 1927 GCT; 56°58'N, 162°45'W; sounding, 33 fm; wind, 180°, 10 kt; weather, moderate drizzle; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.64 | 31.90 |
| 15 | 7.38 | 31.92 |
| 30 | 3.43 | 32.10 |
| 59 | 3.40 | 32.10 |

F9

TORDENSKJOLD; June 29, 1958; 0022 GCT; 56°40'N, 162°43'W; sounding, 38 fm; wind, 230°, 15 kt; weather, fog; sea, slight.

F10

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.70 | 31.91 |
| 15 | 7.73 | 31.91 |
| 30 | - | 31.95 |
| 70 | 3.11 | 32.02 |

TORDENSKJOLD; June 29, 1958; 0525 GCT; 56°38'N, 162°07'W; sounding, 41 fm; wind, 200°, 15 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.87 | 31.88 |
| 15 | 7.90 | 31.85 |
| 30 | 7.80 | 31.95 |
| 75 | 3.67 | 31.96 |

F11

TORDENSKJOLD; June 29, 1958; 2045 GCT; 56°40'N, 161°34'W; sounding, 47 fm; wind, 270°, 3 kt; weather, cloudy; sea, slight.

G11

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.73 | 31.80 |
| 15 | 7.70 | 31.80 |
| 30 | 3.95 | 31.89 |
| 86 | 3.82 | 31.91 |

TORDENSKJOLD; June 30, 1958; 0125 GCT; 56°58'N, 161°33'W; sounding, 37 fm; wind, 070°, 5 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.27 | 31.88 |
| 15 | 7.92 | 31.98 |
| 30 | 3.92 | 31.98 |
| 68 | 3.89 | 31.98 |

G12

TORDENSKJOLD; June 30, 1958; 0617 GCT; 57°02'N, 161°00'W; sounding, 35 fm; wind, 070°, 5 kt; weather, cloudy; sea, smooth.

H12

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.28 | 31.84 |
| 15 | 7.88 | 31.84 |
| 30 | 4.11 | 31.97 |
| 65 | 4.07 | 31.97 |

TORDENSKJOLD; June 30, 1958; 1953 GCT; 57°21'N, 160°55'W; sounding, 34 fm; wind, 090°, 5 kt; weather, intermittent moderate rain; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.04 | 31.91 |
| 15 | 7.22 | 31.95 |
| 30 | 4.86 | 32.06 |
| 63 | 4.83 | 32.06 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; July 1, 1958; 0015 GCT; 57°41'N, 160°54'W; sounding, 29 fm; wind, 090°, 5 kt; weather, moderate rain; sea, smooth.

| | | |
|---|---|---|
| 0 | 7.46 | 31.90 |
| 9 | 7.29 | 31.95 |
| 24 | 4.98 | 31.95 |
| 47 | 4.95 | 31.95 |

TORDENSKJOLD; July 1, 1958; 1921 GCT; 58°00'N, 161°34'W; sounding, 29 fm; wind, 360°, 5 kt; weather, partly cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 5.67 | 31.61 |
| 15 | 5.58 | 31.61 |
| 30 | 5.61 | 31.61 |
| 54 | 5.59 | 31.61 |

TORDENSKJOLD; July 2, 1958; 0657 GCT; 58°37'N, 161°28'W; sounding, 5 fm; wind, 320°, 3 kt; weather, cloudy; sea, calm.

| | | |
|---|---|---|
| 0 | 10.93 | 27.54 |
| 2 | 10.92 | 27.50 |
| 7 | 10.89 | 27.50 |

TORDENSKJOLD; July 2, 1958; 2022 GCT; 58°26'N, 161°02'W; sounding, 12 fm; wind, calm; weather, partly cloudy; sea, calm.

| | | |
|---|---|---|
| 0 | 10.65 | 27.91 |
| 5 | 10.41 | 27.93 |
| 10 | 10.10 | 28.22 |
| 18 | 9.89 | 28.47 |

TORDENSKJOLD; July 3, 1958; 0412 GCT; 57°55'N, 160°27'W; sounding, 27 fm; wind, calm; weather, partly cloudy; sea, calm.

| | | |
|---|---|---|
| 0 | 10.70 | 31.75 |
| 15 | 5.67 | 31.83 |
| 30 | 5.63 | 31.84 |
| 49 | 5.59 | 31.85 |

TORDENSKJOLD; July 4, 1958; 0058 GCT; 57°20'N, 160°13'W; sounding, 32 fm; wind, 140°, 10 kt; weather, partly cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 8.50 | 31.90 |
| 15 | 5.75 | 31.93 |
| 30 | 5.64 | 31.94 |
| 58 | 5.59 | 31.96 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

I12

TORDENSKJOLD; July 1, 1958; 0445 GCT; 58°00'N, 160°58'W; sounding, 23 fm; wind, 050°, 5 kt; weather, moderate rain; sea, smooth.

J12

| | | |
|---|---|---|
| 0 | 5.89 | 31.44 |
| 10 | 5.88 | 31.52 |
| 25 | 5.71 | 31.64 |
| 42 | 5.67 | 31.65 |

J11

TORDENSKJOLD; July 1, 1958; 2358 GCT; 58°01'N, 162°10'W; sounding, 21 fm; wind, 320°, 3 kt; weather, cloudy; sea, calm.

J10

| | | |
|---|---|---|
| 0 | 6.30 | 31.53 |
| 10 | 5.72 | 31.54 |
| 20 | 5.63 | 31.57 |
| 37 | 5.62 | 31.60 |

A

TORDENSKJOLD; July 2, 1958; 1855 GCT; 58°32'N, 161°15'W; sounding, 7 fm; wind, calm; weather, partly cloudy; sea, calm.

B

| | | |
|---|---|---|
| 0 | 11.03 | 27.08 |
| 5 | 10.85 | 27.19 |
| 11 | 10.73 | 27.28 |

C

TORDENSKJOLD; July 2, 1958; 2304 GCT; 58°18'N, 160°47'W; sounding, 11 fm; wind, calm; weather, partly cloudy; sea, calm.

K12

| | | |
|---|---|---|
| 0 | 9.82 | 28.74 |
| 5 | 9.47 | 28.96 |
| 10 | 8.83 | 29.27 |
| 21 | 8.29 | 29.48 |

J13

TORDENSKJOLD; July 3, 1958; 1919 GCT; 57°42'N, 160°16'W; sounding, 29 fm; wind, calm; weather, partly cloudy; sea, calm.

I13

| | | |
|---|---|---|
| 0 | 7.40 | 31.90 |
| 15 | 5.75 | 31.88 |
| 30 | 5.71 | 31.88 |
| 53 | 5.66 | 31.90 |

H13

TORDENSKJOLD; July 4, 1958; 0614 GCT; 57°21'N, 159°46'W; sounding, 31 fm; wind, 110°, 10 kt; weather, partly cloudy; sea, slight.

H14

| | | |
|---|---|---|
| 0 | 6.80 | 31.72 |
| 15 | 6.49 | 31.71 |
| 30 | 6.30 | 31.70 |
| 54 | 6.23 | 31.70 |

G14

TORDENSKJOLD; July 4, 1958; 1915 GCT; 57°00'N, 159°48'W; sounding, 31 fm; wind, 050°, 10 kt; weather, cloudy; sea, slight.

G13

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.34 | 31.77 |
| 15 | 7.21 | 31.76 |
| 30 | 5.65 | 31.84 |
| 56 | 5.54 | 31.85 |

F12

TORDENSKJOLD; July 5, 1958; 0445 GCT; 56°41'N, 161°01'W; sounding, 37 fm; wind, 070°, 10 kt; weather, sky obscured; sea, smooth.

F13

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 9.90 | 31.72 |
| 15 | - | 31.75 |
| 30 | 4.34 | 31.91 |
| 67 | 4.30 | 31.89 |

D

TORDENSKJOLD; July 5, 1958; 2054 GCT; 56°29'N, 160°22'W; sounding, 20 fm; wind, 090°, 5 kt; weather, intermittent slight drizzle; sea, smooth.

E

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 10.09 | 30.77 |
| 10 | 7.06 | 31.26 |
| 20 | 6.67 | 31.44 |
| 36 | 6.16 | 31.56 |

F

TORDENSKJOLD; July 5, 1958; 2311 GCT; 56°18'N, 160°22'W; sounding, 8 fm; wind, 140°, 5 kt; weather, cloudy; sea, smooth.

E12

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 10.25 | 28.92 |
| 3 | 9.87 | 29.85 |
| 7 | 8.71 | 30.61 |
| 13 | 8.18 | 30.84 |

E11

TORDENSKJOLD; July 8, 1958; 0523 GCT; 56°21'N, 161°32'W; sounding, 34 fm; wind, 140°, 20 kt; weather, intermittent moderate rain; sea, slight.

G

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.05 | 31.71 |
| 15 | 8.09 | 31.70 |
| 30 | 5.96 | 31.76 |
| 63 | 5.15 | 31.80 |

H

TORDENSKJOLD; July 8, 1958; 1052 GCT; 56°00'N, 161°22'W; sounding, 10 fm; wind, 140°, 15 kt; weather, overcast; sea, slight.

D11

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.34 | 31.37 |
| 5 | 8.44 | 31.36 |
| 10 | 8.44 | 31.36 |
| 17 | 8.40 | 31.36 |

TORDENSKJOLD; July 4, 1958; 2309 GCT; 57°00'N, 160°20'W; sounding, 34 fm; wind, 070°, 5 kt; weather, cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 9.18 | 31.72 |
| 15 | 5.89 | 31.85 |
| 30 | 4.63 | 31.92 |
| 62 | 4.63 | 31.93 |

TORDENSKJOLD; July 5, 1958; 1855 GCT; 56°39'N, 160°22'W; sounding, 34 fm; wind, 050°, 5 kt; weather, partly cloudy; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 9.10 | 31.61 |
| 15 | 8.29 | 31.64 |
| 30 | 8.82 | 31.75 |
| 61 | 4.70 | 31.83 |

TORDENSKJOLD; July 5, 1958; 2227 GCT; 56°21'N, 160°22'W; sounding, 13 fm; wind, 140°, 5 kt; weather, sky obscured; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 10.50 | 29.77 |
| 5 | 9.63 | 30.61 |
| 10 | 7.97 | 31.00 |
| 23 | 7.26 | 31.31 |

TORDENSKJOLD; July 8, 1958; 0049 GCT; 56°20'N, 161°00'W; sounding, 26 fm; wind, 140°, 15 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.04 | 31.57 |
| 15 | 7.96 | 31.55 |
| 30 | 6.30 | 31.63 |
| 47 | 6.13 | 31.64 |

TORDENSKJOLD; July 8, 1958; 0835 GCT; 56°10'N, 161°26'W; sounding, 26 fm; wind, 140°, 20 kt; weather, sky obscured; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.92 | 31.63 |
| 15 | 7.99 | 31.59 |
| 30 | 7.96 | 31.59 |
| 48 | 6.92 | 31.71 |

TORDENSKJOLD; July 8, 1958; 1932 GCT; 56°00'N, 161°36'W; sounding, 15 fm; wind, 140°, 15 kt; weather, overcast; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.32 | 31.44 |
| 5 | 8.39 | 31.42 |
| 10 | 8.34 | 31.42 |
| 27 | 8.37 | 31.43 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

TORDENSKJOLD; July 9, 1958; 0005 GCT; 56°01'N, 162°15'W; sounding, 39 fm; wind, calm; weather, cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 8.40 | 31.87 |
| 15 | 7.94 | 31.86 |
| 30 | 4.82 | 31.90 |
| 73 | 4.10 | 31.94 |

TORDENSKJOLD; July 9, 1958; 1930 GCT; 56°20'N, 162°50'W; sounding, 44 fm; wind, 140°, 8 kt; weather, intermittent moderate rain; sea, slight.

| | | |
|---|---|---|
| 0 | 8.27 | 31.84 |
| 15 | 8.30 | 31.86 |
| 30 | 7.03 | 31.89 |
| 80 | 3.32 | 31.98 |

TORDENSKJOLD; July 10, 1958; 0551 GCT; 55°40'N, 162°49'W; sounding, 27 fm; wind, 230°, 8 kt; weather, overcast; sea, calm.

| | | |
|---|---|---|
| 0 | 8.25 | 31.87 |
| 15 | 7.87 | 31.72 |
| 30 | 7.77 | 31.79 |
| 49 | 6.45 | 31.85 |

TORDENSKJOLD; July 10, 1958; 2341 GCT; 55°18'N, 163°25'W; sounding, 26 fm; wind, calm; weather, cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 8.14 | 31.72 |
| 15 | 7.83 | 31.69 |
| 30 | 6.42 | 31.90 |
| 47 | 6.26 | 31.93 |

TORDENSKJOLD; July 11, 1958; 0223 GCT; 55°06'N, 163°28'W; sounding, 10 fm; wind, 140°, 12 kt; weather, cloudy; sea, slight.

| | | |
|---|---|---|
| 0 | 7.82 | 31.73 |
| 5 | 7.84 | 31.72 |
| 10 | 7.62 | 31.78 |
| 17 | 7.54 | 31.80 |

TORDENSKJOLD; July 11, 1958; 0427 GCT; 55°04'N, 163°47'W; sounding, 10 fm; wind, calm; weather, partly cloudy; sea, smooth.

| | | |
|---|---|---|
| 0 | 8.71 | 30.84 |
| 5 | 8.60 | 31.52 |
| 10 | 8.19 | 31.47 |
| 18 | 8.05 | 30.94 |

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |

DIO

TORDENSKJOLD; July 9, 1958; 0405 GCT; 56°20'N, 162°13'W; sounding, 42 fm; wind, calm; weather, cloudy; sea, smooth.

EIO

| | | |
|---|---|---|
| 0 | 8.77 | 31.82 |
| 15 | 8.28 | 31.82 |
| 30 | 4.28 | 31.89 |
| 77 | 3.99 | 31.93 |

E9

TORDENSKJOLD; July 10, 1958; 0025 GCT; 55°58'N, 162°45'W; sounding, 43 fm; wind, calm; weather, cloudy; sea, calm.

D9

| | | |
|---|---|---|
| 0 | 8.85 | 31.85 |
| 15 | 8.30 | 31.88 |
| 30 | 5.64 | 31.96 |
| 78 | 3.78 | 31.99 |

C9

TORDENSKJOLD; July 10, 1958; 1928 GCT; 55°39'N, 163°26'W; sounding, 43 fm; wind, 230°, 5 kt; weather, cloudy; sea, slight.

C8

| | | |
|---|---|---|
| 0 | 8.37 | 31.91 |
| 15 | 8.24 | 31.94 |
| 30 | 5.98 | 31.97 |
| 78 | 4.85 | 32.24 |

B8

TORDENSKJOLD; July 11, 1958; 0127 GCT; 55°08'N, 163°20'W; sounding, 9 fm; wind, 140°, 10 kt; weather, cloudy; sea, slight.

I

| | | |
|---|---|---|
| 0 | 8.40 | 31.45 |
| 5 | 8.43 | 31.42 |
| 10 | 8.08 | 31.46 |
| 16 | 7.83 | 31.55 |

J

TORDENSKJOLD; July 11, 1958; 0332 GCT; 55°05'N, 163°38'W; sounding, 15 fm; wind, 140°, 8 kt; weather, cloudy; sea, slight.

K

| | | |
|---|---|---|
| 0 | 8.09 | 31.45 |
| 5 | 8.18 | 31.49 |
| 10 | 7.79 | 31.63 |
| 27 | 7.44 | 31.82 |

L

TORDENSKJOLD; July 11, 1958; 0817 GCT; 54°56'N, 164°27'W; sounding, 10 fm; wind, calm; weather, cloudy; sea, smooth.

M

| | | |
|---|---|---|
| 0 | 7.82 | 31.34 |
| 3 | 7.81 | 31.46 |
| 8 | 7.63 | 31.51 |
| 16 | 7.29 | 31.62 |

N

TORDENSKJOLD; July 11, 1958; 0847 GCT; 54°58'N, 164°31'W; sounding, 26 fm; wind, 200°, 5 kt; weather, cloudy; sea, smooth.

A6

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.66 | 31.63 |
| 15 | 7.46 | 31.68 |
| 30 | 7.26 | 31.70 |
| 47 | 6.89 | 31.83 |

A5

TORDENSKJOLD; July 11, 1958; 2339 GCT; 55°01'N, 165°10'W; sounding, 62 fm; wind, 020°, 12 kt; weather, distant fog higher than observer; sea, slight.

Z5

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.16 | 31.98 |
| 15 | 6.92 | 32.22 |
| 30 | 6.83 | 32.42 |
| 113 | 4.63 | 33.02 |

O

TORDENSKJOLD; July 12, 1958; 0737 GCT; 54°30'N, 164°55'W; sounding, 11 fm; wind, 320°, 5 kt; weather, heavy rain; sea, smooth.

P

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.83 | 31.62 |
| 5 | 7.90 | 31.62 |
| 10 | 7.89 | 31.65 |
| 20 | 7.83 | 31.66 |

Q

TORDENSKJOLD; July 12, 1958; 0921 GCT; 56°26'N, 165°07'W; sounding, 64 fm; wind, 110°, 10 kt; weather, rain; sea, slight.

R

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.18 | 31.82 |
| 15 | 7.03 | 31.94 |
| 30 | 6.84 | 32.07 |
| 117 | 6.25 | 32.38 |

S

TORDENSKJOLD; July 15, 1958; 2027 GCT; 54°49'N, 163°08'W; sounding, 49 fm; wind, calm; weather, cloudy; sea, calm.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 9.08 | 31.09 |
| 15 | 8.53 | 31.15 |
| 26 | 8.13 | 31.26 |
| 87 | 6.15 | 31.78 |

TORDENSKJOLD; July 11, 1958; 0935 GCT; 55°00'N, 164°36'W; sounding, 33 fm; wind, calm; weather, cloudy; sea, calm.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.92 | 31.74 |
| 15 | 7.87 | 31.86 |
| 30 | 6.85 | 31.88 |
| 60 | 6.60 | 31.99 |

TORDENSKJOLD; July 12, 1958; 0449 GCT; 54°40'N, 165°10'W; sounding, 46 fm; wind, calm; weather, rain showers; sea, smooth.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 6.98 | 32.41 |
| 15 | 6.82 | 32.52 |
| 30 | 6.70 | 32.55 |
| 84 | 5.46 | 32.85 |

TORDENSKJOLD; July 12, 1958; 0826 GCT; 54°28'N, 165°00'W; sounding, 40 fm; wind, 140°, 12 kt; weather, moderate drizzle; sea, slight.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 7.80 | 31.67 |
| 5 | 7.85 | 31.71 |
| 30 | 7.68 | 31.74 |
| 72 | 7.11 | 31.83 |

TORDENSKJOLD; July 15, 1958; 1741 GCT; 54°37'N, 163°11'W; sounding, 50 fm; wind, calm; weather, partly cloudy; sea, calm.

| OBSERVED | | |
|---|---|---|
| Z | T | S |
| m | °C | ‰ |
| 0 | 8.46 | 31.35 |
| 15 | 8.38 | 31.38 |
| 30 | 7.57 | 31.65 |
| 91 | 5.99 | 31.82 |

POG

P-58-1

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CGS ST. CATHARINES; March 9, 1958; 1911 GCT; 50°00'N, 145°00'W; wind, variable, force 5; weather, overcast; sea, moderate. 101

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.10 | 32.859 | 7.68 | | | 0.33 | 25.87 | 0 | 6.10 | 32.86 | 25.87 | 214 | 0.00 |
| 10 | 6.03 | 32.786 | 7.68 | | | 0.24 | 25.82 | 10 | 6.03 | 32.79 | 25.82 | 218 | 0.02 |
| 20 | 6.03 | 32.788 | 7.83 | | | 0.24 | 25.83 | 20 | 6.03 | 32.79 | 25.83 | 218 | 0.04 |
| 30 | 6.01 | 32.779 | 7.66 | | | 0.24 | 25.82 | 30 | 6.01 | 32.78 | 25.82 | 219 | 0.07 |
| 49 | 6.00 | 32.790 | 7.62 | | | 0.24 | 25.83 | 50 | 6.00 | 32.79 | 25.83 | 218 | 0.11 |
| 74 | 6.01 | 32.794 | 7.62 | | | 0.25 | 25.83 | 75 | 6.01 | 32.79 | 25.83 | 218 | 0.16 |
| 99 | 6.01 | 32.801 | 7.55 | | | 0.25 | 25.84 | 100 | 6.00 | 32.81 | 25.85 | 217 | 0.22 |
| 123 | 5.45 | 33.337 | 6.56 | | | 0.06 | 26.33 | 125 | 5.39 | 33.37 | 26.36 | 169 | 0.27 |
| 148 | 4.59 | 33.571 | 5.71 | | | 0.04 | 26.61 | 150 | 4.54 | 33.58 | 26.63 | 144 | 0.31 |
| 172 | 4.24 | 33.677 | 5.13 | | | 0.03 | 26.73 | 175 | 4.21 | 33.69 | 26.74 | 132 | 0.34 |
| 197 | 4.08 | 33.753 | 4.27 | | | 0.02 | 26.81 | 200 | 4.06 | 33.76 | 26.82 | 126 | 0.38 |
| 222 | 3.90 | 33.805 | 3.54 | | | 0.02 | 26.87 | 250 | 3.73 | 33.84 | 26.91 | 117 | 0.44 |
| 246 | 3.75 | 33.834 | 3.17 | | | 0.02 | 26.91 | | | | | | |
| 296 | 3.71 | 33.865 | 2.32 | | | 0.02 | 26.94 | | | | | | |

CGS ST. CATHARINES; March 12, 1958; 1950, 1902 GCT; 50°00'N, 145°00'W; wind, variable, force 5; weather, overcast; sea, slight. 102

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.10 | 32.924 | 8.09 | 1.28 | 25 | 0.26 | 25.92 | 0 | 6.10 | 32.92 | 25.92 | 209 | 0.00 |
| 10 | 6.20a) | 32.862 | 8.00 | 1.35 | 25 | 0.24 | (25.86) | 10 | 6.20 | 32.86 | 25.86 | 215 | 0.02 |
| 25 | 6.25 | 32.870 | 7.95 | 1.33 | 26 | 0.24 | 25.86 | 20 | 6.25 | 32.85 | 25.85 | 216 | 0.04 |
| 49 | 6.23 | 32.875 | 7.88 | 1.35 | 27 | 0.24 | 25.87 | 30 | 6.26 | 32.87 | 25.86 | 215 | 0.06 |
| 74 | 6.23 | 32.888 | 7.88 | 1.35 | - | 0.24 | 25.88 | 50 | 6.23 | 32.88 | 25.87 | 215 | 0.11 |
| 99 | 6.23 | 32.873 | 7.88 | 1.40 | 26 | 0.24 | 25.87 | 75 | 6.23 | 32.89 | 25.88 | 214 | 0.16 |
| 124 | 6.24 | 32.896 | 7.76 | 1.40 | 26 | 0.25 | 25.88 | 100 | 6.23 | 32.87 | 25.87 | 215 | 0.22 |
| 149 | 5.47 | 33.560 | 6.28 | 1.94 | 43 | 0.03 | 26.50 | 125 | 6.22 | 32.91 | 25.90 | 213 | 0.27 |
| 173 | 4.75 | 33.650 | 5.30 | 2.15 | - | 0.02 | 26.66 | 150 | 5.44 | 33.57 | 26.52 | 154 | 0.32 |
| 198 | 4.18 | 33.711 | 5.00 | 2.47 | - | 0.03 | 26.77 | 175 | 4.70 | 33.66 | 26.67 | 140 | 0.35 |
| 248 | 3.74 | 33.798 | 3.45 | 2.81 | - | 0.03 | 26.88 | 200 | 4.14 | 33.72 | 26.77 | 130 | 0.39 |
| 297 | 3.76 | 33.903 | 2.58 | 2.99 | 88 | 0.03 | 26.96 | 250 | 3.73 | 33.80 | 26.88 | 120 | 0.45 |
| | | | | | | | | 300 | 3.76 | 33.91 | 26.96 | 112 | 0.51 |
| 396 | 3.83 | 34.028 | 1.84 | 3.14 | - | 0.02 | 27.05 | 400 | 3.83 | 34.03 | 27.06 | 105 | 0.62 |
| 495 | 3.66 | 34.145 | 1.11 | 3.26 | 115 | 0.02 | 27.16 | 500 | 3.65 | 34.15 | 27.17 | 95 | 0.72 |
| 743 | 3.24 | 34.297 | 0.73 | 3.15 | - | 0.02 | 27.32 | 600 | 3.48 | 34.23 | 27.25 | 88 | 0.81 |
| 992 | 2.85 | 34.396 | 0.75 | 3.28 | - | 0.02 | 27.44 | 700 | 3.31 | 34.29 | 27.31 | 83 | 0.90 |
| 1240 | 2.55 | 34.462 | 1.68u | 3.24 | 157 | 0.02 | 27.52 | 800 | 3.15 | 34.32 | 27.35 | 79 | 0.98 |
| | | | | | | | | 1000 | 2.84 | 34.40 | 27.44 | 71 | 1.13 |
| | | | | | | | | 1200 | 2.59 | 34.45 | 27.51 | 66 | 1.27 |

CGS ST. CATHARINES; March 15, 1958; 1915 GCT; 50°00'N, 144°44'W; wind, 060°, force 4; weather, cloudy; sea, moderate. 103

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.30 | 32.900 | 7.94 | 1.24 | 28 | 0.22 | 25.88 | 0 | 6.30 | 32.90 | 25.88 | 213 | 0.00 |
| 5 | 6.43 | 32.880 | 7.91 | 1.22 | 24 | 0.20 | 25.85 | 10 | 6.40 | 32.88 | 25.85 | 216 | 0.02 |
| 10 | 6.40 | 32.879 | 8.04 | 1.28 | 25 | 0.21 | 25.85 | 20 | 6.40 | 32.88 | 25.85 | 216 | 0.04 |
| 25 | 6.43 | 32.887 | 7.91 | 1.29 | 25 | 0.21 | 25.85 | 30 | 6.42 | 32.89 | 25.85 | 216 | 0.06 |
| 50 | 6.33 | 32.881 | 8.02 | 1.23 | 26 | 0.21 | 25.86 | 50 | 6.33 | 32.88 | 25.86 | 215 | 0.11 |
| 69 | 6.30 | 32.884 | 7.85 | 1.24 | 25 | 0.22 | 25.87 | 75 | 6.28 | 32.88 | 25.87 | 215 | 0.16 |
| 79 | 6.27 | 32.879 | 7.91 | 1.29 | 26 | 0.24 | 25.87 | 100 | 6.27 | 32.90 | 25.88 | 214 | 0.22 |
| 89 | 6.28 | 32.896 | 7.77 | 1.32 | 27 | 0.24 | 25.88 | 125 | 6.14 | 33.26 | 26.18 | 186 | 0.27 |
| 98 | 6.27 | 32.890 | 7.85 | 1.36 | 25 | 0.24 | 25.88 | 150 | 5.22 | 33.61 | 26.57 | 149 | 0.31 |
| 122 | 6.20 | 33.218 | 7.02 | 1.64 | 32 | 0.12 | 26.14 | 175 | 4.48 | 33.68 | 26.71 | 136 | 0.34 |
| 147 | 5.32 | 33.586 | 6.15 | 1.98 | 44 | 0.02 | 26.54 | 200 | 4.10 | 33.74 | 26.79 | 128 | 0.38 |
| 171 | 4.57 | 33.671 | 5.51 | 2.24 | 53 | 0.01 | 26.69 | 250 | 3.84 | 33.82 | 26.89 | 119 | 0.44 |
| 196 | 4.15 | 33.728 | 4.14 | 2.41 | 62 | 0.01 | 26.78 | 300 | 3.74 | 33.87 | 26.94 | 115 | 0.50 |
| 220 | 3.95 | 33.780 | 3.99 | 2.58 | 71 | 0.01 | 26.84 | | | | | | |
| 244 | 3.86 | 33.815 | 3.64 | 2.62 | 74 | 0.01 | 26.88 | | | | | | |
| 294 | 3.75 | 33.867 | 2.84 | 2.84 | 84 | 0.01 | 26.93 | | | | | | |
| 300 | 3.74b) | 33.871b) | - | - | - | - | (26.94) | | | | | | |

a) Value interpolated graphically by three-point parabolic method. On PAPA cruises (P-58-1 through P-58-4) where footnotes are used to indicate interpolated and extrapolated values, the parentheses have been omitted because of space limitations.

b) Value extrapolated by computer.

104 CGS ST. CATHARINES; March 19, 1958; 1937, 1852 GCT; 50°00'N, 145°16'W; wind, 040°, force 4; weather, cloudy; sea, rough.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $PO_4$-P µg at/L | $SiO_3$-Si µg at/L | $NO_2$-N µg at/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $\sigma_t$ g/L | δ cl/ton | ΔD dyn m |
| 0 | 6.00 | 32.890 | 7.77 | 1.31 | 26 | 0.23 | 25.91 | 0 | 6.00 | 32.89 | 25.91 | 210 | 0.00 |
| 9 | 6.08 | 32.857 | 7.57 | 1.31 | 25 | 0.22 | 25.87 | 10 | 6.09 | 32.86 | 25.87 | 214 | 0.02 |
| 23 | 6.12 | 32.866 | 7.58 | 1.33 | 25 | 0.22 | 25.88 | 20 | 6.12 | 32.86 | 25.87 | 214 | 0.04 |
| 46 | 6.09 | 32.858 | 7.57 | 1.38 | 26 | 0.23 | 25.87 | 30 | 6.12 | 32.87 | 25.88 | 214 | 0.06 |
| 69 | 6.11 | 32.855 | 7.58 | 1.37 | 25 | 0.23 | 25.87 | 50 | 6.09 | 32.86 | 25.87 | 214 | 0.11 |
| 92 | 5.87 | 32.869 | 7.60 | 1.41 | 27 | 0.25 | 25.91 | 75 | 6.07 | 32.86 | 25.87 | 214 | 0.16 |
| 119 | 5.92 | 32.908 | 7.32 | 1.45 | 28 | 0.21 | 25.93 | 100 | 5.85 | 32.88 | 25.92 | 210 | 0.22 |
| 134 | 5.20 | 33.112a) | 5.95 | 1.97 | 43 | 0.02 | (26.18) | 125 | 5.70 | 32.97 | 26.01 | 202 | 0.27 |
| 157 | 4.64 | 33.676 | 5.40 | 2.08 | 51 | 0.02 | 26.69 | 150 | 4.74 | 33.47 | 26.52 | 154 | 0.31 |
| 186 | 4.51 | 33.732 | 4.83 | 2.33 | 57 | 0.01 | 26.75 | 175 | 4.48 | 33.80 | 26.80 | 127 | 0.35 |
| 234 | 3.91 | 33.780 | 3.77 | 2.61 | 70 | 0.02 | 26.85 | 200 | 4.38 | 33.75 | 26.78 | 130 | 0.38 |
| 281 | 3.69 | 33.863 | 2.67 | 2.86 | 81 | 0.02 | 26.94 | 250 | 3.79 | 33.80 | 26.88 | 120 | 0.44 |
| | | | | | | | | 300 | 3.66 | 33.89 | 26.96 | 112 | 0.50 |
| 376 | 3.87 | 34.012 | 1.92 | 2.98 | 92 | 0.02 | 27.04 | 400 | 3.87 | 34.04 | 27.06 | 104 | 0.61 |
| 475 | 3.73 | 34.104 | 1.24 | 3.08 | 104 | 0.01 | 27.12 | 500 | 3.70 | 34.12 | 27.14 | 97 | 0.71 |
| 731 | 3.39 | 34.268 | 0.83 | 3.08 | 118 | 0.01 | 27.29 | 600 | 3.56 | 34.20 | 27.21 | 91 | 0.81 |
| 967 | 2.91 | 34.377 | 0.68 | 3.16 | 131 | 0.01 | 27.42 | 700 | 3.43 | 34.25 | 27.27 | 86 | 0.90 |
| 1212 | 2.59 | 34.452 | 0.85 | 3.16 | 143 | 0.01 | 27.51 | 800 | 3.27 | 34.30 | 27.33 | 81 | 0.98 |
| | | | | | | | | 1000 | 2.86 | 34.39 | 27.43 | 72 | 1.14 |
| | | | | | | | | 1200 | 2.60 | 34.45 | 27.50 | 66 | 1.28 |

105 CGS ST. CATHARINES; March 23, 1958; 1905 GCT; 49°50'N, 144°44'W; wind, 200°, force 1; weather, overcast; sea, moderate.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.10 | 32.948 | 7.47 | 1.24 | 25 | 0.32 | 25.94 | 0 | 6.10 | 32.95 | 25.94 | 207 | 0.00 |
| 5 | 6.26 | 32.935 | 7.46 | 1.25 | 25 | 0.24 | 25.91 | 10 | 6.29 | 32.89 | 25.87 | 214 | 0.02 |
| 10 | 6.29 | 32.892 | 7.49 | 1.26 | 25 | 0.24 | 25.87 | 20 | 6.29 | 32.87 | 25.86 | 215 | 0.04 |
| 25 | 6.25 | 32.899 | 7.52 | 1.26 | 25 | 0.24 | 25.89 | 30 | 6.25 | 32.90 | 25.89 | 213 | 0.06 |
| 50 | 6.27 | 32.897 | 7.47 | 1.26 | 25 | 0.24 | 25.88 | 50 | 6.27 | 32.90 | 25.88 | 214 | 0.11 |
| 69 | 6.26 | 32.893 | 7.53 | 1.26 | 24 | 0.24 | 25.88 | 75 | 6.26 | 32.89 | 25.88 | 214 | 0.16 |
| 79 | 6.26 | 32.891 | 7.50 | 1.30 | 25 | 0.24 | 25.88 | 100 | 6.23 | 32.90 | 25.89 | 213 | 0.22 |
| 89 | 6.26 | 32.896 | 7.52 | 1.29 | 25 | 0.24 | 25.88 | 125 | 5.91 | 33.58 | 26.46 | 159 | 0.26 |
| 99 | 6.24 | 32.896 | 7.55 | 1.33 | 25 | 0.23 | 25.88 | 150 | 5.08 | 33.64 | 26.61 | 145 | 0.30 |
| 124 | 5.93 | 33.564 | 6.10 | 1.75 | 37 | 0.03 | 26.45 | 175 | 4.70 | 33.73 | 26.72 | 135 | 0.34 |
| 149 | 5.10 | 33.640 | 5.70 | 1.93 | 45 | 0.04 | 26.61 | 200 | 4.43 | 33.77 | 26.79 | 129 | 0.37 |
| 174 | 4.71 | 33.726 | 5.22 | 2.14 | 52 | 0.03 | 26.72 | 250 | 3.94 | 33.81 | 26.87 | 121 | 0.43 |
| 198 | 4.45 | 33.768 | 4.61 | 2.29 | 59 | 0.03 | 26.78 | 300 | 3.75 | 33.88 | 26.94 | 114 | 0.49 |
| 223 | 4.18 | 33.792 | 4.07 | 2.50 | 65 | 0.03 | 26.83 | | | | | | |
| 248 | 3.95 | 33.812 | 3.53 | 2.64 | 73 | - | 26.87 | | | | | | |
| 298 | 3.75 | 33.875 | 2.71 | 2.85 | 82 | 0.03 | 26.94 | | | | | | |
| 300 | 3.75b) | 33.878b) | - | - | - | - | (26.94) | | | | | | |

a) Value interpolated by computer.
b) Value extrapolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CGS ST. CATHARINES; March 26, 1958; 1940, 1844 GCT; 49°50'N, 144°44'W; wind, variable, force 1; weather, slight rain showers; sea, calm. 106

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.50 | 32.943 | 7.60 | 1.26 | 25 | 0.23 | 25.89 | 0 | 6.50 | 32.94 | 25.89 | 212 | 0.00 |
| 10 | 6.44 | 32.899 | 7.57 | 1.27 | 23 | 0.23 | 25.86 | 10 | 6.44 | 32.90 | 25.86 | 215 | 0.02 |
| 25 | 6.37 | 32.899 | 7.54 | 1.28 | 23 | 0.23 | 25.87 | 20 | 6.39 | 32.89 | 25.86 | 215 | 0.04 |
| 50 | 6.33 | 32.899 | 7.52 | 1.30 | 23 | 0.24 | 25.88 | 30 | 6.35 | 32.90 | 25.87 | 214 | 0.06 |
| 75 | 6.34 | 32.902 | 7.49 | 1.27 | 23 | 0.24 | 25.88 | 50 | 6.33 | 32.90 | 25.88 | 214 | 0.11 |
| 99 | 6.32 | 32.906 | 7.46 | 1.31 | 23 | 0.23 | 25.88 | 75 | 6.34 | 32.90 | 25.88 | 214 | 0.16 |
| 124 | 5.79 | 33.600 | 5.99 | 1.82 | 38 | 0.03 | 26.50 | 100 | 6.31 | 32.92 | 25.89 | 213 | 0.22 |
| 148 | 5.19 | 33.701 | 5.62 | 1.96 | 45 | 0.02 | 26.65 | 125 | 5.77 | 33.62 | 26.51 | 155 | 0.26 |
| 173 | 4.84 | 33.746 | 5.24 | 2.12 | 49 | 0.03 | 26.72 | 150 | 5.15 | 33.71 | 26.66 | 141 | 0.30 |
| 197 | 4.53 | 33.748 | - | 2.28 | 59 | 0.02 | 26.76 | 175 | 4.81 | 33.75 | 26.73 | 134 | 0.33 |
| 246 | 4.10 | 33.792 | 3.67 | 2.56 | 70 | 0.03 | 26.84 | 200 | 4.50 | 33.75 | 26.76 | 131 | 0.37 |
| 295 | 3.80 | 33.884 | 2.73 | 2.74 | 82 | 0.02 | 26.94 | 250 | 4.07 | 33.80 | 26.85 | 123 | 0.43 |
| | | | | | | | | 300 | 3.78 | 33.89 | 26.95 | 114 | 0.49 |
| 394 | 3.87 | 34.027 | 1.68 | 2.93 | 97 | 0.03 | 27.05 | 400 | 3.87 | 34.03 | 27.05 | 105 | 0.60 |
| 494 | 3.81 | 34.143 | 1.14 | 3.04 | 106 | 0.03 | 27.15 | 500 | 3.80 | 34.15 | 27.15 | 96 | 0.70 |
| 744 | 3.30 | 34.283 | 0.66 | 3.14 | - | 0.03 | 27.31 | 600 | 3.66 | 34.23 | 27.23 | 90 | 0.80 |
| 993 | 2.86 | 34.393 | 0.60 | 3.16 | 140 | 0.03 | 27.44 | 700 | 3.43 | 34.27 | 27.29 | 85 | 0.88 |
| 1243 | 2.57 | 34.464 | 0.67 | 2.94 | 149 | 0.03 | 27.52 | 800 | 3.20 | 34.31 | 27.34 | 80 | 0.97 |
| | | | | | | | | 1000 | 2.85 | 34.40 | 27.44 | 71 | 1.12 |
| | | | | | | | | 1200 | 2.61 | 34.45 | 27.51 | 66 | 1.26 |

CGS ST. CATHARINES; March 29, 1958; 1930 GCT; 49°50'N, 145°00'W; wind, 340°, force 5; weather, partly cloudy; sea, rough. 107

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.00 | 32.967 | 7.57 | 1.44 | 27 | 0.26 | 25.97 | 0 | 6.00 | 32.97 | 25.97 | 204 | 0.00 |
| 5 | 6.22 | 32.880 | 7.57 | 1.44 | 25 | 0.22 | 25.87 | 10 | 6.20 | 32.88 | 25.88 | 214 | 0.02 |
| 10 | 6.20 | 32.878 | 7.60 | 1.48 | 25 | 0.22 | 25.88 | 20 | 6.19 | 32.89 | 25.88 | 213 | 0.04 |
| 24 | 6.20 | 32.897 | 7.56 | 1.47 | 25 | 0.23 | 25.89 | 30 | 6.20 | 32.90 | 25.89 | 212 | 0.06 |
| 48 | 6.20 | 32.882 | 7.56 | 1.45 | 25 | 0.22 | 25.88 | 50 | 6.20 | 32.88 | 25.88 | 214 | 0.11 |
| 68 | 6.20 | 32.878 | 7.55 | 1.46 | 25 | 0.22 | 25.88 | 75 | 6.19 | 32.88 | 25.88 | 214 | 0.16 |
| 87 | 6.16 | 32.879 | 7.55 | 1.47 | 28 | 0.23 | 25.88 | 100 | 6.11 | 32.87 | 25.88 | 214 | 0.22 |
| 97 | 6.12 | 32.871 | 7.54 | 1.52 | 25 | 0.22 | 25.88 | 125 | 5.50 | 33.65 | 26.57 | 149 | 0.26 |
| 106 | 6.09 | 32.874 | 7.54 | 1.53 | 26 | 0.23 | 25.89 | 150 | 5.08 | 33.66 | 26.62 | 144 | 0.30 |
| 121 | 5.60 | 33.552 | 6.04 | 2.08 | 40 | 0.03 | 26.48 | 175 | 4.61 | 33.72 | 26.73 | 134 | 0.33 |
| 145 | 5.17 | 33.639 | 5.72 | 2.22 | 45 | 0.03 | 26.60 | 200 | 4.31 | 33.76 | 26.79 | 128 | 0.36 |
| 169 | 4.71 | 33.710 | 5.24 | 2.40 | 52 | 0.03 | 26.71 | 250 | 4.07 | 33.84 | 26.88 | 120 | 0.43 |
| 193 | 4.37 | 33.743 | 4.00 | 2.60 | 59 | 0.02 | 26.77 | 300 | 3.77 | 33.89 | 26.95 | 114 | 0.49 |
| 218 | 4.24 | 33.809 | 3.96 | 2.78 | 69 | 0.02 | 26.84 | | | | | | |
| 242 | 4.11 | 33.832 | 3.62 | 2.86 | 67 | 0.02 | 26.87 | | | | | | |
| 289 | 3.84 | 33.878 | 2.73 | 3.11 | 80 | 0.02 | 26.93 | | | | | | |
| 300 | 3.77a) | 33.889a) | - | - | - | - | (26.95) | | | | | | |

CGS ST. CATHARINES; April 2, 1958; 1901 GCT; 50°00'N, 145°00'W; wind, 320°, force 4; weather, intermittent slight rain; sea, rough. 108

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.90 | 32.817 | 7.59 | 1.33 | 30 | 0.25 | 25.86 | 0 | 5.90 | 32.82 | 25.86 | 214 | 0.00 |
| 10 | 5.92 | 32.784 | 7.54 | 1.32 | 27 | 0.22 | 25.84 | 10 | 5.92 | 32.78 | 25.84 | 217 | 0.02 |
| 24 | 5.95 | 32.831 | 7.57 | 1.35 | 27 | 0.22 | 25.87 | 20 | 5.94 | 32.81 | 25.85 | 216 | 0.04 |
| 48 | 5.89 | 32.821 | 7.58 | 1.40 | 27 | 0.23 | 25.87 | 30 | 5.95 | 32.84 | 25.88 | 214 | 0.06 |
| 71 | 5.89 | 32.828 | 7.58 | 1.36 | 27 | 0.21 | 25.87 | 50 | 5.89 | 32.82 | 25.87 | 215 | 0.11 |
| 95 | 5.89 | 32.836 | 7.55 | 1.35 | 27 | 0.21 | 25.88 | 75 | 5.89 | 32.83 | 25.88 | 214 | 0.16 |
| 119 | 6.02 | 33.224 | 6.71 | 1.61 | 32 | 0.12 | 26.17 | 100 | 5.91 | 32.89 | 25.92 | 211 | 0.22 |
| 143 | 5.38 | 33.617 | 5.50 | 1.85 | 43 | 0.03 | 26.56 | 125 | 5.93 | 33.32 | 26.26 | 178 | 0.26 |
| 167 | 4.74 | 33.668 | 5.41 | 2.04 | 50 | 0.02 | 26.67 | 150 | 5.19 | 33.67 | 26.62 | 144 | 0.30 |
| 191 | 4.38 | 33.730 | 4.75 | 2.34 | 59 | 0.03 | 26.76 | 175 | 4.59 | 33.69 | 26.70 | 136 | 0.34 |
| 240 | 3.96 | 33.781 | 3.67 | 2.55 | 70 | 0.03 | 26.84 | 200 | 4.27 | 33.75 | 26.78 | 129 | 0.37 |
| 289 | 3.72 | 33.854 | 2.80 | 2.72 | 80 | 0.03 | 26.93 | 250 | 3.90 | 33.79 | 26.86 | 122 | 0.44 |
| 300 | 3.69a) | 33.873a) | - | - | - | - | (26.94) | 300 | 3.69 | 33.87 | 26.94 | 114 | 0.50 |

a) Value extrapolated by computer.

POG

P-58-I

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

109 CGS ST. CATHARINES; April 5, 1958; 1904 GCT; 50°00'N, 145°00'W; wind, 300°, force 3; weather, cloudy; sea, rough.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.10 | 32.908 | | 25 | 0.24 | 25.91 | 0 | 6.10 | 32.91 | 25.91 | 210 | 0.00 |
| 5 | 6.15 | 32.856 | | 25 | 0.21 | 25.86 | 10 | 6.10 | 32.86 | 25.87 | 214 | 0.02 |
| 9 | 6.11 | 32.858 | | 26 | 0.21 | 25.87 | 20 | 6.12 | 32.86 | 25.87 | 214 | 0.04 |
| 23 | 6.15 | 32.856 | | 26 | 0.21 | 25.86 | 30 | 6.15 | 32.86 | 25.86 | 215 | 0.06 |
| 47 | 6.11 | 32.857 | | 26 | 0.21 | 25.87 | 50 | 6.11 | 32.86 | 25.87 | 214 | 0.11 |
| 66 | 6.11 | 32.854 | | 26 | 0.21 | 25.87 | 75 | 6.08 | 32.85 | 25.87 | 215 | 0.16 |
| 85 | 6.01 | 32.852 | | 27 | 0.22 | 25.88 | 100 | 6.00 | 32.85 | 25.88 | 214 | 0.22 |
| 94 | 6.01 | 32.848 | | 26 | 0.21 | 25.88 | 125 | 5.80 | 33.66 | 26.54 | 152 | 0.26 |
| 103 | 6.00 | 32.856 | | 27 | 0.22 | 25.88 | 150 | 5.15 | 33.67 | 26.63 | 144 | 0.30 |
| 117 | 5.93 | 33.486 | | 37 | 0.04 | 26.39 | 175 | 4.60 | 33.73 | 26.74 | 133 | 0.33 |
| 140 | 5.40 | 33.627 | | 42 | 0.03 | 26.56 | 200 | 4.32 | 33.77 | 26.80 | 128 | 0.37 |
| 164 | 4.78 | 33.709 | | 50 | 0.03 | 26.70 | 250 | 4.09 | 33.84 | 26.88 | 120 | 0.43 |
| 187 | 4.49 | 33.750 | | 57 | 0.02 | 26.76 | 300 | 3.82 | 33.89 | 26.94 | 114 | 0.49 |
| 210 | 4.18 | 33.785 | | 65 | 0.02 | 26.82 | | | | | | |
| 234 | 4.14 | 33.820 | | 68 | 0.02 | 26.86 | | | | | | |
| 280 | 3.95 | 33.872 | | 80 | 0.02 | 26.92 | | | | | | |
| 300 | 3.82a) | 33.888a) | | - | - | (26.94) | | | | | | |

110 CGS ST. CATHARINES; April 9, 1958; 1935, 1852 GCT; 50°00'N, 145°00'W; wind, 150°, force 2; weather, cloudy; sea, calm.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.90 | 32.811 | 8.36 | 1.26 | 28 | 0.24 | 25.86 | 0 | 5.90 | 32.81 | 25.86 | 215 | 0.00 |
| 10 | 5.89 | 32.808 | 8.39 | 1.30 | 28 | 0.23 | 25.86 | 10 | 5.89 | 32.81 | 25.86 | 215 | 0.02 |
| 25 | 5.91 | 32.813 | 8.39 | 1.33 | 28 | 0.23 | 25.86 | 20 | 5.90 | 32.81 | 25.86 | 215 | 0.04 |
| 50 | 5.88 | 32.808 | 8.42 | 1.33 | 28 | 0.25 | 25.86 | 30 | 5.91 | 32.81 | 25.86 | 215 | 0.06 |
| 75 | 5.97 | 32.813 | 8.42 | 1.33 | 28 | 0.24 | 25.85 | 50 | 5.88 | 32.81 | 25.86 | 216 | 0.11 |
| 100 | 5.71 | 33.177 | 6.82 | 1.56 | 34 | 0.13 | 26.17 | 75 | 5.97 | 32.81 | 25.85 | 216 | 0.16 |
| 125 | 5.35 | 33.633 | 6.42 | 1.81 | 44 | 0.04 | 26.57 | 100 | 5.71 | 33.18 | 26.17 | 186 | 0.21 |
| 150 | 4.83 | 33.694 | 5.95 | 2.00 | 50 | 0.04 | 26.68 | 125 | 5.35 | 33.63 | 26.57 | 148 | 0.26 |
| 175 | 4.46 | 33.730 | 5.43 | 2.13 | 57 | 0.04 | 26.75 | 150 | 4.83 | 33.69 | 26.68 | 138 | 0.29 |
| 199 | 4.29 | 33.758 | 4.93 | 2.30 | 62 | 0.04 | 26.79 | 175 | 4.46 | 33.73 | 26.75 | 132 | 0.33 |
| 249 | 4.05 | 33.837 | 3.68 | 2.54 | 72 | 0.04 | 26.88 | 200 | 4.28 | 33.76 | 26.79 | 128 | 0.36 |
| 298 | 3.95 | 33.892 | 2.93 | 2.68 | 80 | 0.04 | 26.93 | 250 | 4.05 | 33.84 | 26.88 | 120 | 0.42 |
| | | | | | | | | 300 | 3.95 | 33.89 | 26.94 | 115 | 0.48 |
| 398 | 3.73 | 34.015 | 1.68 | 2.86 | 95 | 0.04 | 27.05 | 400 | 3.73 | 34.02 | 27.05 | 105 | 0.59 |
| 497 | 3.75 | 34.133 | 1.27 | 2.93 | 100 | 0.04 | 27.14 | 500 | 3.75 | 34.14 | 27.15 | 97 | 0.69 |
| 750 | 3.23 | 34.297 | 0.83 | 3.06 | 122 | 0.04 | 27.33 | 600 | 3.64 | 34.22 | 27.23 | 90 | 0.79 |
| 1000 | 2.83 | 34.393 | 0.68 | 3.05 | 134 | 0.03 | 27.44 | 700 | 3.40 | 34.28 | 27.30 | 84 | 0.88 |
| 1250 | 2.51 | 34.468 | 0.80 | 3.02 | 144 | 0.03 | 27.53 | 800 | 3.14 | 34.32 | 27.35 | 79 | 0.96 |
| | | | | | | | | 1000 | 2.83 | 34.39 | 27.44 | 71 | 1.11 |
| | | | | | | | | 1200 | 2.57 | 34.45 | 27.51 | 65 | 1.25 |

a) Value extrapolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

111

CGS ST. CATHARINES; April 16, 1958; 1954, 1910 GCT; 50°00'N, 145°16'W; wind, 270°, force 3; weather, partly cloudy, distant precipitation; sea, rough.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.10 | 32.848 | 8.55 | 1.35 | 27 | 0.22 | 25.86 | 0 | 6.10 | 32.85 | 25.86 | 214 | 0.00 |
| 10 | 6.27 | 32.858 | 8.46 | 1.28 | 26 | 0.21 | 25.85 | 10 | 6.27 | 32.86 | 25.85 | 216 | 0.02 |
| 25 | 6.18 | 32.859 | 8.46 | 1.33 | 26 | 0.22 | 25.86 | 20 | 6.26 | 32.86 | 25.85 | 216 | 0.04 |
| 49 | 6.16 | 32.857 | 8.49 | 1.31 | 26 | 0.24 | 25.86 | 30 | 6.16 | 32.86 | 25.86 | 215 | 0.06 |
| 74 | 6.15 | 32.862 | 8.47 | 1.28 | 26 | 0.22 | 25.87 | 50 | 6.16 | 32.86 | 25.86 | 215 | 0.11 |
| 98 | 6.15 | 32.891 | 8.37 | 1.29 | 27 | 0.12 | 25.89 | 75 | 6.15 | 32.86 | 25.87 | 215 | 0.16 |
| 123 | 5.42 | 33.464 | 6.78 | 1.82 | 42 | 0.04 | 26.43 | 100 | 6.12 | 32.92 | 25.92 | 211 | 0.22 |
| 147 | 4.77 | 33.650 | 6.10 | 2.04 | 51 | 0.04 | 26.65 | 125 | 5.36 | 33.49 | 26.46 | 159 | 0.26 |
| 172 | 4.47 | 33.717 | 5.59 | 2.12 | 57 | 0.03 | 26.74 | 150 | 4.71 | 33.66 | 26.67 | 139 | 0.30 |
| 196 | 4.24 | 33.752 | 4.41 | 2.32 | 62 | 0.04 | 26.79 | 175 | 4.44 | 33.72 | 26.75 | 132 | 0.33 |
| 245 | 3.86 | 33.798 | 3.90 | 2.58 | 72 | 0.03 | 26.87 | 200 | 4.20 | 33.76 | 26.80 | 127 | 0.37 |
| 294 | 3.71 | 33.863 | 2.96 | 2.76 | 82 | 0.04 | 26.93 | 250 | 3.83 | 33.80 | 26.87 | 121 | 0.43 |
| | | | | | | | | 300 | 3.70 | 33.87 | 26.94 | 114 | 0.49 |
| 387 | 3.71 | 34.010 | 1.76 | 2.96 | 99 | 0.04 | 27.05 | 400 | 3.71 | 34.03 | 27.06 | 104 | 0.60 |
| 484 | 3.75 | 34.105 | 1.39 | 3.01 | 106 | 0.04 | 27.12 | 500 | 3.75 | 34.12 | 27.13 | 98 | 0.70 |
| 728 | 3.32 | 34.280 | 0.92 | 3.11 | 126 | 0.03 | 27.30 | 600 | 3.64 | 34.20 | 27.21 | 92 | 0.80 |
| 976 | 2.84 | 34.390 | 0.73 | 3.10 | 139 | 0.03 | 27.43 | 700 | 3.41 | 34.26 | 27.28 | 85 | 0.89 |
| 1275 | 2.49 | 34.472 | 0.71 | 3.10 | 151 | 0.03 | 27.53 | 800 | 3.19 | 34.32 | 27.35 | 79 | 0.97 |
| | | | | | | | | 1000 | 2.80 | 34.40 | 27.45 | 71 | 1.12 |
| | | | | | | | | 1200 | 2.55 | 34.46 | 27.51 | 65 | 1.26 |

201

CGS ST. CATHARINES; May 31, 1958; 1936, 2007 GCT; 50°00'N, 145°00'W; wind, 320°, force 3; weather, cloudy; sea, slight.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.30 | 32.929 | 6.90 | 1.45 | 27.0 | 0.22 | 25.47 | 0 | 9.30 | 32.93 | 25.47 | 252 | 0.00 |
| 10 | 8.76 | 32.885 | 6.65 | 1.37 | 27.3 | 0.14 | 25.52 | 10 | 8.76 | 32.89 | 25.52 | 247 | 0.02 |
| 20 | 8.40a) | 32.903b) | - | - | - | - | (25.59) | 20 | 8.40 | 32.90 | 25.59 | 241 | 0.05 |
| 30 | 7.87 | 32.917 | 7.12 | 1.32 | 26.9 | 0.11 | 25.68 | 30 | 7.87 | 32.92 | 25.68 | 232 | 0.07 |
| 50 | 6.61 | 32.933 | 7.31 | 1.40 | 28.0 | 0.10 | 25.87 | 50 | 6.61 | 32.93 | 25.87 | 215 | 0.12 |
| 75 | 5.93 | 32.938 | 6.89 | 1.45 | 29.0 | 0.18 | 25.96 | 75 | 5.93 | 32.94 | 25.96 | 207 | 0.17 |
| 100 | 5.90 | 32.952 | 7.07 | 1.52 | - | - | 25.97 | 100 | 5.90 | 32.95 | 25.97 | 206 | 0.22 |
| 125 | 5.53 | 33.474 | 5.76 | 1.92 | 40.6 | 0.02 | 26.43 | 125 | 5.53 | 33.47 | 26.43 | 162 | 0.27 |
| 150 | 5.01 | 33.701 | 5.16 | 2.11 | 50.4 | 0.00 | 26.67 | 150 | 5.01 | 33.70 | 26.67 | 140 | 0.31 |
| 175 | 4.61 | 33.750a) | 4.83 | - | - | 0.01 | (26.75) | 175 | 4.61 | 33.75 | 26.75 | 132 | 0.34 |
| 200 | 4.32 | 33.784 | 4.18 | 2.40 | 62.3 | 0.02 | 26.81 | 200 | 4.32 | 33.78 | 26.81 | 127 | 0.38 |
| | | | | | | | | 250 | 3.98 | 33.85 | 26.90 | 118 | 0.44 |
| 300 | 3.97 | 33.924 | 2.56 | 2.46 | 81.8 | 0.01 | 26.96 | 300 | 3.97 | 33.92 | 26.96 | 113 | 0.50 |
| 396 | 3.80 | 34.035 | 1.51 | 3.26 | 98.2 | 0.01 | 27.06 | 400 | 3.79 | 34.04 | 27.07 | 104 | 0.60 |
| 495 | 3.72 | 34.136 | 1.11 | 3.34 | 108.0 | 0.00 | 27.15 | 500 | 3.71 | 34.14 | 27.15 | 96 | 0.70 |
| 738 | 3.33 | 34.298 | 0.66 | 3.18 | 125.0 | 0.00 | 27.32 | 600 | 3.59 | 34.22 | 27.23 | 90 | 0.80 |
| 1100 | 2.72 | 34.433 | 0.56 | 3.42 | 147.0 | 0.01 | 27.48 | 700 | 3.41 | 34.28 | 27.30 | 84 | 0.89 |
| 1200 | 2.55c) | 34.448c) | - | - | - | - | (27.51) | 800 | 3.23 | 34.33 | 27.35 | 79 | 0.97 |
| | | | | | | | | 1000 | 2.89 | 34.41 | 27.44 | 71 | 1.12 |
| | | | | | | | | 1200 | 2.55 | 34.45 | 27.51 | 65 | 1.26 |

202

CGS ST. CATHARINES; June 4, 1958; 1905 GCT; 50°10'N, 145°00'W; wind, 140°, force 3; weather, clear; sea, slight.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.60 | 32.922 | 6.93 | 1.56 | 26.2 | | 25.42 | 0 | 9.60 | 32.92 | 25.42 | 257 | 0.00 |
| 10 | 9.60a) | 32.886b) | - | - | - | | (25.39) | 10 | 9.60 | 32.89 | 25.39 | 260 | 0.03 |
| 20 | 8.50a) | 32.870a) | - | - | - | | (25.55) | 20 | 8.50 | 32.87 | 25.55 | 245 | 0.05 |
| 30 | 7.72 | 32.873 | 7.29 | 1.55 | 26.4 | | 25.67 | 30 | 7.72 | 32.87 | 25.67 | 234 | 0.08 |
| 50 | 6.70 | 32.867 | 7.29 | 1.58 | 27.0 | | 25.80 | 50 | 6.70 | 32.87 | 25.80 | 221 | 0.12 |
| 75 | 6.13 | 32.918 | 7.25 | 1.67 | 29.3 | | 25.92 | 75 | 6.13 | 32.92 | 25.92 | 210 | 0.18 |
| 90 | 5.88 | 32.943 | 7.29 | 1.67 | 29.6 | | 25.97 | 100 | 5.84 | 32.93 | 25.96 | 207 | 0.23 |
| 100 | 5.84 | 32.927 | 6.91 | 1.71 | 29.2 | | 25.96 | 125 | 5.57 | 33.46 | 26.41 | 164 | 0.28 |
| 110 | 5.69 | 32.948 | - | 1.67 | 30.6 | | 25.99 | 150 | 5.09 | 33.66 | 26.62 | 144 | 0.31 |
| 125 | 5.57 | 33.460 | 5.89 | 2.12 | 41.5 | | 26.41 | | | | | | |
| 150 | 5.09 | 33.656 | 5.51 | 2.35 | 48.8 | | 26.62 | | | | | | |

a) Value interpolated graphically by three-point parabolic method.
b) Value interpolated by computer.
c) Value extrapolated by computer.

POG

P-58-2

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

203 CGS ST. CATHARINES; June 7, 1958; 1856, 1955 GCT; 50°00'N, 144°44'W; wind, 180°, force 3; weather, intermittent slight drizzle; sea, moderate.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.40 | 32.973 | 7.90 | 1.43 | 28.6 | 0.18 | 25.32 | 0 | 10.40 | 32.97 | 25.32 | 266 | 0.00 |
| 10 | 10.22 | 32.899 | 6.72 | 1.40 | 28.8 | 0.16 | 25.30 | 10 | 10.22 | 32.90 | 25.30 | 269 | 0.03 |
| 20 | 8.70a) | 32.895b) | - | - | - | - | (25.54) | 20 | 8.70 | 32.89 | 25.54 | 246 | 0.05 |
| 30 | 8.00 | 32.897 | 7.34 | - | 28.5 | 0.11 | 25.65 | 30 | 8.00 | 32.90 | 25.65 | 236 | 0.08 |
| 50 | 6.86 | 32.919 | 7.53 | 1.35 | 28.8 | 0.09 | 25.82 | 50 | 6.86 | 32.92 | 25.82 | 219 | 0.12 |
| 75 | 6.36 | 32.933 | 7.30 | 1.40 | 28.4 | 0.13 | 25.90 | 75 | 6.36 | 32.93 | 25.90 | 212 | 0.18 |
| 100 | 5.77 | 32.936 | 7.53 | 1.44 | 30.2 | 0.21 | 25.97 | 100 | 5.77 | 32.94 | 25.97 | 205 | 0.23 |
| 124 | 5.97 | 33.386 | 6.78 | 1.62 | 35.8 | 0.00 | 26.30 | 125 | 5.95 | 33.40 | 26.32 | 173 | 0.28 |
| 148 | 4.91 | 33.718 | 5.16 | 2.02 | 51.7 | 0.00 | 26.69 | 150 | 4.85 | 33.73 | 26.71 | 136 | 0.32 |
| 173 | 4.53 | 33.757 | 4.76 | 2.24 | 57.9 | 0.00 | 26.76 | 175 | 4.50 | 33.76 | 26.77 | 130 | 0.35 |
| 195 | 4.22 | 33.800a) | 4.20 | 2.35 | 65.7 | 0.00 | (26.83) | 200 | 4.17 | 33.81 | 26.84 | 123 | 0.38 |
| 242 | 4.03 | 33.864 | 3.05 | 2.56 | 77.2 | 0.00 | 26.90 | 250 | 4.00 | 33.87 | 26.91 | 117 | 0.44 |
| 288 | 3.90 | 33.913 | 2.45 | 2.80 | 85.5 | 0.00 | 26.95 | 300 | 3.86 | 33.92 | 26.97 | 112 | 0.50 |
| | | | | | | | | 400 | 3.66 | 34.02 | 27.07 | 104 | 0.61 |
| 333 | 3.76 | 33.951 | 1.94 | 2.65 | 91.3 | 0.00 | 27.00 | 500 | 3.72 | 34.16 | 27.17 | 95 | 0.71 |
| 484 | 3.73 | 34.143 | 1.06 | 3.00 | 109.0 | 0.00 | 27.15 | 600 | 3.57 | 34.25 | 27.25 | 88 | 0.80 |
| 737 | 3.24 | 34.317 | 0.63 | 3.06 | 128.0 | 0.00 | 27.34 | 700 | 3.35 | 34.30 | 27.32 | 82 | 0.89 |
| 1090 | 2.73 | 34.436 | 0.52 | 3.34 | 145.0 | 0.00 | 27.48 | 800 | 3.13 | 34.35 | 27.38 | 77 | 0.97 |
| 1242 | 2.56 | 34.476 | 0.66 | 3.36 | 147.0 | 0.01 | 27.53 | 1000 | 2.84 | 34.42 | 27.46 | 70 | 1.11 |
| | | | | | | | | 1200 | 2.60 | 34.47 | 27.52 | 65 | 1.25 |

204 CGS ST. CATHARINES; June 11, 1958; 1945, 2005 GCT; 50°00'N, 144°44'W; wind, 200°, force 4; weather, moderate drizzle; sea, rough.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.70 | 32.887 | 6.88 | 1.47 | 28.1 | 0.13 | 25.21 | 0 | 10.70 | 32.89 | 25.21 | 277 | 0.00 |
| 10 | 10.45 | 32.896 | 6.53 | 1.45 | 28.2 | 0.09 | 25.26 | 10 | 10.45 | 32.90 | 25.26 | 272 | 0.03 |
| 20 | 10.50a) | 32.904b) | - | - | - | - | (25.25) | 20 | 10.50 | 32.90 | 25.25 | 273 | 0.06 |
| 30 | 8.28 | 32.912 | 7.52 | 1.40 | 28.4 | 0.08 | 25.62 | 30 | 8.28 | 32.91 | 25.62 | 238 | 0.08 |
| 50 | 7.18 | 32.924 | 7.56 | 1.45 | 27.2 | 0.12 | 25.78 | 50 | 7.18 | 32.92 | 25.78 | 223 | 0.13 |
| 75 | 6.55 | 32.923 | 7.71 | 1.51 | 28.8 | 0.17 | 25.87 | 75 | 6.55 | 32.92 | 25.87 | 215 | 0.18 |
| 89 | 6.08 | 32.932 | 7.13 | 1.56 | 29.5 | 0.22 | 25.93 | 100 | 5.80 | 32.94 | 25.97 | 205 | 0.24 |
| 98 | 5.82 | 32.934 | 7.19 | 1.65 | 30.3 | 0.24 | 25.97 | 125 | 5.95 | 33.44 | 26.35 | 170 | 0.28 |
| | | | | | | | | 150 | 5.04 | 33.70 | 26.66 | 140 | 0.32 |
| 108 | 5.84 | 32.960 | 7.17 | 1.66 | 30.2 | 0.00 | 25.98 | 175 | 4.70 | 33.75 | 26.74 | 133 | 0.36 |
| 123 | 5.97 | 33.398 | 6.03 | 2.06 | 36.9 | 0.00 | 26.31 | 200 | 4.27 | 33.78 | 26.81 | 126 | 0.39 |
| 148 | 5.09 | 33.687 | 5.26 | - | 49.8 | 0.00 | 26.65 | 250 | 4.05 | 33.85 | 26.89 | 119 | 0.45 |
| 173 | 4.73 | 33.748 | 4.76 | - | 57.2 | 0.00 | 26.74 | 300 | 3.95 | 33.89 | 26.93 | 116 | 0.51 |
| 198 | 4.30 | 33.777 | 4.23 | - | 65.6 | 0.00 | 26.81 | | | | | | |
| 248 | 4.06 | 33.848 | 3.46 | - | 78.2 | 0.00 | 26.89 | | | | | | |
| 298 | 3.95 | 33.891 | 2.67 | - | 85.1 | 0.00 | 26.93 | | | | | | |
| 300 | 3.95c) | 33.892c) | - | - | - | - | (26.93) | | | | | | |

204A CGS ST. CATHARINES; June 12, 1958; 1905 GCT; 50°00'N, 144°44'W; wind, 240°, force 3; weather, cloudy; sea, moderate.

| | | | | | |
|---|---|---|---|---|---|
| 0 | 10.5 | - | - | | - |
| 51 | 6.56 | 32.898 | 7.36 | | 0.10 |
| 75 | 5.92 | 32.919 | 7.29 | | 0.22 |
| 90 | 5.84 | 32.937 | 7.43 | | 0.21 |
| 95 | 5.78 | 32.937 | 7.72 | | 0.21 |
| 100 | 5.85 | 32.953 | 7.64 | | 0.20 |
| 104 | 5.82 | 32.934 | 7.19 | | 0.20 |
| 109 | 5.79 | 32.936 | 7.37 | | 0.21 |
| 114 | 5.77 | 32.969 | 7.53 | | 0.21 |
| 124 | 5.61 | 32.930 | 7.21 | | 0.23 |

a) Value interpolated graphically by three-point parabolic method.
b) Value interpolated by computer.
c) Value extrapolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

205

CGS ST. CATHARINES; June 14, 1958; 1914, 2105 GCT; 50°00'N, 145°00'W; wind, 210°, force 5; weather, moderate drizzle; sea, rough.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.30 | 32.962 | 6.84 | 1.32 | 29.6 | 0.21 | 25.33 | 0 | 10.30 | 32.96 | 25.33 | 265 | 0.00 |
| 10 | 10.16 | 32.858 | 6.96 | 1.30 | 29.6 | 0.16 | 25.28 | 10 | 10.16 | 32.86 | 25.28 | 271 | 0.03 |
| 20 | 8.50a) | 32.854b) | - | - | - | - | (25.54) | 20 | 8.50 | 32.85 | 25.54 | 246 | 0.05 |
| 29 | 7.90 | 32.856 | 7.52 | 1.32 | 30.4 | 0.12 | 25.63 | 30 | 7.84 | 32.86 | 25.64 | 236 | 0.08 |
| 48 | 7.04 | 32.876 | 7.64 | 1.31 | 29.9 | 0.10 | 25.76 | 50 | 6.95 | 32.88 | 25.78 | 223 | 0.12 |
| 72 | 5.95 | 32.914 | 6.82 | 1.40 | 30.0 | 0.19 | 25.93 | 75 | 5.87 | 32.92 | 25.95 | 208 | 0.18 |
| 95 | 5.70 | 32.925 | 7.25 | 1.46 | 30.7 | 0.24 | 25.97 | 100 | 5.67 | 32.93 | 25.98 | 205 | 0.23 |
| 119 | 5.66 | 32.945 | 7.32 | 1.45 | 30.7 | 0.29 | 25.99 | 125 | 5.69 | 33.11 | 26.12 | 192 | 0.28 |
| 136 | 5.77 | 33.579 | 5.68 | 1.84 | 43.6 | 0.01 | 26.48 | 150 | 5.31 | 33.76 | 26.68 | 139 | 0.32 |
| 158 | 4.83 | 33.721 | 5.04 | 2.09 | 53.5 | 0.00 | 26.70 | 175 | 4.42 | 33.78 | 26.79 | 128 | 0.36 |
| 198 | 4.31 | 33.782 | 4.22 | 2.36 | 64.8 | 0.00 | 26.81 | 200 | 4.29 | 33.78 | 26.81 | 126 | 0.39 |
| 247 | 3.93 | 33.853 | 3.05 | 2.70 | 78.6 | 0.00 | 26.90 | 250 | 3.92 | 33.86 | 26.91 | 117 | 0.45 |
| 297 | 3.81 | 33.923 | 2.32 | 2.74 | 87.8 | 0.00 | 26.97 | 300 | 3.80 | 33.93 | 26.98 | 111 | 0.51 |
| | | | | | | | | 400 | 3.72 | 34.05 | 27.08 | 102 | 0.61 |
| 478 | 3.78 | 34.124 | 1.05 | 3.13 | 112.0 | - | 27.13 | 500 | 3.76 | 34.14 | 27.15 | 96 | 0.71 |
| 736 | 3.30 | 34.295 | 0.66 | 3.21 | 133.0 | - | 27.32 | 600 | 3.62 | 34.22 | 27.23 | 90 | 0.81 |
| 982 | 2.87 | 34.398 | 0.57 | 3.26 | 144.0 | - | 27.44 | 700 | 3.40 | 34.28 | 27.30 | 84 | 0.90 |
| 1000 | 2.84c) | 34.403c) | - | - | - | - | (27.45) | 800 | 3.19 | 34.33 | 27.35 | 79 | 0.98 |
| | | | | | | | | 1000 | 2.84 | 34.40 | 27.45 | 71 | 1.13 |

2-501

CGS ST. CATHARINES; June 16, 1958; 1900 GCT;[d] 49°50'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.695 |
| 47 | 7.36 | 32.927 |
| 71 | 6.63 | 32.941 |
| 94 | 5.94 | 32.957 |
| 117 | 5.81 | 32.966 |

2-502

CGS ST. CATHARINES; June 16, 1958; 2042 GCT; 49°50'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.841 |
| 48 | 7.04 | 32.938 |
| 73 | 6.35 | 32.945 |
| 96 | 5.93 | 32.952 |
| 119 | 5.86 | 33.127 |
| 144 | 5.56 | 33.624 |
| 192 | 4.68 | 33.750 |

2-503

CGS ST. CATHARINES; June 16, 1958; 2234 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.820 |
| 50 | 6.50 | 32.850 |
| 75 | 5.84 | 32.896 |
| 100 | 5.73 | 32.981 |
| 125 | 5.76 | 33.434 |
| 150 | 5.07 | 33.708 |
| 200 | 4.40 | 33.777 |

2-504

CGS ST. CATHARINES; June 17, 1958; 0036 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.856 |
| 10 | 10.1 | 32.856 |
| 49 | 6.42 | 32.864 |
| 73 | 6.12 | 32.937 |
| 97 | 5.82 | 32.995 |
| 122 | 5.57 | 33.625 |
| 146 | 5.01 | 33.696 |

a) Value interpolated graphically by three-point parabolic method.
b) Value interpolated by computer.
c) Value extrapolated by computer.
d) Stations 2-501 through 2-525 were occupied as a 50-hour series.

POG P-58-2

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

2-505 CGS ST. CATHARINES; June 17, 1958; 0243 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.2 | 32.843 |
| 48 | 6.92 | 32.938 |
| 72 | 6.35 | 32.960 |
| 97 | 5.96 | 32.967 |
| 121 | 5.68 | 33.465 |
| 145 | 5.18 | 33.667 |
| 193 | 4.37 | 33.770 |

2-506 CGS ST. CATHARINES; June 17, 1958; 0439 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.805 |
| 48 | 6.81 | 32.937 |
| 72 | 5.94 | 32.923 |
| 97 | 5.66 | 32.931 |
| 121 | 5.72 | 33.239 |
| 145 | 5.15 | 33.667 |
| 193 | 4.48 | 33.759 |

2-507 CGS ST. CATHARINES; June 17, 1958; 0643 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.829 |
| 49 | 6.92 | 32.934 |
| 74 | 6.03 | 32.937 |
| 98 | 5.64 | 32.944 |
| 123 | 5.62 | 33.510 |
| 148 | 5.18 | 33.692 |
| 197 | 4.35 | 33.775 |

2-508 CGS ST. CATHARINES; June 17, 1958; 0836 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.2 | 32.810 |
| 49 | 6.77 | 32.911 |
| 74 | 5.97 | 32.939 |
| 98 | 5.70 | 32.949 |
| 123 | 5.75 | 33.354 |
| 148 | 5.28 | 33.680 |
| 197 | 4.41 | 33.772 |

2-509 CGS ST. CATHARINES; June 17, 1958; 1035 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.1 | 32.812 |
| 50 | 6.97 | 32.945 |
| 75 | 6.12 | 32.954 |
| 100 | 5.79 | 32.959 |
| 124 | 5.71 | 33.357 |
| 149 | 5.25 | 33.676 |
| 199 | 4.49 | 33.773 |

2-510 CGS ST. CATHARINES; June 17, 1958; 1235 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.1 | 32.833 |
| 50 | 7.25 | 32.898 |
| 75 | 6.14 | 32.915 |
| 100 | 5.79 | 32.936 |
| 124 | 5.75 | 32.971 |
| 149 | 5.29 | 33.666 |
| 199 | 4.48 | 33.756 |

2-511 CGS ST. CATHARINES; June 17, 1958; 1440 GCT; 50°10'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.1 | 32.850 |
| 48 | 6.70 | 32.917 |
| 72 | 6.18 | 32.934 |
| 97 | 5.88 | 32.964 |
| 121 | 5.74 | 33.228 |
| 145 | 5.01 | 33.710 |

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CGS ST. CATHARINES; June 17, 1958; 1640, 1655 GCT; 50°10'N, 145°00'W. 2-512

| | | |
|---|---|---|
| 0 | 10.3 | 32.840 |
| 47 | 6.89 | 32.956 |
| 70 | 5.97 | 32.933 |
| 97 | 5.87 | 32.961 |
| 121 | 5.76 | 33.209 |
| 145 | 5.09 | 33.680 |
| 193 | 4.29 | 33.778 |

CGS ST. CATHARINES; June 17, 1958; 1843, 1851 GCT; 50°10'N, 145°00'W. 2-513

| | | |
|---|---|---|
| 0 | 10.3 | 32.846 |
| 49 | 6.63 | 32.911 |
| 75 | 5.91 | 32.931 |
| 100 | 5.63 | 32.942 |
| 125 | 5.66 | 33.516 |
| 150 | 5.02 | 33.703 |
| 199 | 4.29 | 33.784 |

CGS ST. CATHARINES; June 17, 1958; 2034 GCT; 50°10'N, 145°00'W. 2-514

| | | |
|---|---|---|
| 0 | 10.3 | 32.863a) |
| 50 | 6.37 | 32.943 |
| 75 | 5.90 | 32.966 |
| 100 | 5.71 | 32.973 |
| 125 | 5.56 | 33.564 |
| 150 | 4.78 | 33.710 |
| 200 | 4.17 | 33.782 |

CGS ST. CATHARINES; June 17, 1958; 2245 GCT; 50°10'N, 144°44'W. 2-515

| | | |
|---|---|---|
| 0 | 10.4 | 32.863 |
| 50 | 7.06 | 32.919 |
| 75 | 6.19 | 32.932 |
| 100 | 5.74 | 32.945 |
| 125 | 5.71 | 33.282 |
| 150 | 4.90 | 33.693 |
| 200 | 4.24 | 33.771 |

CGS ST. CATHARINES; June 18, 1958; 0031 GCT; 50°10'N, 144°44'W. 2-516

| | | |
|---|---|---|
| 0 | 10.5 | 32.851 |
| 50 | 6.94 | 32.938 |
| 75 | 6.14 | 32.921 |
| 100 | 5.79 | 32.967 |
| 125 | 5.70 | 33.361 |
| 150 | 4.93 | 33.685 |
| 200 | 4.26 | 33.772 |

CGS ST. CATHARINES; June 18, 1958; 0244 GCT; 50°10'N, 144°44'W. 2-517

| | | |
|---|---|---|
| 0 | 10.4 | 32.834 |
| 50 | 6.86 | 32.921 |
| 75 | 6.22 | 32.928 |
| 99 | 5.72 | 32.938 |
| 124 | 5.68 | 33.346 |
| 148 | 5.06 | 33.660 |
| 198 | 4.27 | 33.769 |

CGS ST. CATHARINES; June 18, 1958; 0440 GCT; 50°10'N, 144°44'W. 2-518

| | | |
|---|---|---|
| 0 | 10.4 | 32.848 |
| 48 | 6.97 | 32.934 |
| 73 | 6.05 | - |
| 96 | 5.65 | 32.940 |
| 119 | 5.72 | 33.302 |
| 144 | 4.94 | 33.668 |
| 192 | 4.27 | 33.765 |

a) Alternate value, 32.884‰.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

2-519 CGS ST. CATHARINES; June 18, 1958; 0639 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.799 |
| 48 | 6.63 | 32.897 |
| 73 | 5.90 | 32.927 |
| 96 | 5.73 | 32.954 |
| 119 | 5.70 | 33.433 |
| 144 | 5.02 | 33.709 |
| 192 | 4.31 | 33.778 |

2-520 CGS ST. CATHARINES; June 18, 1958; 0842 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.1 | 32.821 |
| 48 | 6.80 | 32.932 |
| 73 | 5.89 | 32.936 |
| 96 | 5.86 | 32.966 |
| 119 | 5.77 | 33.423 |
| 144 | 5.18 | 33.686 |
| 192 | 4.47 | 33.757 |

2-521 CGS ST. CATHARINES; June 18, 1958; 1036 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.1 | 32.808 |
| 50 | 6.59 | 32.946 |
| 75 | 5.64 | 32.905 |
| 100 | 5.75 | 32.991 |
| 125 | 5.58 | 33.589 |
| 150 | 5.10 | 33.706 |
| 200 | 4.40 | 33.763 |

2-522 CGS ST. CATHARINES; June 18, 1958; 1236 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.790 |
| 50 | 6.93 | 32.885 |
| 75 | 6.23 | 32.944 |
| 99 | 5.84 | 32.959 |
| 124 | 5.71 | 33.264 |
| 149 | 5.29 | 33.681 |
| 199 | 4.52 | 33.754 |

2-523 CGS ST. CATHARINES; June 18, 1958; 1442 GCT; 50°10'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.1 | 32.799 |
| 49 | 6.56 | 32.950 |
| 74 | 6.09 | 32.964 |
| 98 | 5.82 | 33.010 |
| 123 | 5.62 | 33.588 |
| 148 | 4.92 | 33.724 |
| 197 | 4.20 | 33.782 |

2-524 CGS ST. CATHARINES; June 18, 1958; 1652 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.803 |
| 49 | 6.83 | 32.910 |
| 74 | 5.85 | 32.903 |
| 98 | 5.68 | 32.933 |
| 123 | 5.65 | 33.324 |
| 148 | 5.11 | 33.700 |
| 197 | 5.36 | 33.769 |

2-525 CGS ST. CATHARINES; June 18, 1958; 1837 GCT; 50°00'N, 145°00'W.

| | | |
|---|---|---|
| 0 | 10.3 | 32.816 |
| 50 | 6.58 | 32.906 |
| 75 | 5.96 | 32.948 |
| 100 | 5.80 | 32.969 |
| 125 | 5.77 | 33.409 |
| 150 | 5.19 | 33.693 |
| 199 | 4.54 | 33.770 |

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CGS ST. CATHARINES; June 18, 1958; 2053 GCT; 50°00'N, 145°00'W; wind, 130°, force 6; weather, fog; sea, rough. 206

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.50 | 32.827 | 6.79 | | 29.3 | 0.15 | 25.19 | 0 | 10.50 | 32.83 | 25.19 | 278 | 0.00 |
| 10 | 10.07 | 32.821 | 6.78 | | 29.3 | 0.11 | 25.26 | 10 | 10.07 | 32.82 | 25.26 | 272 | 0.03 |
| 20 | 10.10a) | 32.843b) | - | | - | - | (25.27) | 20 | 10.10 | 32.84 | 25.27 | 271 | 0.06 |
| 30 | 7.77 | 32.869 | 7.32 | | 30.6 | 0.14 | 25.66 | 30 | 7.77 | 32.87 | 25.66 | 235 | 0.08 |
| 50 | 6.54 | 32.931 | 7.31 | | 29.4 | 0.22 | 25.87 | 50 | 6.54 | 32.93 | 25.87 | 214 | 0.13 |
| 75 | 5.92 | 32.934 | 7.01 | | 30.1 | 0.28 | 25.95 | 75 | 5.92 | 32.93 | 25.95 | 207 | 0.18 |
| 99 | 5.78 | 32.965 | 7.06 | | 30.4 | 0.16 | 26.00 | 100 | 5.77 | 32.97 | 26.00 | 202 | 0.23 |
| 109 | 5.73 | 33.055 | 6.72 | | 32.5 | 0.02 | 26.07 | 125 | 5.71 | 33.49 | 26.42 | 163 | 0.28 |
| 124 | 5.72 | 33.474 | 5.76 | | 39.7 | 0.01 | 26.40 | 150 | 5.18 | 33.71 | 26.66 | 141 | 0.31 |
| 149 | 5.20 | 33.708 | - | | 48.9 | 0.01 | 26.65 | 175 | 4.71 | 33.81 | 26.79 | 129 | 0.35 |
| 199 | 4.31 | 33.779 | 4.17 | | 64.5 | 0.01 | 26.81 | 200 | 4.30 | 33.78 | 26.81 | 127 | 0.38 |
| 249 | 3.93 | 33.832 | 3.14 | | 76.5 | 0.01 | 26.89 | 250 | 3.93 | 33.83 | 26.89 | 119 | 0.44 |
| 299 | 3.82 | 33.898 | 2.45 | | 86.0 | 0.01 | 26.95 | 300 | 3.82 | 33.90 | 26.95 | 114 | 0.50 |
| 300 | 3.82c) | 33.899c) | - | | - | - | (26.95) | | | | | | |

CGS ST. CATHARINES; June 21, 1958; 1916, 1949 GCT; 50°00'N, 145°00'W; wind, 200°, force 2; weather, cloudy; sea, moderate. 207

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.30 | 32.893 | 6.76 | 1.28 | 27.9 | | 25.28 | 0 | 10.30 | 32.89 | 25.28 | 270 | 0.00 |
| 10 | 10.15 | 32.822 | 6.80 | 1.31 | 27.8 | | 25.25 | 10 | 10.15 | 32.82 | 25.25 | 273 | 0.03 |
| 20 | 10.20 | 32.809b) | - | - | - | | (25.23) | 20 | 10.20 | 32.81 | 25.23 | 275 | 0.06 |
| 30 | 9.95 | 32.825 | 7.10 | 1.31 | 27.6 | | 25.29 | 30 | 9.95 | 32.83 | 25.29 | 270 | 0.08 |
| 50 | 7.10 | 32.942 | 7.40 | 1.25 | 26.6 | | 25.81 | 50 | 7.10 | 32.94 | 25.81 | 220 | 0.13 |
| 75 | 6.30 | 32.954 | 7.10 | 1.32 | 27.7 | | 25.92 | 75 | 6.30 | 32.95 | 25.92 | 210 | 0.19 |
| 100 | 5.98 | 33.044 | 7.15 | 1.44 | 29.5 | | 26.03 | 100 | 5.98 | 33.04 | 26.03 | 200 | 0.24 |
| 125 | 5.76 | 33.503 | 5.79 | 1.69 | 39.0 | | 26.42 | 125 | 5.76 | 33.50 | 26.42 | 163 | 0.28 |
| 150 | 5.16 | 33.726 | 5.14 | 1.89 | 48.5 | | 26.67 | 150 | 5.16 | 33.73 | 26.67 | 140 | 0.32 |
| 175 | 4.77 | 33.760 | 4.79 | 2.11 | 55.1 | | 26.74 | 175 | 4.77 | 33.76 | 26.74 | 133 | 0.36 |
| 200 | 4.41 | 33.794 | 4.32 | 2.27 | 63.6 | | 26.81 | 200 | 4.41 | 33.79 | 26.81 | 127 | 0.39 |
| 250 | 3.98 | 33.846 | 3.40 | 2.50 | 74.3 | | 26.89 | 250 | 3.98 | 33.85 | 26.89 | 119 | 0.45 |
| 300 | 3.85 | 33.904 | 2.58 | 2.79 | 84.5 | | 26.95 | 300 | 3.85 | 33.90 | 26.95 | 114 | 0.51 |
| | | | | | | | | 400 | 3.87 | 34.05 | 27.07 | 104 | 0.62 |
| 394 | 3.87 | 34.045 | 1.64 | 2.95 | 98.5 | | 27.06 | 500 | 3.73 | 34.13 | 27.14 | 97 | 0.72 |
| 494 | 3.74 | 34.126 | 0.95 | 3.10 | 107.0 | | 27.14 | 600 | 3.57 | 34.21 | 27.22 | 90 | 0.81 |
| 745 | 3.27 | 34.319 | 0.60 | 3.24 | 129.0 | | 27.34 | 700 | 3.37 | 34.29 | 27.30 | 83 | 0.90 |
| 995 | 2.86 | 34.418 | 0.54 | 3.30 | 143.0 | | 27.46 | 800 | 3.17 | 34.35 | 27.37 | 77 | 0.98 |
| 1242 | 2.53 | 34.476 | 0.49 | 3.33 | 152.0 | | 27.53 | 1000 | 2.85 | 34.42 | 27.46 | 70 | 1.13 |
| | | | | | | | | 1200 | 2.58 | 34.47 | 27.52 | 64 | 1.27 |

CGS ST. CATHARINES; June 23, 1958; 1916 GCT; 50°00'N, 145°00'W; wind, direction missing, force 1; weather, partly cloudy; sea, calm. 207A

| | | | | | |
|---|---|---|---|---|---|
| 240 | 3.92 | 33.854 | 3.05 | 2.73 | 78.8 |
| 287 | 3.82 | 33.970 | 2.34 | 2.94 | 87.0 |
| 335 | 3.91 | 33.996 | 1.92 | 2.80 | 93.4 |
| 383 | 3.89 | 34.046 | 1.59 | 3.13 | 99.3 |
| 432 | 3.75 | 34.089 | 1.23 | 3.21 | 106.0 |
| 480 | 3.74 | 34.147 | 0.97 | 3.29 | 112.0 |
| 530 | 3.68 | 34.188 | 0.81 | 3.20 | 116.0 |
| 580 | 3.62 | 34.221 | 0.76 | 3.23 | 120.0 |
| 680 | 3.35 | 34.286 | 0.71 | - | - |

CGS ST. CATHARINES; June 24, 1958; 1856 GCT; 50°00'N, 145°00'W; wind, 320°, force 2; weather, cloudy; sea, slight. 207B

| | | | | | |
|---|---|---|---|---|---|
| 690 | 3.36 | 34.286 | 0.60 | 3.22 | 129.0 |
| 791 | 3.14 | 34.338 | 0.56 | 3.24 | 136.0 |
| 892 | 3.03 | 34.375 | 0.59 | 3.26 | 140.0 |
| 993 | 2.86 | 34.412 | 0.55 | 3.23 | 145.0 |
| 1095 | - | 34.434 | 0.56 | 3.25 | 148.0 |
| 1246 | 2.58 | 34.485 | 0.46 | 3.18 | 154.0 |

a) Value interpolated graphically by three-point parabolic method.
b) Value interpolated by computer.
c) Value extrapolated by computer.

| | OBSERVED | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 208 | CGS ST. CATHARINES; June 25, 1958; 1906 GCT; 50°00'N, 145°00'W; wind, 280°, force 2; weather, cloudy; sea, slight. | | | | | | | | | | | | | |
| | 0 | 12.10 | 32.950 | 6.72 | | 27.7 | 0.18 | 25.00 | 0 | 12.10 | 32.95 | 25.00 | 297 | 0.00 |
| | 10 | 10.57 | 32.831 | 6.99 | | 27.8 | 0.12 | 25.18 | 10 | 10.57 | 32.83 | 25.18 | 279 | 0.03 |
| | 20 | 10.00a) | 32.889b) | - | | - | - | (25.33) | 20 | 10.00 | 32.89 | 25.33 | 266 | 0.06 |
| | 30 | 7.52 | 32.927 | 7.73 | | 26.4 | 0.08 | 25.74 | 30 | 7.52 | 32.93 | 25.74 | 227 | 0.08 |
| | 50 | 6.72 | 32.945 | 7.32 | | 27.6 | 0.10 | 25.86 | 50 | 6.72 | 32.94 | 25.86 | 215 | 0.13 |
| | 75 | 6.20 | 32.999 | 7.16 | | 28.2 | 0.22 | 25.97 | 75 | 6.20 | 33.00 | 25.97 | 205 | 0.18 |
| | 89 | 5.95 | 32.965 | 7.09 | | 29.1 | 0.33 | 25.97 | 100 | 5.89 | 33.00 | 26.01 | 202 | 0.23 |
| | 99 | 5.90 | 32.994 | 7.11 | | 29.7 | 0.33 | 26.00 | 125 | 5.68 | 33.51 | 26.44 | 162 | 0.28 |
| | 109 | 5.85 | 33.051 | 6.91 | | 30.6 | 0.10 | 26.05 | 150 | 5.09 | 33.73 | 26.68 | 138 | 0.31 |
| | 124 | 5.70 | 33.490 | 5.85 | | 39.7 | 0.01 | 26.42 | 175 | 4.76 | 33.78 | 26.76 | 132 | 0.35 |
| | 148 | 5.13 | 33.720 | 5.20 | | 49.4 | 0.01 | 26.67 | 200 | 4.42 | 33.80 | 26.81 | 127 | 0.38 |
| | 173 | 4.79 | 33.775 | 4.74 | | 57.4 | 0.00 | 26.75 | 250 | 3.97 | 33.84 | 26.89 | 119 | 0.44 |
| | 198 | 4.44 | 33.794 | 4.22 | | 62.5 | 0.00 | 26.80 | 300 | 3.76 | 33.90 | 26.95 | 113 | 0.50 |
| | 248 | 3.98 | 33.841 | 3.36 | | 76.3 | 0.00 | 26.89 | | | | | | |
| | 298 | 3.76 | 33.893 | 2.48 | | 85.9 | 0.00 | 26.95 | | | | | | |
| | 300 | 3.76c) | 33.895c) | - | | - | - | (26.95) | | | | | | |
| 209 | CGS ST. CATHARINES; June 28, 1958; 1849, 1913, 1950 GCT; 50°00'N, 145°00'W; wind, 230°, force 3; weather, intermittent slight rain; sea, moderate. | | | | | | | | | | | | | |
| | 0 | 11.20 | 32.792 | 6.83 | 1.34 | 28.2 | 0.16 | 25.04 | 0 | 11.20 | 32.79 | 25.04 | 292 | 0.00 |
| | 10 | 11.04 | 32.795 | 7.15 | 1.30 | 28.5 | 0.14 | 25.07 | 10 | 11.04 | 32.80 | 25.07 | 290 | 0.03 |
| | 20 | 10.00a) | 32.789b) | - | - | - | - | (25.25) | 20 | 10.00 | 32.79 | 25.25 | 273 | 0.06 |
| | 30 | 9.80 | 32.820 | 7.24 | 1.31 | 28.7 | 0.12 | 25.31 | 30 | 9.80 | 32.82 | 25.31 | 268 | 0.08 |
| | 50 | 6.88 | 32.992 | 7.56 | 1.31 | 27.7 | 0.10 | 25.88 | 50 | 6.88 | 32.99 | 25.88 | 214 | 0.13 |
| | 75 | 6.05 | 32.964 | 7.38 | 1.44 | 29.2 | 0.29 | 25.96 | 75 | 6.05 | 32.96 | 25.96 | 206 | 0.19 |
| | 100 | 5.76 | 32.972 | 7.19 | 1.46 | 30.3 | 0.43 | 26.00 | 100 | 5.76 | 32.97 | 26.00 | 202 | 0.24 |
| | 125 | 5.74 | 33.338 | 6.78 | 1.71 | 38.9 | 0.02 | 26.29 | 125 | 5.74 | 33.34 | 26.29 | 175 | 0.28 |
| | 150 | 5.26 | 33.713 | 5.36 | 2.01 | 48.1 | 0.02 | 26.65 | 150 | 5.26 | 33.71 | 26.65 | 142 | 0.32 |
| | | | | | | | | | 175 | 4.87 | 33.76 | 26.73 | 134 | 0.36 |
| | 173 | 4.90 | 33.760 | 5.01 | 2.15 | 54.4 | - | 26.73 | 200 | 4.59 | 33.79 | 26.78 | 129 | 0.39 |
| | 198 | 4.61 | 33.785 | 4.58 | 2.27 | 60.9 | - | 26.78 | 250 | 4.03 | 33.83 | 26.88 | 120 | 0.46 |
| | 247 | 4.05 | 33.827 | 3.52 | 2.59 | 74.1 | - | 26.87 | 300 | 3.82 | 33.91 | 26.96 | 113 | 0.52 |
| | 295 | 3.84 | 33.899 | 2.53 | - | 87.0 | - | 26.95 | 400 | 3.63 | 34.04 | 27.08 | 102 | 0.62 |
| | | | | | | | | | 500 | 3.71 | 34.15 | 27.16 | 95 | 0.72 |
| | 495 | 3.72 | 34.146 | 0.90 | 3.20 | 116.0 | - | 27.16 | 600 | 3.58 | 34.23 | 27.24 | 89 | 0.82 |
| | 750 | 3.30 | 34.306 | 0.63 | 3.28 | 135.0 | - | 27.33 | 700 | 3.41 | 34.29 | 27.30 | 83 | 0.90 |
| | 1000 | 2.91 | 34.402 | 0.56 | 3.23 | 148.0 | - | 27.44 | 800 | 3.22 | 34.33 | 27.35 | 79 | 0.98 |
| | 1248 | 2.55 | 34.462 | 0.78 | 3.24 | 156.0 | - | 27.52 | 1000 | 2.91 | 34.40 | 27.44 | 72 | 1.14 |
| | | | | | | | | | 1200 | 2.62 | 34.45 | 27.50 | 66 | 1.28 |
| 210 | CGS ST. CATHARINES; July 2, 1958; 1907, 1917 GCT; 50°00'N, 145°00'W; wind, calm; weather, overcast; sea, missing. | | | | | | | | | | | | | |
| | 0 | 11.80 | 32.734 | 6.50 | | | 0.13 | 24.89 | 0 | 11.80 | 32.73 | 24.89 | 307 | 0.00 |
| | 10 | 11.02 | 32.761 | 6.85 | | | 0.16 | 25.05 | 10 | 11.02 | 32.76 | 25.05 | 292 | 0.03 |
| | 20 | 10.70 | 32.777b) | - | | | - | (25.12) | 20 | 10.70 | 32.78 | 25.12 | 286 | 0.06 |
| | 30 | 10.50 | 32.809 | 6.98 | | | 0.14 | 25.18 | 30 | 10.50 | 32.81 | 25.18 | 280 | 0.09 |
| | 50 | 6.91 | 32.920 | 7.40 | | | 0.10 | 25.82 | 50 | 6.91 | 32.92 | 25.82 | 220 | 0.14 |
| | 75 | 6.25 | 32.965 | 7.28 | | | 0.19 | 25.94 | 75 | 6.25 | 32.97 | 25.94 | 208 | 0.19 |
| | 90 | 5.85 | 32.955 | 7.12 | | | 0.43 | 25.98 | 100 | 5.68 | 32.96 | 26.00 | 202 | 0.24 |
| | | | | | | | | | 125 | 5.77 | 33.34 | 26.29 | 175 | 0.29 |
| | 100 | 5.68 | 32.960 | 7.13 | | | 0.47 | 26.00 | 150 | 5.21 | 33.68 | 26.63 | 143 | 0.33 |
| | 110 | 5.81 | 33.020 | 7.03 | | | 0.51 | 26.04 | 175 | 4.79 | 33.75 | 26.73 | 134 | 0.37 |
| | 125 | 5.77 | 33.339 | 6.18 | | | 0.02 | 26.29 | 200 | 4.54 | 33.78 | 26.78 | 129 | 0.40 |
| | 150 | 5.21 | 33.683 | 5.28 | | | 0.01 | 26.63 | 250 | 4.06 | 33.83 | 26.87 | 121 | 0.46 |
| | 175 | 4.79 | 33.752 | 4.84 | | | 0.00 | 26.73 | 300 | 3.77 | 33.88 | 26.94 | 115 | 0.52 |
| | 200 | 4.54 | 33.781 | 4.45 | | | 0.01 | 26.78 | | | | | | |
| | 250 | 4.06 | 33.833 | 3.40 | | | 0.02 | 26.87 | | | | | | |
| | 300 | 3.77 | 33.877 | 2.52 | | | 0.02 | 26.94 | | | | | | |

a) Value interpolated graphically by three-point parabolic method.
b) Value interpolated by computer.
c) Value extrapolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CGS ST. CATHARINES; July 3, 1958; 1919 GCT; 50°00'N, 144°44'W; wind, 110°, force 3; weather, overcast; sea, slight. 210A

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 75 | 6.19 | 32.963 | 6.88 | | | 0.32 | | | | | | | |
| 90 | 5.85 | 32.943 | 7.08 | | | 0.37 | | | | | | | |
| 95 | 5.75 | 32.938 | 7.11 | | | 0.41 | | | | | | | |
| 100 | 5.68 | 32.953 | - | | | 0.42 | | | | | | | |
| 105 | 5.78 | 32.997 | - | | | 0.47 | | | | | | | |
| 110 | 5.76 | 33.018 | - | | | 0.48 | | | | | | | |
| 115 | 5.79 | 33.074 | - | | | 0.08 | | | | | | | |
| 120 | 5.76 | 33.180 | - | | | 0.004 | | | | | | | |
| 125 | 5.70 | 33.361 | - | | | 0.00 | | | | | | | |
| 150 | 5.21 | 33.717 | - | | | 0.01 | | | | | | | |

CGS ST. CATHARINES; July 4, 1958; 1944, 2018 GCT; 50°10'N, 145°00'W; wind, 180°, force 3; weather, cloudy; sea, moderate. 211A

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 200 | 4.33 | 33.802 | 4.17 | 2.47 | 60.3 | | | | | | | | |
| 250 | 4.00 | 33.852 | 3.32 | 2.77 | 71.4 | | | | | | | | |
| 300 | 3.73 | 33.896 | 2.41 | 2.97 | 79.9 | | | | | | | | |
| 350 | 3.74 | 33.954 | 2.04 | 2.84 | 84.9 | | | | | | | | |
| 400 | 3.77 | 34.014 | 1.49 | 3.03 | 90.5 | | | | | | | | |
| 449 | 3.77 | 34.103 | 1.30 | 3.14 | 96.0 | | | | | | | | |
| 498 | 3.76 | 34.146 | 1.03 | 3.16 | 101.0 | | | | | | | | |
| 547 | 3.65 | 34.182 | 0.83 | 3.24 | 108.0 | | | | | | | | |
| 594 | 3.59 | 34.216 | 0.74 | 3.29 | 112.0 | | | | | | | | |
| 695 | 3.34 | 34.285 | 0.58 | 3.33 | 120.0 | | | | | | | | |
| 795 | 3.15 | 34.372 | 0.54 | 3.35 | 124.0 | | | | | | | | |
| 894 | 2.98 | 34.405 | 0.53 | 3.19 | - | | | | | | | | |
| 993 | 2.83 | 34.436 | 0.50 | 3.37 | 131.0 | | | | | | | | |
| 1092 | 2.71 | 34.478 | 0.50 | 3.32 | 133.0 | | | | | | | | |
| 1240 | 2.58 | - | 0.50 | 3.33 | 137.0 | | | | | | | | |

CGS ST. CATHARINES; July 5, 1958; 1906 GCT; 50°00'N, 145°00'W; wind, 140°, force 4; weather, intermittent slight rain; sea, moderate. 211

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.80 | 32.769 | 6.76 | 1.63 | - | 0.13 | 24.92 | 0 | 11.80 | 32.77 | 24.92 | 305 | 0.00 |
| 10 | 11.59 | 32.759 | 6.78 | 1.35 | - | 0.12 | 24.95 | 10 | 11.59 | 32.76 | 24.95 | 302 | 0.03 |
| 20 | 11.53 | 32.763 | 6.89 | 1.38 | - | 0.07 | 24.96 | 20 | 11.53 | 32.76 | 24.96 | 301 | 0.06 |
| 30 | 10.35 | 32.789 | 7.27 | 1.40 | 26.6 | 0.11 | 25.19 | 30 | 10.35 | 32.79 | 25.19 | 279 | 0.09 |
| 50 | 6.56 | 32.844 | 7.46 | 1.54 | 30.2 | 0.11 | 25.80 | 50 | 6.56 | 32.84 | 25.80 | 221 | 0.14 |
| 74 | 5.68 | 32.878 | 7.17 | 1.63 | 31.6 | 0.25 | 25.94 | 75 | 5.66 | 32.88 | 25.94 | 208 | 0.19 |
| 99 | 5.79 | 32.995 | 6.94 | 1.60 | 28.4 | 0.48 | 26.02 | 100 | 5.79 | 33.01 | 26.03 | 200 | 0.25 |
| 123 | 5.50 | 33.544 | 5.64 | 1.93 | 40.4 | 0.01 | 26.49 | 125 | 5.47 | 33.57 | 26.51 | 154 | 0.29 |
| 148 | 5.06 | 33.710 | 5.11 | 2.10 | 47.4 | 0.00 | 26.67 | 150 | 5.03 | 33.72 | 26.68 | 139 | 0.33 |
| 173 | 4.67 | 33.766 | 4.60 | 2.34 | 53.8 | 0.00 | 26.76 | 175 | 4.64 | 33.77 | 26.76 | 131 | 0.36 |
| 197 | 4.38 | 33.782 | 4.19 | 2.58 | 59.6 | 0.00 | 26.80 | 200 | 4.35 | 33.78 | 26.81 | 127 | 0.39 |
| 247 | 4.00 | 33.855 | 3.19 | 2.77 | 71.5 | 0.00 | 26.90 | 250 | 3.98 | 33.86 | 26.90 | 118 | 0.46 |
| 296 | 3.73 | 33.890 | 2.43 | 3.08 | 81.0 | 0.01 | 26.95 | 300 | 3.72 | 33.89 | 26.96 | 113 | 0.51 |
| 345 | 3.75 | 33.952 | 1.89 | 3.10 | 86.8 | 0.00 | 27.00 | | | | | | |

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 212 | CGS ST. CATHARINES; July 8, 1958; 1911 GCT; 50°00'N, 145°00'W; wind, 240°, force 2; weather, cloudy; sea, slight. | | | | | | | | | | | | |
| 0 | 12.80 | 32.801 | 6.53 | | | 0.17 | 24.75 | 0 | 12.80 | 32.80 | 24.75 | 320 | 0.00 |
| 10 | 11.74 | 32.764 | 6.79 | | | 0.13 | 24.92 | 10 | 11.74 | 32.76 | 24.92 | 304 | 0.03 |
| 20 | 10.60a) | 32.787b) | - | | | - | (25.15) | 20 | 10.60 | 32.79 | 25.15 | 283 | 0.06 |
| 32 | 8.22 | 32.827 | 7.47 | | | 0.10 | 25.56 | 30 | 8.69 | 32.82 | 25.48 | 251 | 0.09 |
| 50 | 6.70 | 32.913 | 7.41 | | | 0.11 | 25.84 | 50 | 6.70 | 32.91 | 25.84 | 218 | 0.13 |
| 75 | 6.24 | 32.972 | 7.18 | | | 0.19 | 25.94 | 75 | 6.24 | 32.97 | 25.94 | 208 | 0.19 |
| 90 | 5.75 | 32.957 | 7.09 | | | 0.55 | 25.99 | 100 | 5.73 | 32.99 | 26.02 | 201 | 0.24 |
| 100 | 5.73 | 32.991 | 7.09 | | | 0.58 | 26.02 | 125 | 5.53 | 33.09 | 26.12 | 191 | 0.29 |
| 110 | 5.79 | 33.024 | 7.03 | | | 0.61 | 26.04 | 150 | 5.20 | 33.48 | 26.47 | 158 | 0.33 |
| 125 | 5.53 | 33.087 | 6.84 | | | 0.04 | 26.12 | 175 | 4.64 | 33.71 | 26.72 | 135 | 0.37 |
| 150 | 5.20 | 33.485 | 5.82 | | | 0.01 | 26.47 | 200 | 4.52 | 33.78 | 26.79 | 129 | 0.40 |
| 175 | 4.64 | 33.710 | 5.04 | | | 0.01 | 26.72 | 250 | 4.05 | 33.81 | 26.86 | 122 | 0.47 |
| 200 | 4.52 | 33.782 | 4.51 | | | 0.01 | 26.79 | 300 | 3.83 | 33.88 | 26.94 | 115 | 0.53 |
| 250 | 4.05 | 33.815 | 3.75 | | | 0.01 | 26.86 | | | | | | |
| 300 | 3.83 | 33.883 | 2.76 | | | 0.01 | 26.94 | | | | | | |
| 301 | CGS ST. CATHARINES; August 23, 1958; 2003, 2112 GCT;[c] 49°50'N, 145°16'W; wind, 260°, force 3; weather, drizzle; sea, rough. | | | | | | | | | | | | |
| 0 | 12.60 | 32.667 | 6.52 | 1.17 | 18.0 | | 24.69 | 0 | 12.60 | 32.67 | 24.69 | 326 | 0.00 |
| 9 | 12.54 | 32.653 | 6.17 | 0.81 | 25.3 | | 24.69 | 10 | 12.54 | 32.65 | 24.69 | 327 | 0.03 |
| 19 | 12.51 | 32.656 | 5.92 | 0.76 | 14.2 | | 24.70 | 20 | 12.51 | 32.66 | 24.70 | 326 | 0.07 |
| | | | | | | | | 30 | 12.34 | 32.66 | 24.73 | 323 | 0.10 |
| 28 | 12.49 | 32.651 | 5.05 | 0.86 | 15.4 | | 24.70 | 50 | 8.36 | 32.88 | 25.58 | 242 | 0.16 |
| 48 | 8.65 | 32.869 | 6.61 | 1.08 | 23.4 | | 25.53 | 75 | 6.13 | 32.98 | 25.96 | 206 | 0.21 |
| | | | | | | | | 100 | 5.84 | 33.04 | 26.04 | 198 | 0.26 |
| 72 | 6.29 | 32.966 | 5.90 | 1.74 | 26.1 | | 25.93 | 125 | 5.87 | 33.26 | 26.22 | 182 | 0.31 |
| 97 | 5.86 | 33.020 | 6.75 | 1.22 | 28.4 | | 26.03 | 150 | 5.63 | 33.69 | 26.59 | 148 | 0.35 |
| 122 | 5.88 | 33.222 | 6.22 | 1.34 | 30.7 | | 26.19 | 175 | 5.00 | 33.73 | 26.69 | 138 | 0.39 |
| 146 | 5.70 | 33.654 | 4.46 | 1.73 | 42.5 | | 26.55 | 200 | 4.57 | 33.79 | 26.79 | 128 | 0.42 |
| 171 | 5.08 | 33.722 | 4.84 | 1.92 | 49.3 | | 26.68 | 250 | 3.98 | 33.83 | 26.88 | 120 | 0.48 |
| 196 | 4.63 | 33.786 | 4.30 | 2.08 | 55.1 | | 26.78 | 300 | 3.82 | 33.89 | 26.94 | 114 | 0.54 |
| 244 | 4.03 | 33.820 | 2.97 | 2.10 | 70.4 | | 26.87 | 400 | 3.86 | 34.03 | 27.05 | 105 | 0.65 |
| 293 | 3.84 | 33.880 | 2.60 | 2.69 | 82.0 | | 26.93 | 500 | 3.72 | 34.16 | 27.17 | 95 | 0.76 |
| | | | | | | | | 600 | 3.57 | 34.24 | 27.25 | 88 | 0.85 |
| 391 | 3.87 | 34.019 | 1.71 | 2.97 | 96.2 | | 27.04 | 700 | 3.38 | 34.28 | 27.30 | 84 | 0.94 |
| 489 | 3.74 | 34.145 | 0.87 | 2.78 | 106.0 | | 27.15 | 800 | 3.21 | 34.31 | 27.34 | 80 | 1.08 |
| 733 | 3.32 | 34.282 | 0.65 | 3.14 | 134.0 | | 27.30 | 1000 | 2.87 | 34.40 | 27.44 | 71 | 1.17 |
| 980 | 2.90 | 34.392 | 0.56 | 2.92 | 148.0 | | 27.43 | 1200 | 2.61 | 34.45 | 27.51 | 66 | 1.31 |
| 1227 | 2.58 | 34.459 | 0.47 | 2.69 | 164.0 | | 27.51 | | | | | | |
| 302 | CGS ST. CATHARINES; August 27, 1958; 2020, 2038 GCT; 50°10'N, 145°16'W; wind, 190°, force 5; weather, slight drizzle; sea, rough. | | | | | | | | | | | | |
| 0 | 13.00 | 32.615 | 6.57 | | 15.8 | 0.10 | 24.57 | 0 | 13.00 | 32.61 | 24.57 | 338 | 0.00 |
| 10 | 12.77 | 32.614 | 6.31 | | 13.4 | 0.07 | 24.61 | 10 | 12.77 | 32.61 | 24.61 | 334 | 0.03 |
| 29 | 12.52 | 32.607 | 6.17 | | 13.0 | 0.08 | 24.66 | 20 | 12.61 | 32.61 | 24.64 | 331 | 0.07 |
| 48 | 6.96 | 32.915 | 6.34 | | 26.6 | 0.09 | 25.81 | 30 | 12.36 | 32.62 | 24.69 | 327 | 0.10 |
| 67 | 6.21 | 32.942 | 6.99 | | 27.4 | 0.66 | 25.92 | 50 | 6.65 | 32.93 | 25.86 | 216 | 0.16 |
| 72 | 6.03 | 32.961 | 6.32 | | 28.3 | 0.60 | 25.96 | 75 | 5.90 | 32.96 | 25.97 | 205 | 0.21 |
| 76 | 5.86 | 32.952 | 6.85 | | 33.0 | 0.65 | 25.98 | 100 | 5.70 | 33.03 | 26.05 | 198 | 0.26 |
| 86 | 5.77 | 32.986 | 6.87 | | 33.0 | 0.45 | 26.01 | 125 | 5.27 | 33.45 | 26.44 | 162 | 0.30 |
| 96 | 5.72 | 33.001 | 6.63 | | 33.5 | 0.04 | 26.03 | 150 | 4.91 | 33.71 | 26.69 | 138 | 0.34 |
| 105 | 5.68 | 33.072 | 6.99 | | 29.6 | 0.00 | 26.09 | 175 | 4.58 | 33.76 | 26.76 | 131 | 0.38 |
| 120 | 5.36 | 33.365 | 5.91 | | 40.1 | 0.00 | 26.36 | 200 | 4.05 | 33.79 | 26.84 | 124 | 0.41 |
| 144 | 4.99 | 33.674 | 4.83 | | 50.7 | 0.00 | 26.65 | | | | | | |
| 168 | 4.71 | 33.748 | 4.75 | | 56.0 | 0.00 | 26.74 | | | | | | |
| 192 | 4.17 | 33.776 | 4.07 | | 63.8 | 0.00 | 26.82 | | | | | | |
| 240 | 3.86 | 33.841 | 2.86 | | 75.8 | 0.15 | 26.90 | | | | | | |

a) Value interpolated graphically by three-point parabolic method.
b) Value interpolated by computer.
c) The second time is the time given for all casts following the first cast.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

303

CGS ST. CATHARINES; August 30, 1958; 1909, 1943 GCT; 50°00'N, 145°00'W; wind, 290°, force 3; weather, cloudy; sea, slight.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.60 | 32.638 | 6.64 | 1.21 | 22.2 | 0.10 | 24.66 | 0 | 12.60 | 32.64 | 24.66 | 329 | 0.00 |
| 10 | 12.33 | 32.627 | 6.13 | - | 15.6 | 0.10 | 24.71 | 10 | 12.33 | 32.63 | 24.71 | 325 | 0.03 |
| 20 | 12.29 | 32.626 | 5.99 | 0.88 | 14.9 | 0.09 | 24.71 | 20 | 12.29 | 32.63 | 24.61 | 324 | 0.06 |
| 30 | 12.30 | 32.627 | 5.28 | 0.96 | 15.3 | 0.05 | 24.71 | 30 | 12.30 | 32.63 | 24.71 | 325 | 0.10 |
| 50 | 6.98 | 32.894 | 6.76 | 1.33 | 29.2 | 0.10 | 25.79 | 50 | 6.98 | 32.89 | 25.79 | 223 | 0.15 |
| 75 | 6.01 | 32.926 | 6.28 | - | 31.6 | 0.64 | 25.94 | 75 | 6.01 | 32.93 | 25.94 | 208 | 0.21 |
| 100 | 5.57 | 32.987 | 6.55 | 1.44 | 32.9 | 0.00 | 26.04 | 100 | 5.57 | 32.99 | 26.04 | 199 | 0.26 |
| 125 | 5.33 | 33.392 | 5.48 | 1.70 | 41.9 | 0.02 | 26.39 | 125 | 5.33 | 33.39 | 26.39 | 166 | 0.30 |
| 150 | 5.00 | 33.695 | 4.20 | 2.14 | 51.5 | 0.00 | 26.66 | 150 | 5.00 | 33.69 | 26.66 | 140 | 0.34 |
| 175 | 4.62 | 33.737 | 4.68 | 2.11 | 57.5 | 0.00 | 26.74 | 175 | 4.62 | 33.74 | 26.74 | 133 | 0.38 |
| 200 | 4.30 | 33.763 | 4.18 | 2.75 | 63.8 | 0.00 | 26.79 | 200 | 4.30 | 33.76 | 26.79 | 128 | 0.41 |
| 249 | 3.93 | 33.831 | 2.91 | 2.74 | 76.9 | 0.00 | 26.89 | 250 | 3.92 | 33.83 | 26.89 | 119 | 0.47 |
| 299 | 3.80 | 33.887 | 2.26 | 2.54 | 88.0 | 0.00 | 26.94 | 300 | 3.80 | 33.89 | 26.95 | 114 | 0.53 |
| | | | | | | | | 400 | 3.78 | 34.03 | 27.06 | 105 | 0.64 |
| 400 | 3.78 | 34.026 | 1.22 | 2.92 | 103.2 | - | 27.06 | 500 | 3.72 | 34.13 | 27.14 | 97 | 0.74 |
| 500 | 3.72 | 34.129 | 0.93 | 3.49 | 113.2 | - | 27.14 | 600 | 3.59 | 34.21 | 27.22 | 90 | 0.84 |
| 750 | 3.27 | 34.289 | 0.66 | 3.13 | 131.2 | - | 27.31 | 700 | 3.39 | 34.27 | 27.29 | 85 | 0.93 |
| 988 | 2.87 | 34.382 | 0.57 | 2.94 | 146.3 | - | 27.43 | 800 | 3.18 | 34.31 | 27.34 | 80 | 1.01 |
| 1000 | 2.85a) | 34.385a) | - | - | - | - | (27.43) | 1000 | 2.85 | 34.39 | 27.43 | 72 | 1.16 |

304

CGS ST. CATHARINES; September 1, 1958; 1930 GCT; 49°50'N, 144°44'W; wind, 260°, force 3; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 701 | 3.34 | 34.264 | 0.68 | 2.77 | 124 | 27.29 | 700 | (3.34) | (34.26) | (27.29) |
| 799 | 3.18 | 34.316 | 0.72 | 3.29 | 130 | 27.34 | 800 | 3.19 | 34.31 | 27.34 |
| 897 | 3.02 | 34.359 | 0.62 | 3.18 | 141 | 27.39 | | | | |
| 996 | 2.87 | 34.387 | 0.59 | 2.98 | 140 | 27.43 | | | | |
| 1097 | 2.73 | 34.420 | 0.59 | 2.87 | 144 | 27.47 | | | | |
| 1248 | 2.58 | - | 0.77 | 2.63 | 120 | | | | | |

305

CGS ST. CATHARINES; September 2, 1958; 1858 GCT; 50°00'N, 145°00'W; wind, 240°, force 4; weather, intermittent moderate drizzle; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 199 | 4.18 | 33.792 | 3.72 | 2.02 | 66.9 | 26.83 | 200 | 4.17 | 33.79 | 26.83 |
| 248 | 3.84 | 33.838 | 2.53 | 2.02 | 77.4 | 26.90 | 300 | 3.72 | 33.92 | 26.98 |
| 298 | 3.72 | 33.921 | 2.22 | 2.75 | 87.0 | 26.98 | 400 | 3.69 | 34.03 | 27.07 |
| 347 | 3.68 | 33.958 | 1.70 | 2.58 | 83.7 | 27.01 | 500 | 3.70 | 34.16 | 27.17 |
| 396 | 3.68 | 34.030 | 1.34 | 2.66 | 101.0 | 27.07 | 600 | 3.50 | 34.22 | 27.24 |
| 445 | 3.76 | 34.105 | 1.09 | 2.64 | 105.0 | 27.12 | 700 | (3.34) | (34.26) | (27.29) |
| 494 | 3.69 | 34.157 | 0.91 | 3.07 | 110.0 | 27.17 | | | | |
| 543 | 3.60 | 34.189 | 0.72 | 3.12 | 115.0 | 27.20 | | | | |
| 595 | 3.52 | 34.211 | 0.58 | 2.78 | 119.0 | 27.23 | | | | |
| 646 | 3.42 | 34.246 | 0.59 | 2.87 | 123.0 | 27.27 | | | | |
| 697 | 3.32 | 34.273 | 0.62 | 2.95 | 127.0 | 27.30 | | | | |

306

CGS ST. CATHARINES; September 3, 1958; 1915 GCT; 49°50'N, 145°00'W; wind, 340°, force 3; weather, cloudy; sea, rough.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 12.30 | 32.721a) | 6.66 | 21.4 | 0.10 | (24.79) | b) |
| 10 | 12.35 | 32.609 | 6.33 | 16.1 | 0.07 | 24.69 | |
| 30 | 12.32 | 32.607 | 6.29 | 16.8 | 0.07 | 24.69 | |
| 50 | 8.07 | 32.900 | 6.56 | 28.1 | 0.07 | 25.64 | |
| 70 | 6.86 | 32.984 | 6.80 | 28.7 | 0.23 | 25.87 | |
| 74 | 6.76 | 32.985 | 6.68 | 28.8 | 0.20 | 25.89 | |
| 79 | 6.63 | 33.004 | 6.81 | 28.4 | 0.35 | 25.92 | |
| 84 | 6.38 | - | 6.75 | 29.4 | 0.54 | | |
| 89 | 6.20 | - | 6.38 | 29.5 | 0.54 | | |
| 99 | 5.82 | 32.992 | 6.84 | 31.7 | 0.03 | 26.01 | |
| 109 | 5.79 | 32.996 | 6.61 | 30.9 | 0.00 | 26.02 | |
| 124 | 5.82 | 33.414 | 5.62 | 38.0 | 0.00 | 26.34 | |
| 149 | 4.95 | 33.715 | 4.83 | 52.0 | 0.00 | 26.69 | |
| 174 | 4.51 | 33.752 | 4.30 | 60.6 | 0.00 | 26.76 | |
| 198 | 4.20 | 33.787 | 3.81 | 69.3 | 0.00 | 26.82 | |
| 248 | 3.88 | 33.827 | 2.93 | 77.8 | 0.00 | 26.89 | |
| 298 | 3.75 | 33.907 | 2.08 | 89.7 | 0.00 | 26.96 | |



a) Value extrapolated by computer.

b) For data at standard depths see next page, Station 304 (Composite), a composite of Stations 304, 305 and 306.

| | OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 304 (COMPOSITE) | CGS ST. CATHARINES; September 1-3, 1958; missing GCT; 49°50'N, 144°44'W (50°00'N, 145°00'W; 49°50'N, 145°00'W); wind, missing; weather, missing; sea, missing.[a] | | | | | | | | | | | | | |
| | 0 | 12.30 | 32.721b) | | | | | (24.79) | 0 | 12.30 | 32.72 | 24.79 | 317 | 0.00 |
| | 10 | 12.35 | 32.609 | | | | | 24.69 | 10 | 12.35 | 32.61 | 24.69 | 326 | 0.03 |
| | 30 | 12.32 | 32.607 | | | | | 24.69 | 20 | 12.36 | 32.57 | 24.66 | 330 | 0.06 |
| | 50 | 8.07 | 32.900 | | | | | 25.64 | 30 | 12.32 | 32.61 | 24.69 | 326 | 0.10 |
| | 74 | 6.76 | 32.985 | | | | | 25.89 | 50 | 8.07 | 32.90 | 25.64 | 237 | 0.16 |
| | 99 | 5.82 | 32.992 | | | | | 26.01 | 75 | 6.71 | 32.99 | 25.89 | 213 | 0.21 |
| | 124 | 5.82 | 33.414 | | | | | 26.34 | 100 | 5.80 | 33.00 | 26.02 | 201 | 0.26 |
| | 149 | 4.95 | 33.715 | | | | | 26.69 | 125 | 5.80 | 33.43 | 26.36 | 169 | 0.31 |
| | 174 | 4.51 | 33.752 | | | | | 26.76 | 150 | 4.92 | 33.72 | 26.69 | 137 | 0.35 |
| | 199 | 4.18 | 33.792 | | | | | 26.83 | 175 | 4.49 | 33.75 | 26.77 | 130 | 0.38 |
| | 248 | 3.84 | 33.838 | | | | | 26.90 | 200 | 4.17 | 33.79 | 26.83 | 124 | 0.42 |
| | 298 | 3.72 | 33.921 | | | | | 26.98 | 250 | 3.83 | 33.84 | 26.90 | 118 | 0.48 |
| | 396 | 3.68 | 34.030 | | | | | 27.07 | 300 | 3.72 | 33.92 | 26.98 | 111 | 0.53 |
| | 494 | 3.69 | 34.157 | | | | | 27.17 | 400 | 3.68 | 34.03 | 27.07 | 103 | 0.64 |
| | 595 | 3.52 | 34.211 | | | | | 27.23 | 500 | 3.69 | 34.16 | 27.17 | 94 | 0.74 |
| | 697 | 3.32 | 34.273 | | | | | 27.30 | 600 | 3.51 | 34.21 | 27.23 | 89 | 0.83 |
| | 799 | 3.18 | 34.316 | | | | | 27.34 | 700 | 3.32 | 34.27 | 27.30 | 83 | 0.92 |
| | 996 | 2.87 | 34.387 | | | | | 27.43 | 800 | 3.18 | 34.32 | 27.35 | 80 | 1.00 |
| | 1097 | 2.73 | 34.420 | | | | | 27.47 | 1000 | 2.86 | 34.39 | 27.43 | 72 | 1.16 |
| | 1248 | 2.58 | - | | | | | | 1200 | 2.62 | | | | |
| 307 | CGS ST. CATHARINES; September 6, 1958; 1900, 2118 GCT;[c] 50°00'N, 145°00'W; wind, 240°, force 3; weather, overcast; sea, moderate. | | | | | | | | | | | | | |
| | 0 | 12.40 | 32.648 | 6.55 | 1.05 | 18.7 | 0.13 | 24.71 | 0 | 12.40 | 32.65 | 24.71 | 324 | 0.00 |
| | 10 | 12.27 | 32.630 | 6.20 | 0.82 | 9.4 | 0.04 | 24.72 | 10 | 12.27 | 32.63 | 24.72 | 324 | 0.03 |
| | 20 | 12.23 | 32.629 | 6.07 | 0.75 | 9.9 | 0.04 | 24.73 | 20 | 12.23 | 32.63 | 24.73 | 323 | 0.06 |
| | 30 | 12.22 | 32.628 | 5.92 | 0.80 | 10.4 | 0.09 | 24.73 | 30 | 12.22 | 32.63 | 24.73 | 323 | 0.10 |
| | 50 | 8.05 | 32.860 | 6.71 | 1.24 | 24.2 | 0.08 | 25.61 | 50 | 8.05 | 32.86 | 25.61 | 240 | 0.15 |
| | 75 | 6.02 | 32.936 | 6.78 | 1.13 | 28.0 | 0.45 | 25.94 | 75 | 6.02 | 32.94 | 25.94 | 208 | 0.21 |
| | 100 | 5.38 | 33.015 | 6.63 | 1.13 | 29.8 | 0.00 | 26.08 | 100 | 5.38 | 33.02 | 26.08 | 195 | 0.26 |
| | 125 | 5.12 | 33.361 | 5.56 | 1.77 | 40.4 | 0.00 | 26.39 | 125 | 5.12 | 33.36 | 26.39 | 166 | 0.31 |
| | 150 | 5.04 | 33.722 | 4.33 | 2.01 | 48.5 | 0.00 | 26.68 | 150 | 5.04 | 33.72 | 26.68 | 139 | 0.34 |
| | 174 | 4.64 | 33.760 | 4.50 | 2.28 | 55.2 | 0.00 | 26.76 | 175 | 4.62 | 33.76 | 26.76 | 131 | 0.38 |
| | 199 | 4.27 | 33.780 | 3.96 | 2.09 | 62.5 | 0.00 | 26.81 | 200 | 4.26 | 33.78 | 26.81 | 126 | 0.41 |
| | 249 | 3.94 | 33.841 | 2.89 | 2.33 | 74.1 | 0.00 | 26.89 | 250 | 3.93 | 33.84 | 26.89 | 119 | 0.47 |
| | 299 | 3.74 | 33.898 | 2.28 | 2.94 | 85.6 | 0.00 | 26.96 | 300 | 3.74 | 33.90 | 26.96 | 113 | 0.53 |
| | | | | | | | | | 400 | 3.66 | 34.03 | 27.07 | 103 | 0.64 |
| | 400 | 3.66 | 34.029 | 1.40 | 3.22 | 102.0 | 0.00 | 27.07 | 500 | 3.68 | 34.14 | 27.15 | 96 | 0.74 |
| | 500 | 3.68 | 34.136 | 1.04 | 3.24 | 111.0 | 0.00 | 27.15 | 600 | 3.64 | | | | |
| | 750 | 3.46d) | - | - | - | - | - | | 700 | 3.53 | | | | |
| | | | | | | | | | 800 | 3.37 | | | | |
| | 1001 | 2.84 | 34.400 | 0.63 | 3.36 | 147.0 | 0.00 | 27.44 | 1000 | 2.84 | | | | |
| | | | | | | | | | 1200 | 2.58 | | | | |
| | 1252 | 2.54 | 34.460 | 0.69 | 3.28 | 155.0 | 0.00 | 27.52 | | | | | | |

a) This station is a composite of observed data from Stations 304, 305 and 306.
b) Value extrapolated by computer.
c) The second time is the time given for all casts following the first cast.
d) Value interpolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

308

CGS ST. CATHARINES; September 10, 1958; 1922 GCT; 50°00'N, 145°16'W; wind, calm; weather, clear; sea, calm.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.40 | 32.668 | 6.43 | | 16.2 | 0.11 | 24.73 | 0 | 12.40 | 32.67 | 24.73 | 323 | 0.00 |
| 10 | 12.34 | 32.650 | 6.33 | | 14.7 | 0.11 | 24.72 | 10 | 12.34 | 32.65 | 24.72 | 323 | 0.03 |
| 30 | 12.27 | 32.645 | 6.15 | | 17.0 | 0.11 | 24.73 | 20 | 12.30 | 32.64 | 24.73 | 323 | 0.06 |
| 50 | 7.28 | 32.975 | 6.98 | | 30.6 | 0.14 | 25.81 | 30 | 12.27 | 32.64 | 24.73 | 323 | 0.10 |
| 70 | 6.40 | 33.020 | 7.01 | | 34.3 | 0.34 | 25.96 | 50 | 7.28 | 32.97 | 25.81 | 220 | 0.15 |
| 75 | 6.14 | 33.025 | 6.91 | | 29.3 | 0.54 | 26.00 | 75 | 6.14 | 33.03 | 26.00 | 203 | 0.20 |
| 79 | 5.96 | 33.020 | 6.83 | | 30.1 | 0.80 | 26.02 | 100 | 5.61 | 33.06 | 26.09 | 194 | 0.26 |
| 84 | 5.85 | 33.025 | 6.75 | | 29.4 | 0.39 | 26.03 | 125 | 5.50 | 33.35 | 26.33 | 172 | 0.30 |
| 89 | 5.72 | 33.032 | 6.57 | | 28.9 | 0.02 | 26.06 | 150 | 4.93 | 33.71 | 26.68 | 139 | 0.34 |
| 99 | 5.62 | 33.051 | 6.78 | | 33.5 | 0.01 | 26.08 | 175 | 4.63 | 33.75 | 26.75 | 132 | 0.38 |
| 109 | 5.56 | 33.114 | 6.68 | | 34.1 | 0.02 | 26.14 | 200 | 4.29 | 33.77 | 26.80 | 127 | 0.41 |
| 124 | 5.51 | 33.331 | 5.99 | | 38.9 | 0.02 | 26.32 | 250 | 3.94 | 33.84 | 26.89 | 119 | 0.47 |
| 149 | 4.95 | 33.697 | 5.00 | | 52.4 | 0.01 | 26.67 | 300 | 3.79 | 33.91 | 26.96 | 113 | 0.53 |
| 174 | 4.64 | 33.744 | 4.66 | | 56.4 | 0.00 | 26.74 | | | | | | |
| 199 | 4.30 | 33.769 | 4.05 | | 64.9 | 0.00 | 26.80 | | | | | | |
| 248 | 3.95 | 33.833 | 3.11 | | 81.9 | 0.01 | 26.89 | | | | | | |
| 298 | 3.79 | 33.906 | 2.49 | | 84.6 | 0.01 | 26.96 | | | | | | |
| 300 | 3.79a) | 33.909a) | - | | - | - | (26.96) | | | | | | |

309

CGS ST. CATHARINES; September 13, 1958; 1914, 1947 GCT; 50°00'N, 145°00'W; wind, 320°, force 5; weather, intermittent slight drizzle; sea, moderate.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.70 | 32.613 | 6.42 | 0.99 | 10.7 | 0.12 | 24.63 | 0 | 12.70 | 32.61 | 24.63 | 332 | 0.00 |
| 10 | 12.48 | 32.608 | 6.34 | 0.90 | 11.1 | 0.12 | 24.66 | 10 | 12.48 | 32.61 | 24.66 | 329 | 0.03 |
| 20 | 12.44 | 32.611 | 6.40 | 0.70 | 7.6 | 0.10 | 24.67 | 20 | 12.44 | 32.61 | 24.67 | 328 | 0.07 |
| 30 | 12.44 | 32.610 | 6.08 | 0.62 | 10.6 | 0.11 | 24.67 | 30 | 12.44 | 32.61 | 24.67 | 328 | 0.10 |
| 50 | 7.33 | 32.972 | 6.99 | 1.28 | 26.1 | 0.14 | 25.80 | 50 | 7.33 | 32.97 | 25.80 | 221 | 0.16 |
| 75 | 6.31 | 33.096 | 6.97 | 1.63 | 27.2 | 0.67 | 26.03 | 75 | 6.31 | 33.10 | 26.03 | 199 | 0.21 |
| 100 | 5.55 | 33.048 | 6.71 | 1.55 | 27.2 | 0.02 | 26.09 | 100 | 5.55 | 33.05 | 26.09 | 194 | 0.26 |
| 125 | 5.51 | 33.360 | 5.62 | 1.58 | 33.6 | 0.00 | 26.34 | 125 | 5.51 | 33.36 | 26.34 | 171 | 0.30 |
| 150 | 4.80 | 33.717 | 3.62u | 1.87 | 48.3 | 0.00 | 26.70 | 150 | 4.80 | 33.72 | 26.70 | 136 | 0.34 |
| 175 | 4.41 | 33.759 | 4.24 | 2.40 | 57.2 | 0.01 | 26.78 | 175 | 4.41 | 33.76 | 26.78 | 129 | 0.38 |
| 200 | 4.17 | 33.780 | 3.79 | 2.20 | 63.8 | 0.02 | 26.83 | 200 | 4.17 | 33.84 | 26.87 | 121 | 0.41 |
| 250 | 3.98 | 33.838 | 2.96 | 2.27 | 70.7 | 0.01 | 26.90 | 250 | 3.98 | 33.78 | 26.84 | 124 | 0.47 |
| 301 | 3.78 | 33.936 | 2.34 | 2.68 | 79.5 | 0.01 | 26.98 | 300 | 3.78 | 33.93 | 26.98 | 111 | 0.53 |
| 399 | 3.72 | 34.017 | 1.49 | 2.60 | 95.0 | - | 27.06 | 400 | 3.72 | 34.02 | 27.06 | 105 | 0.64 |
| 499 | 3.68 | 34.114 | 0.99 | 2.34 | 108.0 | - | 27.14 | 500 | 3.68 | 34.11 | 27.14 | 98 | 0.74 |
| 749 | 3.26 | 34.290 | 0.60 | 3.39 | 128.0 | - | 27.32 | 600 | 3.57 | 34.20 | 27.21 | 91 | 0.83 |
| 999 | 2.88 | 34.395 | 0.62 | 3.82 | 141.0 | - | 27.44 | 700 | 3.38 | 34.26 | 27.28 | 85 | 0.92 |
| 1249 | 2.54 | 34.460 | 0.66 | 3.19 | 151.0 | - | 27.52 | 800 | 3.18 | 34.32 | 27.35 | 80 | 1.01 |
| | | | | | | | | 1000 | 2.88 | 34.40 | 27.44 | 72 | 1.16 |
| | | | | | | | | 1200 | 2.60 | 34.45 | 27.50 | 66 | 1.30 |

310

CGS ST. CATHARINES; September 16, 1958; 1950, 2136 GCT; 50°00'N, 145°16'W; wind, 270°, force 3; weather, overcast; sea, moderate.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 198 | 4.32 | 33.782 | 3.65 | 2.42 | 58.1 | 26.81 | b) |
| 248 | 3.94 | 33.854 | 2.89 | 2.31 | 69.4 | 26.90 | |
| 298 | 3.76 | 33.900 | 2.09 | 2.99 | 83.7 | 26.96 | |
| 347 | 3.78 | 33.969 | 1.55 | 2.47 | 88.2 | 26.98 | |
| 397 | 3.76 | 34.026 | 1.13 | 2.53 | 96.7 | 27.06 | |
| 447 | 3.70 | 34.076 | 0.77 | 2.51 | 101.0 | 27.10 | |
| 496 | 3.65 | 34.119 | 0.96 | 3.38 | 108.0 | 27.14 | |
| 546 | 3.62 | 34.160 | 0.72 | 3.41 | 113.0 | 27.18 | |
| 595 | 3.56 | 34.206 | 0.60 | 2.65 | 117.0 | 27.22 | |
| 645 | 3.41 | 34.242 | 0.62 | 3.26 | 123.0 | 27.26 | |
| 691 | 3.33 | 34.264 | 0.53 | 3.39 | 127.0 | 27.29 | |
| 789 | 3.14 | 34.319 | 0.56 | 3.31 | 133.0 | 27.35 | |
| 887 | 2.98 | 34.362 | 0.54 | 3.21 | 138.0 | 27.40 | |
| 985 | 2.86 | 34.392 | 0.56 | 3.00 | 143.0 | 27.43 | |
| 1083 | 2.72 | 34.425 | 0.56 | 2.07 | 141.0 | 27.47 | |
| 1229 | 2.55 | 34.459 | 0.60 | 3.15 | 153.0 | 27.52 | |

a) Value extrapolated by computer.

b) For data at standard depths see next page, Station 310 (Composite), a composite of Stations 310 and 311.

POG

P-58-3

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

311 CGS ST. CATHARINES; September 17, 1958; 1933, 1945 GCT; 50°00'N, 145°00'W; wind, 020°, force 8; weather, intermittent slight drizzle; sea, rough.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0 | 11.50 | 32.616 | 6.83 | 13.0 | 0.11 | 24.85 | a) | |
| 8 | 11.59 | 32.611 | 6.97 | 12.1 | 0.09 | 24.83 | | |
| 23 | 11.57 | 32.610 | 6.60 | 13.9 | 0.10 | 24.84 | | |
| 38 | 11.58 | 32.611 | 6.63 | 13.9 | 0.10 | 24.83 | | |
| 54 | 7.37 | 32.970 | 7.87 | 28.1 | 0.12 | 25.79 | | |
| 57 | 6.93 | 33.003 | 8.49 | 25.1 | 0.16 | 25.88 | | |
| 52b) | 7.22 | 32.980 | 7.08 | 26.5 | 0.13 | 25.82 | | |
| 56 | 6.90 | 32.993 | 7.94 | 27.5 | 0.14 | 25.88 | | |
| 60 | 6.72 | 32.989 | 6.92 | 30.9 | 0.13 | 25.90 | | |
| 66 | 6.56 | 33.036 | 7.27 | 26.6 | 0.29 | 25.96 | | |
| 70 | 6.27 | 33.028 | 7.65 | 26.3 | 0.58 | 25.98 | | |
| 79 | 5.86 | 33.030 | 6.99 | 29.4 | 0.43 | 26.04 | | |
| 96 | 5.40 | 33.114 | 6.63 | 35.1 | 0.00 | 26.16 | | |
| 105 | 5.45 | 33.385 | 6.14 | 38.5 | 0.00 | 26.38 | | |
| 118 | 5.37 | 33.444 | 6.47 | 40.5 | 0.00 | 26.42 | | |
| 138 | 4.92 | 33.679 | 5.53 | 47.4 | 0.01 | 26.66 | | |
| 163 | 4.57 | 33.732 | 4.86 | 52.5 | 0.00 | 26.74 | | |

310 (COMPOSITE) CGS ST. CATHARINES; September 16-17, 1958; missing GCT; 50°00'N, 145°16'W (50°00'N, 145°00'W); wind, missing; weather, missing; sea, missing.[c]

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.50 | 32.616 | 24.85 | 0 | 11.50 | 32.62 | 24.85 | 311 | 0.00 |
| 8 | 11.59 | 32.611 | 24.83 | 10 | 11.60 | 32.61 | 24.83 | 313 | 0.03 |
| 23 | 11.57 | 32.610 | 24.84 | 20 | 11.59 | 32.61 | 24.83 | 313 | 0.06 |
| 38 | 11.58 | 32.611 | 24.83 | 30 | 11.57 | 32.61 | 24.84 | 313 | 0.09 |
| 54 | 7.37 | 32.970 | 25.79 | 50 | 8.83 | 32.85 | 25.48 | 252 | 0.15 |
| 70 | 6.27 | 33.028 | 25.98 | 75 | 6.01 | 33.05 | 26.03 | 200 | 0.21 |
| 96 | 5.40 | 33.114 | 26.16 | 100 | 5.35 | 33.16 | 26.20 | 184 | 0.26 |
| 118 | 5.37 | 33.444 | 26.42 | 125 | 5.26 | 33.53 | 26.51 | 155 | 0.30 |
| 138 | 4.92 | 33.679 | 26.66 | 150 | 4.72 | 33.74 | 26.73 | 134 | 0.34 |
| 163 | 4.57 | 33.732 | 26.74 | 175 | 4.45 | 33.75 | 26.77 | 130 | 0.37 |
| 198 | 4.32 | 33.782 | 26.81 | 200 | 4.31 | 33.78 | 26.81 | 126 | 0.40 |
| 248 | 3.94 | 33.854 | 26.90 | 250 | 3.93 | 33.86 | 26.91 | 118 | 0.46 |
| 298 | 3.76 | 33.900 | 26.96 | 300 | 3.76 | 33.90 | 26.96 | 113 | 0.52 |
| 397 | 3.76 | 34.026 | 27.06 | 400 | 3.76 | 34.03 | 27.06 | 104 | 0.63 |
| 496 | 3.65 | 34.119 | 27.14 | 500 | 3.65 | 34.12 | 27.15 | 97 | 0.73 |
| 595 | 3.56 | 34.206 | 27.22 | 600 | 3.55 | 34.21 | 27.22 | 90 | 0.83 |
| 691 | 3.33 | 34.264 | 27.29 | 700 | 3.31 | 34.27 | 27.30 | 84 | 0.91 |
| 789 | 3.14 | 34.319 | 27.35 | 800 | 3.12 | 34.32 | 27.36 | 78 | 1.00 |
| 985 | 2.86 | 34.392 | 27.43 | 1000 | 2.84 | 34.40 | 27.44 | 71 | 1.15 |
| 1229 | 2.55 | 34.459 | 27.52 | 1200 | 2.58 | 34.45 | 27.51 | 66 | 1.28 |

a) See Station 310 (Composite) for composite of Stations 310 and 311.

b) Overlapping casts; reconciliation of property curves when necessary.

c) This station is a composite of observed data from Stations 310 and 311.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CGS ST. CATHARINES; September 22, 1958; 1905, missing, 2106 GCT; 50°00'N, 145°16'W; wind, 210°, force 5; weather, overcast; sea, moderate. 312

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.30 | 32.606 | 6.62 | 1.26 | 12.5 | 0.09 | 24.88 | 0 | 11.30 | 32.61 | 24.88 | 308 | 0.00 |
| 10 | 11.34 | 32.614 | 6.69 | 1.00 | 9.6 | 0.11 | 24.88 | 10 | 11.34 | 32.61 | 24.88 | 308 | 0.03 |
| 20 | 11.31 | 32.615 | 6.57 | 1.03 | 10.1 | 0.10 | 24.89 | 20 | 11.31 | 32.61 | 24.89 | 308 | 0.06 |
| 30 | 11.33 | 32.618 | 6.28 | 0.77 | 9.0 | 0.09 | 24.89 | 30 | 11.33 | 32.62 | 24.89 | 308 | 0.09 |
| 50 | 7.27 | 32.989 | 7.01 | 0.97 | 13.0 | 0.12 | 25.82 | 50 | 7.27 | 32.99 | 25.82 | 219 | 0.15 |
| | | | | | | | | 75 | 5.79 | 33.07 | 26.08 | 195 | 0.20 |
| 75 | 5.79 | 33.072 | 7.02 | 1.27 | 14.5 | - | 26.08 | 100 | 5.45 | 33.34 | 26.33 | 171 | 0.24 |
| 85 | 5.61 | 33.107 | 6.34 | 1.41 | - | 0.00 | 26.13 | 125 | 5.19 | 33.60 | 26.56 | 149 | 0.28 |
| 90 | 5.56 | 33.125 | 6.82 | 1.67 | - | 0.02 | 26.15 | 150 | 4.70 | 33.76 | 26.75 | 132 | 0.32 |
| 100 | 5.45 | 33.344 | 6.26 | 1.46 | 17.3 | 0.00 | 26.33 | 175 | 4.34 | 33.77 | 26.80 | 127 | 0.35 |
| 110 | 5.42 | 33.398 | 6.22 | 1.69 | - | 0.01 | 26.38 | 200 | 4.14 | 33.80 | 26.84 | 124 | 0.38 |
| 125 | 5.19 | 33.596 | 5.47 | 1.91 | 19.9 | 0.00 | 26.56 | 250 | 3.85 | 33.86 | 26.92 | 116 | 0.44 |
| 150 | 4.70 | 33.756 | 4.77 | 2.07 | - | 0.00 | 26.75 | 300 | 3.70 | 33.92 | 26.98 | 110 | 0.50 |
| 175 | 4.34 | 33.774 | 4.57 | 2.21 | 27.7 | 0.01 | 26.80 | 400 | 3.71 | 34.03 | 27.07 | 103 | 0.61 |
| 200 | 4.14 | 33.799 | 3.77 | 2.49 | - | 0.01 | 26.84 | 500 | 3.63 | 34.13 | 27.16 | 96 | 0.71 |
| 250 | 3.85 | 33.860 | 2.96 | 2.58 | - | 0.02 | 26.92 | 600 | 3.50 | 34.22 | 27.24 | 89 | 0.80 |
| 300 | 3.70 | 33.925 | 1.97 | 2.79 | - | 0.01 | 26.98 | 700 | 3.30 | 34.28 | 27.30 | 83 | 0.89 |
| | | | | | | | | 800 | 3.10 | 34.33 | 27.36 | 78 | 0.97 |
| 394 | 3.71 | 34.025 | 1.40 | 2.95 | - | - | 27.06 | | | | | | |
| 493 | 3.64 | 34.128 | 0.97 | 3.05 | - | - | 27.15 | | | | | | |
| 742 | 3.20 | 34.298 | 0.66 | 3.04 | - | - | 27.33 | | | | | | |
| 990 | 2.81 | 34.394 | 0.81 | 3.15 | - | - | 27.44 | | | | | | |

CGS ST. CATHARINES; November 3, 1958; 1923 GCT; 50°00'N, 145°00'W; wind, 240°, force 3; weather, partly cloudy; sea, rough. 401

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.50 | 32.689 | 0.30 | 25.41 | 0 | 8.50 | 32.69 | 25.41 | 258 | 0.00 |
| 10 | 8.66 | 32.655 | 0.26 | 25.36 | 10 | 8.66 | 32.66 | 25.36 | 263 | 0.03 |
| 30 | 8.65 | 32.647 | 0.26 | 25.35 | 20 | 8.71 | 32.64 | 25.34 | 265 | 0.05 |
| 49 | 8.64 | 32.653 | 0.28 | 25.36 | 30 | 8.65 | 32.65 | 25.35 | 264 | 0.08 |
| 69 | 7.81 | 32.812 | 0.41 | 25.61 | 50 | 8.62 | 32.66 | 25.37 | 263 | 0.13 |
| 79 | 6.76 | 32.969 | 0.63 | 25.87 | 75 | 7.23 | 32.90 | 25.76 | 226 | 0.19 |
| 89 | 6.05 | 33.066 | 0.58 | 26.04 | 100 | 5.42 | 33.14 | 26.18 | 186 | 0.24 |
| 98 | 5.49 | 33.125 | 0.00 | 26.16 | 125 | 5.44 | 33.47 | 26.43 | 162 | 0.29 |
| 108 | 5.30 | 33.200 | 0.00 | 26.24 | 150 | 5.00 | 33.76 | 26.72 | 135 | 0.33 |
| 123 | 5.44 | 33.439 | 0.00 | 26.41 | 175 | 4.35 | 33.76 | 26.79 | 128 | 0.36 |
| 148 | 5.04 | 33.751 | 0.00 | 26.70 | 200 | 4.12 | 33.78 | 26.83 | 125 | 0.39 |
| 172 | 4.40 | 33.760 | 0.00 | 26.78 | 250 | 3.71 | 33.83 | 26.91 | 117 | 0.45 |
| 197 | 4.15 | 33.776 | 0.00 | 26.82 | 300 | 3.78 | 33.93 | 26.98 | 111 | 0.51 |
| 246 | 3.72 | 33.827 | 0.00 | 26.90 | | | | | | |
| 295 | 3.75 | 33.921 | 0.00 | 26.98 | | | | | | |
| 300 | 3.78a) | 33.933a) | - | (26.98) | | | | | | |

CGS ST. CATHARINES; November 6, 1958; 1926 GCT; 50°00'N, 144°44'W; wind, 250°, force 6; weather, partly cloudy; sea, rough. 402

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.90 | 32.840 | 25.47 | 0 | 8.90 | 32.84 | 25.47 | 252 | 0.00 |
| 10 | 8.71 | 32.662 | 25.36 | 10 | 8.71 | 32.66 | 25.36 | 263 | 0.03 |
| 24 | 8.70 | 32.661 | 25.36 | 20 | 8.67 | 32.63 | 25.34 | 265 | 0.05 |
| 49 | 8.69 | 32.670 | 25.37 | 30 | 8.70 | 32.66 | 25.36 | 263 | 0.08 |
| 73 | 6.47 | 33.005 | 25.94 | 50 | 8.64 | 32.68 | 25.38 | 262 | 0.13 |
| 98 | 5.40 | 33.176 | 26.21 | 75 | 6.34 | 33.03 | 25.97 | 205 | 0.19 |
| 122 | 5.22 | 33.534 | 26.51 | 100 | 5.35 | 33.20 | 26.23 | 181 | 0.24 |
| 147 | 4.87 | 33.753 | 26.72 | 125 | 5.19 | 33.57 | 26.54 | 151 | 0.28 |
| 150 | 4.82a) | 33.769a) | (26.74) | 150 | 4.86 | 33.77 | 26.74 | 133 | 0.32 |

a) Value extrapolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 403 | CGS ST. CATHARINES; November 8, 1958; 1926 GCT; 49°50'N, 145°16'W; wind, 270°, force 7; weather, cloudy; sea, rough. | | | | | | | | | | | | |
| 0 | 7.50 | 32.808 | | | | 0.33 | 25.65 | 0 | 7.50 | 32.81 | 25.65 | 235 | 0.00 |
| 10 | 8.33 | 32.716 | | | | 0.27 | 25.46 | 10 | 8.33 | 32.72 | 25.46 | 254 | 0.02 |
| 24 | 8.34 | 32.704 | | | | 0.27 | 25.44 | 20 | 8.47 | 32.69 | 25.42 | 257 | 0.05 |
| 49 | 8.32 | 32.701 | | | | 0.30 | 25.45 | 30 | 8.34 | 32.70 | 25.44 | 255 | 0.08 |
| 73 | 5.72 | 33.136 | | | | 0.00 | 26.14 | 50 | 8.26 | 32.71 | 25.46 | 254 | 0.13 |
| 97 | 5.41 | 33.267 | | | | 0.00 | 26.28 | 75 | 5.61 | 33.16 | 26.17 | 186 | 0.18 |
| 122 | 5.56 | 33.659 | | | | 0.00 | 26.57 | 100 | 5.40 | 33.30 | 26.31 | 174 | 0.23 |
| 146 | 5.12 | 33.771 | | | | 0.00 | 26.71 | 125 | 5.54 | 33.69 | 26.59 | 147 | 0.27 |
| 171 | 4.53 | 33.773 | | | | - | 26.78 | 150 | 5.03 | 33.78 | 26.73 | 134 | 0.30 |
| 195 | 4.29 | 33.795 | | | | - | 26.82 | 175 | 4.47 | 33.78 | 26.79 | 129 | 0.34 |
| 292 | 3.76 | 33.880 | | | | - | 26.94 | 200 | 4.25 | 33.80 | 26.83 | 125 | 0.37 |
| 359 | 3.78 | 33.965 | | | | - | 27.01 | 250 | 3.90 | 33.84 | 26.90 | 118 | 0.43 |
| 451 | 3.77 | 34.084 | | | | - | 27.10 | 300 | 3.75 | 33.89 | 26.95 | 114 | 0.49 |
| 699 | 3.38 | 34.257 | | | | - | 27.28 | 400 | 3.78 | 34.02 | 27.05 | 105 | 0.60 |
| 947 | 2.95 | 34.371 | | | | - | 27.41 | 500 | 3.73 | 34.14 | 27.15 | 97 | 0.70 |
| 1195 | 2.59 | 34.450 | | | | - | 27.50 | 600 | 3.60 | 34.21 | 27.22 | 90 | 0.80 |
| 1200 | 2.58a) | 34.451a) | | | | - | (27.51) | 700 | 3.38 | 34.26 | 27.28 | 85 | 0.88 |
| | | | | | | | | 800 | 3.21 | 34.31 | 27.34 | 80 | 0.97 |
| | | | | | | | | 1000 | 2.87 | 34.39 | 27.43 | 72 | 1.12 |
| | | | | | | | | 1200 | 2.58 | 34.45 | 27.51 | 66 | 1.26 |
| 404 | CGS ST. CATHARINES; November 14, 1958; 2111, 1944, 2028 GCT; 50°00'N, 145°16'W; wind, 150°, force 2; weather, cloudy; sea, slight. | | | | | | | | | | | | |
| 0 | 7.50 | 32.796 | | | | | 25.64 | 0 | 7.50 | 32.80 | 25.64 | 236 | 0.00 |
| 10 | 7.57 | 32.779 | | | | | 25.61 | 10 | 7.57 | 32.78 | 25.61 | 238 | 0.02 |
| 25 | 7.58 | 32.772 | | | | | 25.61 | 20 | 7.59 | 32.77 | 25.61 | 239 | 0.05 |
| 50 | 7.55 | 32.794 | | | | | 25.63 | 30 | 7.58 | 32.77 | 25.61 | 239 | 0.07 |
| 75 | 5.84 | 33.111 | | | | | 26.10 | 50 | 7.55 | 32.79 | 25.63 | 238 | 0.12 |
| 100 | 5.39 | 33.298 | | | | | 26.30 | 75 | 5.84 | 33.11 | 26.10 | 193 | 0.17 |
| 125 | 5.27 | 33.724 | | | | | 26.66 | 100 | 5.39 | 33.30 | 26.30 | 174 | 0.22 |
| 150 | 4.81 | 33.796 | | | | | 26.76 | 125 | 5.27 | 33.72 | 26.66 | 141 | 0.26 |
| 174 | 4.34 | 33.782 | | | | | 26.81 | 150 | 4.81 | 33.80 | 26.76 | 130 | 0.29 |
| 199 | 4.13 | 33.810 | | | | | 26.85 | 175 | 4.33 | 33.78 | 26.81 | 127 | 0.33 |
| 299 | 3.77 | 33.943 | | | | | 26.99 | 200 | 4.12 | 33.81 | 26.85 | 122 | 0.36 |
| | | | | | | | | 250 | 3.85 | 33.87 | 26.93 | 116 | 0.42 |
| 399 | 3.78 | 34.064 | | | | | 27.09 | 300 | 3.77 | 33.94 | 26.99 | 110 | 0.48 |
| 498 | 3.63 | 34.160 | | | | | 27.18 | 400 | 3.78 | 34.07 | 27.09 | 102 | 0.58 |
| 748 | 3.23 | 34.334 | | | | | 27.35 | 500 | 3.63 | 34.16 | 27.18 | 94 | 0.68 |
| | | | | | | | | 600 | 3.47 | 34.24 | 27.26 | 87 | 0.77 |
| 992 | 2.84 | 34.433 | | | | | 27.47 | 700 | 3.31 | 34.31 | 27.33 | 81 | 0.86 |
| 1238 | 2.52 | 34.493 | | | | | 27.54 | 800 | 3.15 | 34.36 | 27.38 | 76 | 0.94 |
| | | | | | | | | 1000 | 2.83 | 34.44 | 27.47 | 68 | 1.08 |
| | | | | | | | | 1200 | 2.56 | 34.49 | 27.54 | 63 | 1.21 |
| 405 | CGS ST. CATHARINES; November 18, 1958; 1924 GCT; 49°50'N, 145°00'W; wind, 290°, force 6; weather, moderate to heavy snow showers; sea, rough. | | | | | | | | | | | | |
| 0 | 7.00 | 32.772 | | | | | 25.69 | 0 | 7.00 | 32.77 | 25.69 | 231 | 0.00 |
| 25 | 7.08 | 32.759 | | | | | 25.67 | 10 | 7.04 | 32.76 | 25.68 | 232 | 0.02 |
| 49 | 7.09 | 32.764 | | | | | 25.67 | 20 | 7.07 | 32.76 | 25.67 | 233 | 0.05 |
| 69 | 6.59 | 32.932 | | | | | 25.87 | 30 | 7.09 | 32.76 | 25.67 | 234 | 0.07 |
| 79 | 5.56 | 33.190 | | | | | 26.20 | 50 | 7.08 | 32.77 | 25.68 | 233 | 0.12 |
| 89 | 5.46 | 33.272 | | | | | 26.28 | 75 | 6.03 | 33.07 | 26.05 | 198 | 0.17 |
| 99 | 5.52 | 33.452 | | | | | 26.41 | 100 | 5.52 | 33.47 | 26.43 | 162 | 0.22 |
| 109 | 5.41 | 33.637 | | | | | 26.57 | 125 | 5.06 | 33.77 | 26.72 | 135 | 0.25 |
| 125 | 5.06 | 33.769 | | | | | 26.72 | 150 | 4.64 | 33.77 | 26.77 | 130 | 0.29 |
| 150 | 4.64 | 33.773 | | | | | 26.77 | 175 | 4.26 | 33.79 | 26.82 | 126 | 0.32 |
| 176 | 4.25 | 33.787 | | | | | 26.82 | 200 | 4.07 | 33.80 | 26.85 | 123 | 0.35 |
| 201 | 4.07 | 33.804 | | | | | 26.85 | 250 | 3.85 | 33.85 | 26.91 | 117 | 0.41 |
| 251 | 3.85 | 33.852 | | | | | 26.91 | 300 | 3.75 | 33.91 | 26.97 | 112 | 0.47 |
| 301 | 3.75 | 33.910 | | | | | 26.97 | | | | | | |



a) Value extrapolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

406

CGS ST. CATHARINES; November 21, 1958; 2046, 1904 GCT; 50°00'N, 144°44'W; wind, 310°, force 4; weather, cloudy; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.80 | 32.794 | 25.73 | 0 | 6.80 | 32.79 | 25.73 | 227 | 0.00 |
| 10 | 6.76 | 32.755 | 25.71 | 10 | 6.76 | 32.75 | 25.71 | 230 | 0.02 |
| 25 | 6.79 | 32.750 | 25.70 | 20 | 6.77 | 32.74 | 25.70 | 231 | 0.05 |
| 50 | 6.79 | 32.746 | 25.70 | 30 | 6.79 | 32.75 | 25.70 | 231 | 0.07 |
| 75 | 6.79 | 32.753 | 25.70 | 50 | 6.79 | 32.75 | 25.70 | 231 | 0.12 |
| 100 | 5.32 | 33.414 | 26.40 | 75 | 6.79 | 32.75 | 25.70 | 231 | 0.17 |
| 125 | 5.06 | 33.715 | 26.67 | 100 | 5.32 | 33.41 | 26.40 | 164 | 0.22 |
| 150 | 4.65 | 33.772 | 26.76 | 125 | 5.06 | 33.72 | 26.67 | 139 | 0.26 |
| 176 | 4.25 | 33.776 | 26.81 | 150 | 4.65 | 33.77 | 26.76 | 131 | 0.30 |
| 202 | 4.01 | 33.804 | 26.86 | 175 | 4.26 | 33.78 | 26.81 | 126 | 0.33 |
| 304 | 3.73 | 33.934 | 26.99 | 200 | 4.02 | 33.80 | 26.85 | 122 | 0.36 |
| | | | | 250 | 3.75 | 33.86 | 26.93 | 115 | 0.42 |
| 394 | 3.75 | 34.023 | 27.06 | 300 | 3.72 | 33.93 | 26.98 | 110 | 0.48 |
| 492 | 3.69 | 34.139 | 27.16 | 400 | 3.75 | 34.03 | 27.06 | 104 | 0.58 |
| 743 | 3.22 | 34.301 | 27.33 | 500 | 3.68 | 34.15 | 27.16 | 95 | 0.68 |
| 995 | 2.85 | 34.388 | 27.43 | 600 | 3.54 | 34.23 | 27.24 | 88 | 0.78 |
| 1246 | 2.55 | 34.460 | 27.52 | 700 | 3.33 | 34.29 | 27.31 | 83 | 0.86 |
| | | | | 800 | 3.13 | 34.33 | 27.36 | 78 | 0.95 |
| | | | | 1000 | 2.84 | 34.39 | 27.43 | 72 | 1.10 |
| | | | | 1200 | 2.60 | 34.45 | 27.50 | 66 | 1.24 |

407A

CGS ST. CATHARINES; November 26, 1958; 1918 GCT; 50°00'N, 145°00'W; wind, direction missing, force 1; weather, intermittent slight rain; sea, indeterminate.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0 | 6.80 | 32.746 | 25.69 | 0 | 6.80 | 32.75 | 25.69 | |
| 10 | 6.87 | 32.766 | 25.70 | 10 | 6.87 | 32.77 | 25.70 | |
| 25 | 6.87 | 32.763 | 25.70 | 20 | 6.88 | 32.77 | 25.70 | |
| 50 | 6.87 | 32.761 | 25.70 | 30 | 6.87 | 32.76 | 25.70 | |
| 70 | 6.87 | 32.769 | 25.70 | 50 | 6.87 | 32.76 | 25.70 | |
| 80 | 5.97 | 33.055 | 26.04 | 75 | 6.49 | 32.89 | 25.85 | |
| 90 | 5.38 | 33.210 | 26.24 | 100 | 5.21 | 33.42 | 26.42 | |
| 100 | 5.21 | 33.418 | 26.42 | 125 | 4.98 | 33.69 | 26.66 | |
| 110 | 5.10 | 33.560 | 26.55 | 150 | 4.51 | 33.76 | 26.77 | |
| 125 | 4.98 | 33.692 | 26.66 | 175 | 4.25 | 33.77 | 26.81 | |
| 150 | 4.51 | 33.762 | 26.77 | 200 | 4.03 | 33.79 | 26.85 | |
| 175 | 4.25 | 33.773 | 26.81 | 250 | 3.77 | 33.84 | 26.91 | |
| 200 | 4.03 | 33.794 | 26.85 | 300 | 3.74 | 33.90 | 26.96 | |
| 301 | 3.66 | 33.923 | 26.99 | | | | | |

407B

CGS ST. CATHARINES; November 27, 1958; 1922 GCT; 50°00'N, 145°00'W; wind, 250°, force 4; weather, partly cloudy; sea, moderate.

| | | | | |
|---|---|---|---|---|
| 246 | 3.94 | 33.872 | 26.92 | a) |
| 295 | 3.75 | 33.893 | 26.95 | |
| 341 | 3.74 | 33.957 | 27.01 | |
| 390 | 3.76 | 34.020 | 27.05 | |
| 440 | 3.73 | 34.068 | 27.09 | |
| 490 | 3.68 | 34.113 | 27.14 | |
| 539 | 3.65 | 34.160 | 27.18 | |
| 590 | 3.61 | 34.195 | 27.21 | |
| 638 | 3.48 | 34.224 | 27.24 | |
| 688 | 3.38 | 34.283 | 27.30 | |

a) For data at standard depths see next page, Station 407 (Composite), a composite of Stations 407A and 407B.

POG P-58-4

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

407 (COMPOSITE) CGS ST. CATHARINES; November 26-27, 1958; missing GCT; 50°00'N, 145°00'W; wind, missing; weather, missing; sea, missing.[a]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.80 | 32.746 | 25.69 | 0 | 6.80 | 32.75 | 25.69 | 231 | 0.00 |
| 10 | 6.87 | 32.766 | 25.70 | 10 | 6.87 | 32.77 | 25.70 | 230 | 0.02 |
| 25 | 6.87 | 32.763 | 25.70 | 20 | 6.88 | 32.77 | 25.70 | 230 | 0.05 |
| 50 | 6.87 | 32.761 | 25.70 | 30 | 6.87 | 32.76 | 25.70 | 231 | 0.07 |
| 70 | 6.87 | 32.769 | 25.70 | 50 | 6.87 | 32.76 | 25.70 | 231 | 0.12 |
| 80 | 5.97 | 33.055 | 26.04 | 75 | 6.49 | 32.89 | 25.85 | 217 | 0.17 |
| 90 | 5.38 | 33.210 | 26.24 | 100 | 5.21 | 33.42 | 26.42 | 163 | 0.22 |
| 100 | 5.21 | 33.418 | 26.42 | 125 | 4.98 | 33.69 | 26.66 | 140 | 0.26 |
| 110 | 5.10 | 33.560 | 26.55 | 150 | 4.51 | 33.76 | 26.77 | 130 | 0.29 |
| 125 | 4.98 | 33.692 | 26.66 | 175 | 4.25 | 33.77 | 26.81 | 126 | 0.32 |
| 150 | 4.51 | 33.762 | 26.77 | 200 | 4.03 | 33.79 | 26.85 | 123 | 0.36 |
| 175 | 4.25 | 33.773 | 26.81 | 250 | 3.77 | 33.84 | 26.91 | 117 | 0.42 |
| 200 | 4.03 | 33.794 | 26.85 | 300 | 3.74 | 33.90 | 26.96 | 113 | 0.48 |
| 295 | 3.75 | 33.893 | 26.95 | 400 | 3.76 | 34.03 | 27.06 | 104 | 0.58 |
| 341 | 3.74 | 33.957 | 27.01 | 500 | 3.67 | 34.12 | 27.14 | 97 | 0.68 |
| 390 | 3.76 | 34.020 | 27.05 | 600 | 3.59 | 34.20 | 27.22 | 91 | 0.78 |
| 490 | 3.68 | 34.113 | 27.14 | 700 | 3.34 | 34.29 | 27.31 | 82 | 0.87 |
| 590 | 3.61 | 34.195 | 27.21 | | | | | | |
| 688 | 3.38 | 34.283 | 27.30 | | | | | | |
| 700 | 3.34b) | 34.294b) | (27.31) | | | | | | |

408A CGS ST. CATHARINES; November 29, 1958; 2010, 1915 GCT; 50°00'N, 145°00'W; wind, 320°, force 4; weather, partly cloudy; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.80 | 32.848 | 25.77 | 0 | 6.80 | 32.85 | 25.77 | 223 | 0.00 |
| 10 | 6.77 | 32.812 | 25.75 | 10 | 6.77 | 32.81 | 25.75 | 226 | 0.02 |
| 25 | 6.75 | 32.792 | 25.74 | 20 | 6.75 | 32.79 | 25.74 | 227 | 0.04 |
| 50 | 6.76 | 32.793 | 25.74 | 30 | 6.75 | 32.79 | 25.73 | 227 | 0.07 |
| 75 | 6.74 | 32.793 | 25.74 | 50 | 6.76 | 32.79 | 25.74 | 227 | 0.11 |
| 100 | 5.32 | 33.377 | 26.38 | 75 | 6.74 | 32.79 | 25.74 | 227 | 0.17 |
| 125 | 5.06 | 33.745 | 26.70 | 100 | 5.32 | 33.38 | 26.38 | 167 | 0.22 |
| 150 | 4.71 | 33.767 | 26.75 | 125 | 5.06 | 33.75 | 26.70 | 137 | 0.26 |
| 175 | 4.32 | 33.792 | 26.82 | 150 | 4.71 | 33.77 | 26.75 | 132 | 0.29 |
| 200 | 4.01 | 33.811 | 26.86 | 175 | 4.32 | 33.79 | 26.82 | 126 | 0.32 |
| 250 | 3.75 | 33.844 | 26.91 | 200 | 4.01 | 33.81 | 26.86 | 121 | 0.36 |
| 299 | 3.71 | 33.909 | 26.97 | 250 | 3.75 | 33.84 | 26.91 | 117 | 0.42 |
| | | | | 300 | 3.71 | 33.91 | 26.97 | 112 | 0.47 |
| 399 | 3.73 | 34.087 | 27.11 | 400 | 3.73 | 34.09 | 27.11 | 99 | 0.58 |
| 500 | 3.69 | 34.157 | 27.17 | 500 | 3.69 | 34.16 | 27.17 | 95 | 0.68 |
| 750 | 3.22 | 34.314 | 27.34 | 600 | 3.57 | 34.22 | 27.23 | 89 | 0.77 |
| 1000 | 2.83 | 34.397 | 27.44 | 700 | 3.36 | 34.28 | 27.30 | 83 | 0.86 |
| 1250 | 2.53 | 34.473 | 27.53 | 800 | 3.14 | 34.34 | 27.37 | 78 | 0.94 |
| | | | | 1000 | 2.83 | 34.40 | 27.44 | 71 | 1.09 |
| | | | | 1200 | 2.58 | 34.46 | 27.51 | 65 | 1.23 |

a) This station is a composite of observed data from Stations 407A and 407B.
b) Value extrapolated by computer.

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

408B

CGS ST. CATHARINES; December 3, 1958; 2028, 1925 GCT; 50°00'N, 145°00'W; wind, 160°, force 2; weather, cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.55a) | 32.820 | 25.78 | 0 | 6.55 | 32.82 | 25.78 | 222 | 0.00 |
| 5 | 6.55a) | 32.781 | 25.75 | 10 | 6.53 | 32.78 | 25.76 | 225 | 0.02 |
| 10 | 6.53a) | 32.779 | 25.76 | 20 | 6.52 | 32.80 | 25.77 | 224 | 0.04 |
| 20 | 6.52a) | 32.795 | 25.77 | 30 | 6.51 | 32.80 | 25.78 | 223 | 0.07 |
| 50 | 6.50 | 32.793 | 25.77 | 50 | 6.50 | 32.79 | 25.77 | 224 | 0.11 |
| 150 | 4.79 | 32.784 | 25.97 | 75 | 6.31 | 32.79 | 25.79 | 222 | 0.17 |
| 300 | 3.73 | 33.938 | 26.99 | 100 | 5.96 | 32.79 | 25.83 | 218 | 0.22 |
| 500 | 3.65 | 34.153 | 27.17 | 125 | 5.45 | 32.79 | 25.89 | 213 | 0.28 |
| | | | | 150 | 4.79 | 32.78 | 25.97 | 206 | 0.33 |
| 746 | 3.20 | 34.305 | 27.33 | 175 | 4.49 | 32.88 | 26.07 | 196 | 0.38 |
| 991 | 2.83 | 34.403 | 27.45 | 200 | 4.24 | 33.01 | 26.21 | 184 | 0.43 |
| 1486 | 2.25 | 34.519 | 27.59 | 250 | 3.88 | 33.40 | 26.55 | 152 | 0.51 |
| 1892 | 1.98 | 34.582 | 27.66 | 300 | 3.73 | 33.94 | 26.99 | 110 | 0.58 |
| 2000 | 1.94b) | 34.594b) | (27.67) | 400 | 3.50 | 34.23 | 27.25 | 86 | 0.68 |
| | | | | 500 | 3.65 | 34.15 | 27.17 | 94 | 0.77 |
| | | | | 600 | 3.51 | 34.23 | 27.24 | 88 | 0.86 |
| | | | | 700 | 3.31 | 34.29 | 27.31 | 82 | 0.95 |
| | | | | 800 | 3.11 | 34.33 | 27.36 | 78 | 1.03 |
| | | | | 1000 | 2.82 | 34.41 | 27.45 | 70 | 1.18 |
| | | | | 1200 | 2.56 | 34.47 | 27.52 | 64 | 1.32 |
| | | | | 1500 | 2.24 | 34.52 | 27.59 | 58 | 1.50 |
| | | | | 2000 | 1.94 | 34.59 | 27.67 | 51 | 1.78 |

409

CGS ST. CATHARINES; December 4, 1958; 1910 GCT; 50°00'N, 145°00'W; wind, 100°, force 8; weather, overcast; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.30 | 32.827 | 25.82 | 0 | 6.30 | 32.83 | 25.82 | 218 | 0.00 |
| 9 | 6.44 | 32.776 | 25.76 | 10 | 6.45 | 32.77 | 25.76 | 224 | 0.02 |
| 23 | 6.42 | 32.785 | 25.77 | 20 | 6.45 | 32.77 | 25.76 | 224 | 0.04 |
| 45 | 6.45 | 32.780 | 25.77 | 30 | 6.42 | 32.79 | 25.77 | 223 | 0.07 |
| 64 | 6.45 | 32.782 | 25.77 | 50 | 6.45 | 32.78 | 25.77 | 224 | 0.11 |
| 73 | 6.45 | 32.786 | 25.77 | 75 | 6.45 | 32.79 | 25.77 | 224 | 0.17 |
| 81 | 6.47 | 32.804 | 25.78 | 100 | 5.18 | 33.28 | 26.31 | 173 | 0.22 |
| 90 | 5.23 | 33.056 | 26.13 | 125 | 5.10 | 33.73 | 26.68 | 139 | 0.26 |
| 99 | 5.18 | 33.257 | 26.30 | 150 | 4.67 | 33.79 | 26.78 | 129 | 0.29 |
| 114 | 5.17 | 33.588 | 26.56 | 175 | 4.13 | 33.77 | 26.82 | 125 | 0.32 |
| 138 | 4.95 | 33.772 | 26.73 | 200 | 4.04 | 33.81 | 26.86 | 122 | 0.36 |
| 162 | 4.28 | 33.760 | 26.79 | 250 | 3.79 | 33.86 | 26.92 | 116 | 0.42 |
| 186 | 4.12 | 33.790 | 26.83 | 300 | 3.54 | 33.90 | 26.98 | 111 | 0.47 |
| 235 | 3.87 | 33.841 | 26.90 | | | | | | |
| 284 | 3.62 | 33.886 | 26.96 | | | | | | |
| 300 | 3.54b) | 33.899b) | (26.98) | | | | | | |

a) From bathythermograph.
b) Value extrapolated by computer.

POG

P-58-4

| OBSERVED | | | | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | $NO_2$-N | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | µg at/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

410 CGS ST. CATHARINES; December 7, 1958; 2013, 1925 GCT; 50°00'N, 145°00'W; wind, variable, force 2; weather, partly cloudy; sea, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.60 | 32.777 | 25.74 | 0 | 6.60 | 32.78 | 25.74 | 226 | 0.00 |
| 10 | 6.43 | 32.754 | 25.75 | 10 | 6.43 | 32.75 | 25.75 | 226 | 0.02 |
| 25 | 6.38 | 32.749 | 25.75 | 20 | 6.37 | 32.75 | 25.75 | 226 | 0.04 |
| 50 | 6.40 | 32.754 | 25.75 | 30 | 6.37 | 32.75 | 25.75 | 226 | 0.07 |
| 75 | 6.37 | 32.759 | 25.76 | 50 | 6.40 | 32.75 | 25.75 | 226 | 0.11 |
| 100 | 5.18 | 33.151 | 26.21 | 75 | 6.37 | 32.76 | 25.76 | 225 | 0.17 |
| 125 | 5.23 | 33.677 | 26.62 | 100 | 5.18 | 33.15 | 26.21 | 182 | 0.22 |
| 150 | 4.99 | 33.770 | 26.72 | 125 | 5.23 | 33.68 | 26.62 | 144 | 0.26 |
| 175 | 4.48 | 33.774 | 26.78 | 150 | 4.99 | 33.77 | 26.72 | 134 | 0.30 |
| 200 | 4.29 | 33.792 | 26.82 | 175 | 4.48 | 33.77 | 26.78 | 129 | 0.33 |
| 250 | 3.99 | 33.838 | 26.89 | 200 | 4.29 | 33.79 | 26.82 | 126 | 0.36 |
| 300 | 3.75 | 33.891 | 26.95 | 250 | 3.99 | 33.84 | 26.89 | 120 | 0.42 |
| | | | | 300 | 3.75 | 33.89 | 26.95 | 114 | 0.48 |
| 401 | 3.75 | 34.032 | 27.06 | 400 | 3.75 | 34.03 | 27.06 | 104 | 0.59 |
| 502 | 3.65 | 34.137 | 27.16 | 500 | 3.65 | 34.14 | 27.16 | 96 | 0.69 |
| 745 | 3.25 | 34.288 | 27.32 | 600 | 3.52 | 34.22 | 27.23 | 89 | 0.79 |
| 998 | 2.85 | 34.292 | 27.36 | 700 | 3.34 | 34.27 | 27.29 | 84 | 0.88 |
| 1249 | 2.53 | 34.462 | 27.52 | 800 | 3.16 | 34.30 | 27.34 | 80 | 0.96 |
| | | | | 1000 | 2.85 | 34.29 | 27.36 | 79 | 1.12 |
| | | | | 1200 | 2.59 | 34.42 | 27.48 | 68 | 1.27 |

411 CGS ST. CATHARINES; December 11, 1958; 1949 GCT; 50°00'N, 145°00'W; wind, 190°, force 6; weather, missing; sea, missing.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.60 | 32.786 | 25.75 | 0 | 6.60 | 32.79 | 25.75 | 225 | 0.00 |
| 10 | 6.52 | 32.762 | 25.74 | 10 | 6.52 | 32.76 | 25.74 | 226 | 0.02 |
| 24 | 6.50 | 32.758 | 25.74 | 20 | 6.49 | 32.76 | 25.74 | 226 | 0.04 |
| 49 | 6.52 | 32.758 | 25.74 | 30 | 6.50 | 32.76 | 25.74 | 226 | 0.07 |
| 69 | 6.52 | 32.768 | 25.75 | 50 | 6.52 | 32.76 | 25.74 | 227 | 0.11 |
| 78 | 6.52 | 32.785 | 25.76 | 75 | 6.52 | 32.78 | 25.76 | 226 | 0.17 |
| 88 | 6.39 | 32.784 | 25.78 | 100 | 5.39 | 33.13 | 26.17 | 187 | 0.22 |
| 98 | 5.52 | 33.071 | 26.11 | 125 | 5.18 | 33.69 | 26.64 | 142 | 0.26 |
| 108 | 5.01 | 33.335 | 26.38 | 150 | 4.78 | 33.78 | 26.75 | 132 | 0.30 |
| 122 | 5.18 | 33.650 | 26.61 | 175 | 4.41 | 33.77 | 26.79 | 128 | 0.33 |
| 147 | 4.82 | 33.770 | 26.74 | 200 | 4.18 | 33.80 | 26.83 | 124 | 0.36 |
| 173 | 4.43 | 33.768 | 26.78 | 250 | 3.94 | 33.85 | 26.90 | 118 | 0.42 |
| 199 | 4.19 | 33.795 | 26.83 | 300 | 3.73 | 33.90 | 26.96 | 112 | 0.48 |
| 250 | 3.94 | 33.854 | 26.90 | | | | | | |
| 299 | 3.73 | 33.902 | 26.96 | | | | | | |
| 300 | 3.73a) | 33.903a) | (26.96) | | | | | | |

a) Value extrapolated by computer.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HMCS OSHAWA; March 11, 1958; 1809 GCT;[a] 47°25'N, 124°47'W; sounding, 102 fm; wind, 120°, 5 kt; weather, partly cloudy; sea, smooth. 1

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.50 | 30.507 | 7.80 | 23.39 | 0 | 10.50 | 30.51 | 23.39 | 450 | 0.00 |
| 10 | 10.25 | 31.003 | 7.63 | 23.82 | 10 | 10.25 | 31.00 | 23.82 | 410 | 0.04 |
| 20 | 10.85 | 32.231 | 6.53 | 24.67 | 20 | 10.85 | 32.23 | 24.67 | 328 | 0.08 |
| 30 | 10.75 | 32.540 | 6.47 | 24.93 | 30 | 10.75 | 32.54 | 24.93 | 304 | 0.11 |
| 50 | 10.70 | 32.713 | 6.15 | 25.07 | 50 | 10.70 | 32.71 | 25.07 | 291 | 0.17 |
| 75 | 10.41 | 32.877 | 5.78 | 25.25 | 75 | 10.41 | 32.88 | 25.25 | 275 | 0.24 |
| 100 | 8.37 | 33.637 | 3.56 | 26.17 | 100 | 8.37 | 33.64 | 26.17 | 187 | 0.30 |
| 125 | 7.92 | 33.780 | 3.30 | 26.35 | 125 | 7.92 | 33.78 | 26.35 | 170 | 0.35 |
| 150 | 7.72 | 33.852 | 2.89 | 26.43 | 150 | 7.72 | 33.85 | 26.43 | 163 | 0.39 |
| 175 | 7.41 | 33.904 | 2.84 | 26.52 | 175 | 7.41 | 33.90 | 26.52 | 155 | 0.43 |

HMCS OSHAWA; March 11, 1958; 2038 GCT; 47°26.5'N, 125°10'W; sounding, 350 fm; wind, 030°, 5 kt; weather, partly cloudy; sea, smooth. 2

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.80 | 32.457 | 7.67 | 25.02 | 0 | 9.80 | 32.46 | 25.02 | 294 | 0.00 |
| 10 | 9.76 | 32.432 | 7.73 | 25.01 | 10 | 9.76 | 32.43 | 25.01 | 296 | 0.03 |
| 30 | 9.65 | 32.419 | 7.91 | 25.02 | 20 | 9.71 | 32.42 | 25.01 | 296 | 0.06 |
| 50 | 9.69 | 32.452 | 6.83 | 25.04 | 30 | 9.65 | 32.42 | 25.02 | 296 | 0.09 |
| 75 | 9.51 | 32.994 | 5.82 | 25.49 | 50 | 9.69 | 32.45 | 25.04 | 294 | 0.15 |
| 100 | 9.03 | 33.337 | 4.80 | 25.83 | 75 | 9.51 | 32.99 | 25.49 | 252 | 0.22 |
| 125 | 8.57 | 33.524 | 4.19 | 26.05 | 100 | 9.03 | 33.34 | 25.83 | 219 | 0.28 |
| 150 | 8.43 | 33.669 | 3.55 | 26.19 | 125 | 8.57 | 33.52 | 26.05 | 199 | 0.33 |
| 175 | 8.01 | 33.798 | 3.15 | 26.35 | 150 | 8.43 | 33.67 | 26.19 | 186 | 0.38 |
| 200 | 7.57 | 33.875 | 2.35 | 26.47 | 175 | 8.01 | 33.80 | 26.35 | 171 | 0.42 |
| 225 | 7.29 | 33.926 | 2.77 | 26.55 | 200 | 7.57 | 33.88 | 26.47 | 160 | 0.46 |
| 250 | 7.03 | 33.964 | 2.39 | 26.62 | 225 | 7.29 | 33.93 | 26.55 | 152 | 0.50 |
| 275 | 6.87 | 33.978 | 2.17 | 26.65 | 250 | 7.03 | 33.96 | 26.62 | 146 | 0.54 |
| 300 | 6.56 | 34.007 | 1.93 | 26.72 | 300 | 6.56 | 34.01 | 26.72 | 138 | 0.61 |
| 400 | 5.76 | 34.062 | 1.31 | 26.86 | 400 | 5.76 | 34.06 | 26.86 | 125 | 0.74 |
| 500 | 5.29 | 34.098 | 1.00 | 26.95 | 500 | 5.29 | 34.10 | 26.95 | 117 | 0.87 |
| 600 | 4.60 | 34.186 | 0.54 | 27.10 | 600 | 4.60 | 34.19 | 27.10 | 104 | 0.98 |

HMCS OSHAWA; March 11, 1958; 2336 GCT; 47°28'N, 125°30'W; sounding, 790 fm; wind, 030°, 10 kt; weather, partly cloudy; sea, slight. 3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (9.94)b) | (32.523)b) | - | (25.05) | 0 | 9.94 | 32.52 | 25.05 | 292 | 0.00 |
| 5 | 9.84 | 32.524 | 6.83 | 25.07 | 10 | 9.77 | 32.52 | 25.08 | 289 | 0.03 |
| 20 | 9.70 | 32.526 | 6.94 | 25.09 | 20 | 9.70 | 32.53 | 25.09 | 288 | 0.06 |
| 30 | 9.73 | 32.526 | 6.84 | 25.09 | 30 | 9.73 | 32.53 | 25.09 | 289 | 0.09 |
| 49 | 9.71 | 32.522 | 6.52 | 25.09 | 50 | 9.71 | 32.52 | 25.09 | 289 | 0.14 |
| 74 | 9.64 | 32.619 | 5.03 | 25.18 | 75 | 9.60 | 32.64 | 25.19 | 280 | 0.22 |
| 98 | 8.11 | 33.297 | 4.08 | 25.94 | 100 | 8.05 | 33.34 | 25.98 | 205 | 0.28 |
| 123 | 8.00 | 33.588 | 3.85 | 26.19 | 125 | 7.98 | 33.60 | 26.20 | 184 | 0.33 |
| 148 | 7.71 | 33.700 | 3.38 | 26.32 | 150 | 7.69 | 33.71 | 26.33 | 173 | 0.37 |
| 172 | 7.58 | 33.824 | 2.81 | 26.43 | 175 | 7.56 | 33.84 | 26.45 | 162 | 0.41 |
| 197 | 7.39 | 33.912 | 2.35 | 26.53 | 200 | 7.37 | 33.92 | 26.54 | 154 | 0.45 |
| 222 | 7.24 | 33.957 | 2.49 | 26.59 | 225 | 7.20 | 33.96 | 26.59 | 149 | 0.49 |
| 246 | 6.83 | 33.962 | 2.06 | 26.65 | 250 | 6.78 | 33.96 | 26.65 | 143 | 0.53 |
| 296 | 6.51 | 33.995 | 1.58 | 26.71 | 300 | 6.48 | 34.00 | 26.72 | 137 | 0.60 |
| 392 | 5.78 | 34.076 | 0.76 | 26.87 | 400 | 5.74 | 34.08 | 26.88 | 123 | 0.73 |
| 491 | 5.43 | 34.125 | 0.57 | 26.95 | 500 | 5.38 | 34.13 | 26.96 | 116 | 0.85 |
| 590 | 4.69 | 34.186 | 0.50 | 27.09 | 600 | 4.63 | 34.19 | 27.10 | 104 | 0.96 |
| 788 | 4.08 | 34.300 | 0.29 | 27.24 | 700 | 4.21 | 34.25 | 27.19 | 95 | 1.06 |
| 986 | 3.58 | 34.395 | 0.29 | 27.37 | 800 | 4.05 | 34.31 | 27.25 | 90 | 1.16 |
| 1000 | (3.55)b) | (34.401)b) | - | (27.38) | 1000 | 3.55 | 34.40 | 27.38 | 79 | 1.33 |

a) Although not indicated in the tabulation, two casts were usually made at a station, the first to a depth of 300 meters. (When the water depth limited the cast to 1000 meters or less, a single cast was made.) The time reported is the time of the messenger release of the shallow cast. The deeper cast was made 45 to 60 minutes later.

b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 4 | HMCS OSHAWA; March 12, 1958; 0445 GCT; 47°30'N, 126°05'W; sounding, 900 fm; wind, 340°, 15 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | (9.25)a) | (32.436)a) | - | (25.10) | 0 | 9.25 | 32.44 | 25.10 | 288 | 0.00 |
| 5 | 9.26 | 32.434 | 7.17 | 25.09 | 10 | 9.26 | 32.43 | 25.09 | 288 | 0.03 |
| 20 | 9.25 | 32.434 | 7.06 | 25.09 | 20 | 9.25 | 32.43 | 25.09 | 288 | 0.06 |
| 29 | 9.21 | 32.438 | 7.18 | 25.10 | 30 | 9.21 | 32.44 | 25.10 | 287 | 0.09 |
| 49 | 9.23 | 32.446 | 7.00 | 25.11 | 50 | 9.22 | 32.45 | 25.11 | 287 | 0.14 |
| 74 | 8.80 | 32.792 | 6.34 | 25.44 | 75 | 8.77 | 32.81 | 25.47 | 254 | 0.21 |
| 98 | 7.74 | 33.459 | 4.56 | 26.12 | 100 | 7.70 | 33.49 | 26.16 | 188 | 0.27 |
| 123 | 7.72 | 33.608 | 4.05 | 26.24 | 125 | 7.72 | 33.62 | 26.25 | 179 | 0.32 |
| 147 | 7.73 | 33.793 | 3.16 | 26.39 | 150 | 7.70 | 33.81 | 26.40 | 166 | 0.36 |
| 172 | 7.33 | 33.850 | 3.28 | 26.49 | 175 | 7.29 | 33.86 | 26.50 | 157 | 0.40 |
| 196 | 7.08 | 33.881 | 3.39 | 26.55 | 200 | 7.05 | 33.89 | 26.56 | 152 | 0.44 |
| 221 | 6.91 | 33.934 | 3.11 | 26.61 | 225 | 6.86 | 33.94 | 26.62 | 146 | 0.48 |
| 245 | 6.56 | 33.928 | 2.96 | 26.66 | 250 | 6.49 | 33.93 | 26.67 | 142 | 0.51 |
| 294 | 5.91 | 33.997 | 1.88 | 26.79 | 300 | 5.84 | 34.00 | 26.81 | 129 | 0.58 |
| 392 | 5.16 | 34.014 | 1.51 | 26.90 | 400 | 5.12 | 34.02 | 26.90 | 120 | 0.70 |
| 490 | 4.83 | 34.058 | 1.11 | 26.97 | 500 | 4.80 | 34.07 | 26.98 | 114 | 0.82 |
| 588 | 4.55 | 34.168 | 0.67 | 27.09 | 600 | 4.52 | 34.18 | 27.10 | 103 | 0.93 |
| 785 | 3.97 | 34.288 | 0.57 | 27.25 | 700 | 4.22 | 34.25 | 27.19 | 95 | 1.03 |
| 970 | 3.56 | 34.400 | 0.49 | 27.38 | 800 | 3.93 | 34.30 | 27.26 | 89 | 1.13 |
| 1000 | (3.51)a) | (34.418)a) | - | (27.40) | 1000 | 3.51 | 34.42 | 27.40 | 77 | 1.29 |
| 5 | HMCS OSHAWA; March 12, 1958; 2155 GCT; 47°35'N, 127°21'W; sounding, 1396 fm; wind, 010°, 5 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | (8.72)a) | (32.431)a) | - | (25.17) | 0 | 8.72 | 32.43 | 25.17 | 280 | 0.00 |
| 5 | 8.73 | 32.426 | 6.79 | 25.17 | 10 | 8.73 | 32.42 | 25.17 | 281 | 0.03 |
| 20 | 8.73 | 32.421 | 6.72 | 25.16 | 20 | 8.73 | 32.42 | 25.16 | 281 | 0.06 |
| 30 | 8.71 | 32.426 | 6.73 | 25.17 | 30 | 8.71 | 32.43 | 25.17 | 281 | 0.08 |
| 50 | 8.75 | 32.430 | 6.60 | 25.17 | 50 | 8.75 | 32.43 | 25.17 | 282 | 0.14 |
| 75 | 7.31 | 32.824 | 6.12 | 25.69 | 75 | 7.31 | 32.82 | 25.69 | 232 | 0.21 |
| 100 | 7.31 | 33.300 | 5.02 | 26.06 | 100 | 7.31 | 33.30 | 26.06 | 197 | 0.26 |
| 125 | 7.28 | 33.597 | 4.35 | 26.30 | 125 | 7.28 | 33.60 | 26.30 | 175 | 0.31 |
| 150 | 7.22 | 33.798 | 3.67 | 26.46 | 150 | 7.22 | 33.80 | 26.46 | 160 | 0.35 |
| 175 | 7.07 | 33.891 | 3.27 | 26.56 | 175 | 7.07 | 33.89 | 26.56 | 151 | 0.39 |
| 200 | 6.87 | 33.926 | 3.16 | 26.61 | 200 | 6.87 | 33.93 | 26.61 | 146 | 0.43 |
| 225 | 6.63 | 33.954 | 2.51 | 26.67 | 225 | 6.63 | 33.95 | 26.67 | 142 | 0.46 |
| 250 | 6.35 | 33.963 | 2.34 | 26.71 | 250 | 6.35 | 33.96 | 26.71 | 138 | 0.50 |
| 300 | 6.00 | 33.994 | 1.83 | 26.78 | 300 | 6.00 | 33.99 | 26.78 | 131 | 0.56 |
| 398 | 5.34 | 34.053 | 1.20 | 26.91 | 400 | 5.33 | 34.05 | 26.91 | 120 | 0.69 |
| 497 | 4.92 | 34.122 | 0.74 | 27.01 | 500 | 4.91 | 34.12 | 27.01 | 111 | 0.81 |
| 597 | 4.50 | 34.200 | 0.49 | 27.12 | 600 | 4.49 | 34.20 | 27.12 | 101 | 0.92 |
| 797 | 3.93 | 34.321 | 0.34 | 27.28 | 700 | 4.16 | 34.27 | 27.21 | 93 | 1.01 |
| 993 | 3.46 | 34.407 | 0.31 | 27.39 | 800 | 3.92 | 34.32 | 27.28 | 87 | 1.10 |
| 1190 | 3.03 | 34.464 | 0.45 | 27.48 | 1000 | 3.44 | 34.41 | 27.39 | 77 | 1.27 |
| 1487 | 2.49 | 34.528 | 0.76 | 27.58 | 1200 | 3.01 | 34.47 | 27.48 | 69 | 1.42 |
| 1982 | 1.94 | 34.602 | 1.43 | 27.68 | 1500 | 2.47 | 34.53 | 27.58 | 60 | 1.62 |
| 2000 | (1.93)a) | (34.604)a) | - | (27.68) | 2000 | 1.93 | 34.60 | 27.68 | 50 | 1.90 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

6

HMCS OSHAWA; March 12, 1958; 2054 GCT; 47°41'N, 129°09'W; sounding, 1395 fm; wind, 060°, 12 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (8.80)a) | (32.409)a) | - | (25.15) | 0 | 8.80 | 32.41 | 25.15 | 283 | 0.00 |
| 5 | 8.71 | 32.408 | 6.71 | 25.16 | 10 | 8.65 | 32.41 | 25.17 | 281 | 0.03 |
| 18 | 8.59 | 32.406 | 6.72 | 25.17 | 20 | 8.58 | 32.41 | 25.17 | 280 | 0.06 |
| 28 | 8.60 | 32.406 | 6.69 | 25.17 | 30 | 8.60 | 32.41 | 25.17 | 281 | 0.08 |
| 46 | 8.59 | 32.407 | 6.71 | 25.17 | 50 | 8.59 | 32.41 | 25.18 | 281 | 0.14 |
| 69 | 8.55 | 32.428 | 6.63 | 25.20 | 75 | 8.28 | 32.52 | 25.31 | 268 | 0.21 |
| 92 | 6.93 | 32.977 | 5.81 | 25.86 | 100 | 6.73 | 33.10 | 25.98 | 205 | 0.27 |
| 115 | 6.88 | 33.215 | 5.53 | 26.05 | 125 | 6.91 | 33.33 | 26.14 | 190 | 0.32 |
| 138 | 6.99 | 33.481 | 4.77 | 26.25 | 150 | 6.98 | 33.59 | 26.33 | 172 | 0.36 |
| 161 | 6.93 | 33.668 | 4.63 | 26.40 | 175 | 6.92 | 33.78 | 26.49 | 158 | 0.41 |
| 184 | 6.93 | 33.845 | 3.52 | 26.54 | 200 | 6.72 | 33.90 | 26.61 | 147 | 0.44 |
| 207 | 6.57 | 33.899 | 3.35 | 26.63 | 225 | 6.37 | 33.93 | 26.68 | 140 | 0.48 |
| 230 | 6.33 | (33.935)b) | - | (26.69) | 250 | 6.13 | 33.95 | 26.73 | 136 | 0.52 |
| 275 | 5.89 | 33.956 | 2.26 | 26.76 | 300 | 5.69 | 33.97 | 26.80 | 129 | 0.58 |
| 394 | 5.17 | 34.038 | 1.38 | 26.92 | 400 | 5.14 | 34.04 | 26.92 | 118 | 0.71 |
| 493 | 4.71 | 34.180 | 0.97 | 27.08 | 500 | 4.68 | 34.19 | 27.09 | 104 | 0.82 |
| 592 | 4.41 | 34.197 | 0.53 | 27.13 | 600 | 4.39 | 34.20 | 27.13 | 100 | 0.92 |
| 792 | 3.99 | 34.307 | 0.35 | 27.26 | 700 | 4.15 | 34.24 | 27.19 | 95 | 1.02 |
| 991 | 3.42 | 34.394 | 0.31 | 27.38 | 800 | 3.97 | 34.31 | 27.26 | 89 | 1.11 |
| 1190 | 2.97 | 34.452 | 0.45 | 27.47 | 1000 | 3.40 | 34.40 | 27.39 | 77 | 1.28 |
| 1487 | 2.47 | 34.524 | 0.94 | 27.57 | 1200 | 2.95 | 34.45 | 27.48 | 69 | 1.43 |
| 1985 | 1.95 | 34.606 | 1.44 | 27.68 | 1500 | 2.45 | 34.53 | 27.58 | 60 | 1.63 |
| 2482 | 1.79 | 34.590 | 1.41 | 27.68 | 2000 | 1.94 | 34.61 | 27.68 | 50 | 1.91 |
| 2500 | (1.79)a) | (34.588)a) | - | (27.68) | 2500 | 1.79 | 34.59 | 27.68 | 52 | 2.17 |

7

HMCS OSHAWA; March 13, 1958; 0535 GCT; 47°49'N, 131°05'W; sounding, 1550 fm; wind, 030°, 10 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.91)a) | (32.446)a) | - | (25.31) | 0 | 7.91 | 32.45 | 25.31 | 268 | 0.00 |
| 5 | 7.90 | 32.444 | 6.76 | 25.31 | 10 | 7.89 | 32.44 | 25.31 | 268 | 0.03 |
| 20 | 7.89 | 32.444 | 6.87 | 25.31 | 20 | 7.89 | 32.44 | 25.31 | 268 | 0.05 |
| 30 | 7.90 | 32.448 | 6.83 | 25.31 | 30 | 7.90 | 32.45 | 25.31 | 268 | 0.08 |
| 50 | 7.90 | 32.440 | 6.74 | 25.30 | 50 | 7.90 | 32.44 | 25.30 | 269 | 0.14 |
| 74 | 7.89 | 32.448 | 6.76 | 25.31 | 75 | 7.88 | 32.45 | 25.31 | 268 | 0.20 |
| 99 | 7.46 | 32.582 | 6.43 | 25.48 | 100 | 7.43 | 32.60 | 25.49 | 251 | 0.27 |
| 124 | 6.46 | 33.167 | 5.48 | 26.07 | 125 | 6.44 | 33.18 | 26.09 | 195 | 0.32 |
| 149 | 6.22 | 33.447 | 5.02 | 26.32 | 150 | 6.22 | 33.46 | 26.33 | 172 | 0.37 |
| 174 | 6.31 | 33.734 | 4.38 | 26.54 | 175 | 6.31 | 33.74 | 26.54 | 152 | 0.41 |
| 199 | 6.34 | 33.859 | 3.58 | 26.63 | 200 | 6.33 | 33.86 | 26.63 | 144 | 0.45 |
| 224 | 6.05 | 33.914 | 3.04 | 26.71 | 225 | 6.04 | 33.92 | 26.71 | 137 | 0.48 |
| 248 | 5.83 | (33.955)b) | - | (26.77) | 250 | 5.81 | 33.96 | 26.77 | 131 | 0.52 |
| 297 | 5.37 | 34.001 | 2.06 | 26.86 | 300 | 5.35 | 34.00 | 26.87 | 123 | 0.58 |
| 367 | 5.04 | 33.981 | 1.65 | 26.89 | 400 | 4.89 | 34.00 | 26.92 | 119 | 0.70 |
| 460 | 4.62 | 34.080 | 0.90 | 27.01 | 500 | 4.47 | 34.12 | 27.06 | 106 | 0.82 |
| 554 | 4.29 | 34.158 | 0.67 | 27.11 | 600 | 4.15 | 34.19 | 27.15 | 98 | 0.92 |
| 742 | 3.84 | 34.276 | 0.44 | 27.25 | 700 | 3.92 | 34.25 | 27.22 | 92 | 1.02 |
| 929 | 3.38 | 34.360 | 0.32 | 27.36 | 800 | 3.70 | 34.31 | 27.29 | 86 | 1.11 |
| 1118 | 2.96 | 34.430 | 0.39 | 27.46 | 1000 | 3.22 | 34.39 | 27.40 | 76 | 1.27 |
| 1405 | 2.53 | 34.508 | 0.68 | 27.56 | 1200 | 2.81 | 34.46 | 27.49 | 68 | 1.42 |
| 1896 | 1.97 | 34.594 | 1.34 | 27.67 | 1500 | 2.40 | 34.53 | 27.58 | 59 | 1.61 |
| 2394 | 1.73 | 34.577 | 2.18 | 27.68 | 2000 | 1.89 | 34.60 | 27.68 | 50 | 1.89 |
| 2500 | (1.72)a) | (34.560)a) | - | (27.66) | 2500 | 1.72 | 34.56 | 27.66 | 53 | 2.15 |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 8 | HMCS OSHAWA; March 13, 1958; 1405 GCT; 47°56'N, 132°56'W; sounding, 1400 fm; wind, 010°, 10 kt; weather, partly cloudy, lightning visible; sea, slight. | | | | | | | | | |
| 0 | (7.87)a) | (32.455)a) | - | (25.32) | 0 | 7.87 | 32.45 | 25.32 | 266 | 0.00 |
| 5 | 7.86 | 32.454 | 6.61 | 25.32 | 10 | 7.85 | 32.45 | 25.32 | 266 | 0.03 |
| 20 | 7.83 | 32.451 | 6.60 | 25.32 | 20 | 7.83 | 32.45 | 25.32 | 266 | 0.05 |
| 30 | 7.82 | 32.449 | 6.63 | 25.32 | 30 | 7.82 | 32.45 | 25.32 | 267 | 0.08 |
| 50 | 7.80 | 32.454 | 6.61 | 25.33 | 50 | 7.80 | 32.45 | 25.33 | 266 | 0.13 |
| 75 | 7.76 | 32.462 | 6.64 | 25.34 | 75 | 7.76 | 32.46 | 25.34 | 266 | 0.20 |
| 100 | 6.70 | 32.778 | 6.07 | 25.73 | 100 | 6.70 | 32.78 | 25.73 | 228 | 0.26 |
| 125 | 6.16 | 33.143 | 5.66 | 26.09 | 125 | 6.16 | 33.14 | 26.09 | 195 | 0.32 |
| 149 | 5.95 | 33.406 | 5.11 | 26.32 | 150 | 5.94 | 33.42 | 26.33 | 172 | 0.36 |
| 174 | 5.83 | 33.684 | 4.56 | 26.56 | 175 | 5.83 | 33.69 | 26.56 | 150 | 0.40 |
| 199 | 5.84 | 33.826 | 4.07 | 26.67 | 200 | 5.84 | 33.83 | 26.67 | 140 | 0.44 |
| 224 | 5.72 | 33.860 | 3.77 | 26.71 | 225 | 5.71 | 33.86 | 26.71 | 137 | 0.48 |
| 249 | 5.52 | 33.880 | 3.27 | 26.75 | 250 | 5.51 | 33.88 | 26.75 | 133 | 0.51 |
| 299 | 5.14 | 33.929 | 2.31 | 26.83 | 300 | 5.13 | 33.93 | 26.83 | 126 | 0.57 |
| 384 | 4.56 | 33.983 | 1.44 | 26.94 | 400 | 4.47 | 34.00 | 26.96 | 114 | 0.70 |
| 481 | 4.08 | 34.066 | 0.95 | 27.06 | 500 | 4.02 | 34.08 | 27.08 | 104 | 0.80 |
| 578 | 3.88 | 34.138 | 0.64 | 27.14 | 600 | 3.84 | 34.15 | 27.15 | 97 | 0.91 |
| 776 | 3.62 | 34.286 | 0.40 | 27.28 | 700 | 3.70 | 34.23 | 27.23 | 91 | 1.00 |
| 971 | 3.15 | 34.367 | 0.36 | 27.39 | 800 | 3.57 | 34.30 | 27.29 | 85 | 1.09 |
| 1172 | 2.84 | 34.436 | 0.40 | 27.47 | 1000 | 3.09 | 34.38 | 27.40 | 75 | 1.25 |
| 1463 | 2.40 | 34.514 | 0.71 | 27.57 | 1200 | 2.80 | 34.44 | 27.48 | 68 | 1.40 |
| 1955 | 1.91 | 34.592 | 1.36 | 27.67 | 1500 | 2.35 | 34.52 | 27.58 | 59 | 1.59 |
| 2235 | 1.82 | 34.625 | 1.69 | 27.71 | 2000 | 1.89 | 34.60 | 27.68 | 50 | 1.87 |
| 9 | HMCS OSHAWA; March 13, 1958; 2306 GCT; 48°03'N, 134°44'W; sounding, 2200 fm; wind, 030°, 15 kt; weather, clear; sea, moderate. | | | | | | | | | |
| 0 | (7.96)a) | (32.461)a) | - | (25.31) | 0 | 7.96 | 32.46 | 25.31 | 267 | 0.00 |
| 5 | 7.90 | 32.463 | 6.64 | 25.32 | 10 | 7.85 | 32.46 | 25.33 | 266 | 0.03 |
| 20 | 7.80 | 32.465 | 6.65 | 25.34 | 20 | 7.80 | 32.47 | 25.34 | 265 | 0.05 |
| 30 | 7.81 | 32.464 | 6.62 | 25.33 | 30 | 7.81 | 32.46 | 25.33 | 265 | 0.08 |
| 50 | 7.80 | 32.464 | 6.55 | 25.34 | 50 | 7.80 | 32.46 | 25.34 | 266 | 0.13 |
| 75 | 7.72 | 32.475 | 6.66 | 25.36 | 75 | 7.72 | 32.47 | 25.36 | 264 | 0.20 |
| 100 | 6.42 | 33.010 | 5.72 | 25.95 | 100 | 6.42 | 33.01 | 25.95 | 208 | 0.26 |
| 125 | 6.16 | 33.522 | 4.91 | 26.39 | 125 | 6.16 | 33.52 | 26.39 | 166 | 0.31 |
| 150 | 6.24 | 33.765 | 4.23 | 26.57 | 150 | 6.24 | 33.77 | 26.57 | 150 | 0.35 |
| 175 | 6.08 | 33.809 | 4.37 | 26.62 | 175 | 6.08 | 33.81 | 26.62 | 145 | 0.38 |
| 200 | 5.84 | 33.860 | 4.38 | 26.69 | 200 | 5.84 | 33.86 | 26.69 | 138 | 0.42 |
| 225 | 5.61 | 33.883 | 4.10 | 26.74 | 225 | 5.61 | 33.88 | 26.74 | 134 | 0.45 |
| 250 | 5.38 | 33.906 | 3.51 | 26.79 | 250 | 5.38 | 33.91 | 26.79 | 130 | 0.49 |
| 300 | 5.06 | 33.931 | 2.89 | 26.84 | 300 | 5.06 | 33.93 | 26.84 | 125 | 0.55 |
| 400 | 4.45 | 33.987 | 1.84 | 26.96 | 400 | 4.45 | 33.99 | 26.96 | 115 | 0.67 |
| 501 | 4.10 | 34.062 | 1.24 | 27.05 | 500 | 4.10 | 34.06 | 27.05 | 106 | 0.78 |
| 602 | 3.90 | 34.174 | 0.72 | 27.16 | 600 | 3.90 | 34.17 | 27.16 | 97 | 0.89 |
| 803 | 3.58 | 34.315 | 0.32 | 27.31 | 700 | 3.73 | 34.26 | 27.24 | 89 | 0.98 |
| 1004 | 3.12 | 34.406 | 0.30 | 27.42 | 800 | 3.58 | 34.31 | 27.30 | 84 | 1.07 |
| 1206 | 2.76 | 34.464 | 0.44 | 27.50 | 1000 | 3.13 | 34.40 | 27.42 | 74 | 1.23 |
| 1509 | 2.34 | 34.529 | 0.76 | 27.59 | 1200 | 2.77 | 34.46 | 27.50 | 67 | 1.37 |
| 2013 | 1.89 | 34.605 | 1.18 | 27.69 | 1500 | 2.35 | 34.53 | 27.59 | 59 | 1.56 |
| | | | | | 2000 | 1.90 | 34.60 | 27.68 | 50 | 1.84 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

10

HMCS OSHAWA; March 14, 1958; 0748 GCT; 48°32'N, 133°26'W; sounding, 1950 fm; wind, 030°, 15 kt; weather, clear; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.44)a) | (32.515)a) | - | (25.43) | 0 | 7.44 | 32.51 | 25.43 | 256 | 0.00 |
| 5 | 7.42 | 32.516 | 6.98 | 25.43 | 10 | 7.41 | 32.52 | 25.43 | 256 | 0.03 |
| 20 | 7.39 | 32.521 | 6.96 | 25.44 | 20 | 7.39 | 32.52 | 25.44 | 255 | 0.05 |
| 30 | 7.39 | 32.526 | 6.85 | 25.44 | 30 | 7.39 | 32.53 | 25.44 | 255 | 0.08 |
| 50 | 7.28 | 32.543 | 6.83 | 25.47 | 50 | 7.28 | 32.54 | 25.47 | 253 | 0.13 |
| 75 | 7.12 | 32.556 | 6.84 | 25.50 | 75 | 7.12 | 32.56 | 25.50 | 250 | 0.19 |
| 100 | 6.39 | 32.941 | 6.18 | 25.90 | 100 | 6.39 | 32.94 | 25.90 | 212 | 0.25 |
| 125 | 5.91 | 33.332 | 5.58 | 26.27 | 125 | 5.91 | 33.33 | 26.27 | 178 | 0.30 |
| 150 | 6.13 | 33.639 | 4.73 | 26.48 | 150 | 6.13 | 33.64 | 26.48 | 158 | 0.34 |
| 175 | 6.18 | 33.782 | 4.23 | 26.59 | 175 | 6.18 | 33.78 | 26.59 | 148 | 0.38 |
| 200 | 5.91 | 33.866 | 3.82 | 26.69 | 200 | 5.91 | 33.87 | 26.69 | 139 | 0.42 |
| 225 | 5.50 | 33.885 | 3.74 | 26.76 | 225 | 5.50 | 33.89 | 26.76 | 132 | 0.45 |
| 250 | 5.25 | 33.950 | 2.70 | 26.84 | 250 | 5.25 | 33.95 | 26.84 | 125 | 0.48 |
| 300 | 4.68 | 33.919 | 2.58 | 26.88 | 300 | 4.68 | 33.92 | 26.88 | 121 | 0.54 |
| 381 | 4.38 | 34.009 | 1.60 | 26.98 | 400 | 4.31 | 34.03 | 27.00 | 110 | 0.66 |
| 476 | 4.02 | 34.084 | 1.01 | 27.08 | 500 | 3.97 | 34.11 | 27.10 | 101 | 0.77 |
| 572 | 3.92 | 34.186 | 0.58 | 27.17 | 600 | 3.87 | 34.21 | 27.19 | 94 | 0.87 |
| 764 | 3.44 | 34.287 | 0.48 | 27.30 | 700 | 3.64 | 34.27 | 27.26 | 87 | 0.96 |
| 957 | 3.15 | 34.375 | 0.38 | 27.39 | 800 | 3.37 | 34.30 | 27.32 | 82 | 1.04 |
| 1151 | 2.85 | 34.447 | 0.48 | 27.48 | 1000 | 3.08 | 34.39 | 27.41 | 74 | 1.20 |
| 1441 | 2.39 | 34.514 | 0.68 | 27.57 | 1200 | 2.77 | 34.46 | 27.50 | 67 | 1.34 |
| 1924 | 1.92 | 34.606 | 1.44 | 27.68 | 1500 | 2.31 | 34.53 | 27.59 | 58 | 1.54 |
| 2408 | 1.72 | 34.641 | 2.07 | 27.73 | 2000 | 1.87 | 34.62 | 27.70 | 49 | 1.81 |
| 2891 | 1.60 | 34.667 | 2.42 | 27.76 | 2500 | 1.69 | 34.65 | 27.73 | 46 | 2.05 |
| 3000 | (1.58)a) | (34.672)a) | - | (27.76) | 3000 | 1.58 | 34.67 | 27.76 | 45 | 2.28 |

11

HMCS OSHAWA; March 14, 1958; 1526 GCT; 48°57'N, 132°13'W; sounding, 1620 fm; wind, 300°, 5 kt; weather, overcast; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.58)a) | (32.488)a) | - | (25.39) | 0 | 7.58 | 32.49 | 25.39 | 260 | 0.00 |
| 5 | 7.56 | 32.491 | 6.76 | 25.39 | 10 | 7.55 | 32.49 | 25.39 | 259 | 0.03 |
| 20 | 7.54 | 32.490 | 6.64 | 25.39 | 20 | 7.54 | 32.49 | 25.39 | 260 | 0.05 |
| 30 | 7.56 | 32.481 | 6.55 | 25.38 | 30 | 7.56 | 32.48 | 25.38 | 261 | 0.08 |
| 50 | 7.55 | 32.481 | 6.59 | 25.38 | 50 | 7.55 | 32.48 | 25.38 | 261 | 0.13 |
| 75 | 7.46 | 32.516 | 6.61 | 25.42 | 75 | 7.46 | 32.52 | 25.42 | 257 | 0.20 |
| 100 | 5.98 | 33.056 | 5.66 | 26.04 | 100 | 5.98 | 33.06 | 26.04 | 199 | 0.25 |
| 125 | 5.76 | 33.430 | 4.86 | 26.36 | 125 | 5.76 | 33.43 | 26.36 | 168 | 0.30 |
| 150 | 5.54 | 33.636 | 4.45 | 26.55 | 150 | 5.54 | 33.64 | 26.55 | 151 | 0.34 |
| 175 | 5.43 | 33.768 | 4.03 | 26.67 | 175 | 5.43 | 33.77 | 26.67 | 140 | 0.38 |
| 200 | 5.34 | 33.830 | 3.58 | 26.73 | 200 | 5.34 | 33.83 | 26.73 | 134 | 0.41 |
| 225 | 5.16 | 33.876 | 3.05 | 26.79 | 225 | 5.16 | 33.88 | 26.79 | 129 | 0.44 |
| 250 | 5.00 | 33.907 | 2.54 | 26.83 | 250 | 5.00 | 33.91 | 26.83 | 125 | 0.48 |
| 301 | 4.71 | 33.940 | 1.87 | 26.89 | 300 | 4.72 | 33.94 | 26.89 | 120 | 0.54 |
| 388 | 4.29 | 34.004 | 1.34 | 26.99 | 400 | 4.25 | 34.01 | 27.00 | 110 | 0.66 |
| 484 | 4.02 | 34.102 | 0.82 | 27.09 | 500 | 3.99 | 34.12 | 27.11 | 101 | 0.76 |
| 581 | 3.91 | 34.178 | 0.56 | 27.16 | 600 | 3.88 | 34.19 | 27.18 | 95 | 0.86 |
| 777 | 3.47 | 34.300 | 0.40 | 27.30 | 700 | 3.68 | 34.26 | 27.25 | 89 | 0.95 |
| 969 | 3.13 | 34.371 | 0.67 | 27.39 | 800 | 3.42 | 34.31 | 27.32 | 83 | 1.04 |
| 1163 | 2.86 | 34.452 | 0.50 | 27.48 | 1000 | 3.08 | 34.38 | 27.41 | 75 | 1.20 |
| 1455 | 2.32 | 34.512 | 0.72 | 27.58 | 1200 | 2.80 | 34.46 | 27.50 | 67 | 1.34 |
| 1946 | 1.90 | 34.603 | 1.38 | 27.68 | 1500 | 2.26 | 34.52 | 27.59 | 58 | 1.53 |
| 2436 | 1.70 | 34.645 | 2.04 | 27.73 | 2000 | 1.87 | 34.61 | 27.69 | 49 | 1.81 |
| 2500 | (1.69)a) | (34.647)a) | - | (27.73) | 2500 | 1.69 | 34.65 | 27.73 | 46 | 2.05 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 12 | HMCS OSHAWA; March 14, 1958; 2333 GCT; 49°30'N, 130°58'W; sounding, 1375 fm; wind, 200°, 5 kt; weather, cloudy; sea, smooth. | | | | | | | | | |
| 0 | (7.91)a) | (32.454)a) | - | (25.31) | 0 | 7.91 | 32.45 | 25.31 | 267 | 0.00 |
| 5 | 7.78 | 32.454 | 6.99 | 25.33 | 10 | 7.68 | 32.45 | 25.34 | 264 | 0.03 |
| 20 | 7.56 | 32.452 | 6.93 | 25.36 | 20 | 7.56 | 32.45 | 25.36 | 263 | 0.05 |
| 30 | 7.56 | 32.450 | 6.93 | 25.36 | 30 | 7.56 | 32.45 | 25.36 | 263 | 0.08 |
| 50 | 7.56 | 32.451 | 6.89 | 25.36 | 50 | 7.56 | 32.45 | 25.36 | 263 | 0.13 |
| 75 | 7.54 | 32.458 | 6.90 | 25.37 | 75 | 7.54 | 32.46 | 25.37 | 263 | 0.20 |
| 100 | 7.27 | 32.534 | 6.72 | 25.46 | 100 | 7.27 | 32.53 | 25.46 | 254 | 0.26 |
| 125 | 6.09 | 33.198 | 5.59 | 26.14 | 125 | 6.09 | 33.20 | 26.14 | 190 | 0.32 |
| 150 | 6.41 | 33.656 | 4.37 | 26.46 | 150 | 6.41 | 33.66 | 26.46 | 160 | 0.36 |
| 175 | 6.28 | 33.850 | 3.65 | 26.63 | 175 | 6.28 | 33.85 | 26.63 | 144 | 0.40 |
| 200 | 6.07 | 33.899 | 3.08 | 26.70 | 200 | 6.07 | 33.90 | 26.70 | 138 | 0.44 |
| 225 | 5.72 | 33.921 | 2.68 | 26.76 | 225 | 5.72 | 33.92 | 26.76 | 132 | 0.47 |
| 250 | 5.41 | 33.937 | 2.25 | 26.81 | 250 | 5.41 | 33.94 | 26.81 | 128 | 0.50 |
| 300 | 4.94 | 33.949 | 1.94 | 26.87 | 300 | 4.94 | 33.95 | 26.87 | 122 | 0.57 |
| 400 | 4.53 | 34.004 | 1.57 | 26.96 | 400 | 4.53 | 34.00 | 26.96 | 114 | 0.69 |
| 500 | 4.17 | 34.078 | 1.11 | 27.06 | 500 | 4.17 | 34.08 | 27.06 | 106 | 0.80 |
| 600 | 4.02 | 34.175 | 0.72 | 27.15 | 600 | 4.02 | 34.17 | 27.15 | 98 | 0.90 |
| 800 | 3.54 | 34.307 | 0.40 | 27.30 | 700 | 3.81 | 34.25 | 27.23 | 90 | 1.00 |
| 1000 | 3.20 | 34.390 | 0.31 | 27.40 | 800 | 3.54 | 34.31 | 27.30 | 84 | 1.08 |
| 1200 | 2.82 | 34.451 | 0.46 | 27.49 | 1000 | 3.20 | 34.39 | 27.40 | 76 | 1.25 |
| 1499 | 2.39 | 34.519 | 0.71 | 27.58 | 1200 | 2.82 | 34.45 | 27.49 | 68 | 1.39 |
| 1997 | 1.90 | 34.604 | 0.90 | 27.68 | 1500 | 2.39 | 34.52 | 27.58 | 60 | 1.59 |
| 2393 | 1.76 | 34.642 | 1.50 | 27.73 | 2000 | 1.90 | 34.60 | 27.68 | 50 | 1.87 |
| 2500 | (1.76)a) | (34.648)a) | - | (27.73) | 2500 | 1.76 | 34.65 | 27.73 | 47 | 2.11 |
| 13 | HMCS OSHAWA; March 15, 1958; 0610 GCT; 49°48'N, 129°30'W; sounding, 815 fm; wind, 150°, 3 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | (8.76)a) | (31.434)a) | - | (24.39) | 0 | 8.76 | 31.43 | 24.39 | 355 | 0.00 |
| 5 | 8.47 | 31.742 | 8.30 | 24.67 | 10 | 8.24 | 31.99 | 24.90 | 306 | 0.03 |
| 20 | 7.99 | 32.314 | 6.79 | 25.19 | 20 | 7.99 | 32.31 | 25.19 | 279 | 0.06 |
| 30 | 8.00 | 32.402 | 6.51 | 25.26 | 30 | 8.00 | 32.40 | 25.26 | 273 | 0.09 |
| 50 | 7.86 | 32.442 | 6.68 | 25.31 | 50 | 7.86 | 32.44 | 25.31 | 268 | 0.14 |
| 75 | 7.81 | 32.443 | 6.66 | 25.32 | 75 | 7.81 | 32.44 | 25.32 | 268 | 0.21 |
| 100 | 6.74 | 33.129 | 5.20 | 26.00 | 100 | 6.74 | 33.13 | 26.00 | 203 | 0.27 |
| 125 | 6.64 | 33.509 | 4.70 | 26.32 | 125 | 6.64 | 33.51 | 26.32 | 173 | 0.32 |
| 150 | 6.66 | 33.776 | 4.00 | 26.52 | 150 | 6.66 | 33.78 | 26.52 | 154 | 0.36 |
| 175 | 6.48 | 33.882 | 3.26 | 26.63 | 175 | 6.48 | 33.88 | 26.63 | 144 | 0.40 |
| 200 | 6.16 | 33.904 | 2.96 | 26.69 | 200 | 6.16 | 33.90 | 26.69 | 139 | 0.43 |
| 224 | 5.95 | 33.921 | 2.70 | 26.73 | 225 | 5.94 | 33.92 | 26.73 | 135 | 0.47 |
| 249 | 5.79 | 33.951 | 2.11 | 26.77 | 250 | 5.78 | 33.95 | 26.77 | 131 | 0.50 |
| 299 | 5.44 | 33.982 | 1.68 | 26.84 | 300 | 5.43 | 33.98 | 26.84 | 125 | 0.57 |
| 394 | 5.05 | 34.064 | 1.03 | 26.95 | 400 | 5.02 | 34.07 | 26.96 | 115 | 0.69 |
| 493 | 4.62 | 34.133 | 0.66 | 27.05 | 500 | 4.59 | 34.14 | 27.06 | 106 | 0.80 |
| 592 | 4.26 | 34.189 | 0.53 | 27.14 | 600 | 4.23 | 34.19 | 27.14 | 99 | 0.90 |
| 790 | 3.80 | 34.340 | 0.32 | 27.30 | 700 | 3.97 | 34.26 | 27.23 | 91 | 1.00 |
| 988 | 3.33 | 34.420 | 0.36 | 27.41 | 800 | 3.78 | 34.35 | 27.31 | 84 | 1.09 |
| 1188 | 2.90 | 34.461 | 0.48 | 27.49 | 1000 | 3.30 | 34.42 | 27.42 | 74 | 1.25 |
| 1388 | 2.49 | 34.514 | 0.75 | 27.56 | 1200 | 2.87 | 34.46 | 27.49 | 68 | 1.39 |
| 1500 | (2.27)a) | (34.549)a) | - | (27.61) | 1500 | 2.27 | 34.55 | 27.61 | 56 | 1.58 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HMCS OSHAWA; March 15, 1958; 1033 GCT; 50°18'N, 128°35'W; sounding, 800 fm; wind, 360°, 10 kt; weather, partly cloudy; sea, calm. 14

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (8.69)a) | (31.558)a) | - | (24.50) | 0 | 8.69 | 31.56 | 24.50 | 345 | 0.00 |
| 5 | 9.01 | 31.716 | 7.37 | 24.57 | 10 | 9.22 | 31.85 | 24.64 | 331 | 0.03 |
| 20 | 9.29 | 32.049 | 6.93 | 24.79 | 20 | 9.29 | 32.05 | 24.79 | 317 | 0.07 |
| 30 | 8.91 | 32.153 | 6.66 | 24.93 | 30 | 8.91 | 32.15 | 24.93 | 304 | 0.10 |
| 50 | 7.97 | 32.354 | 6.75 | 25.22 | 50 | 7.97 | 32.35 | 25.22 | 276 | 0.16 |
| 75 | 7.74 | 32.525 | 6.35 | 25.39 | 75 | 7.74 | 32.53 | 25.39 | 260 | 0.22 |
| 100 | 7.14 | 32.952 | 5.62 | 25.81 | 100 | 7.14 | 32.95 | 25.81 | 221 | 0.28 |
| 125 | 6.89 | 33.253 | 5.04 | 26.08 | 125 | 6.89 | 33.25 | 26.08 | 196 | 0.34 |
| 150 | 6.78 | 33.488 | 4.65 | 26.28 | 150 | 6.78 | 33.49 | 26.28 | 177 | 0.38 |
| 175 | 6.69 | 33.723 | 4.41 | 26.48 | 175 | 6.69 | 33.72 | 26.48 | 159 | 0.43 |
| 200 | 6.62 | 33.828 | 4.04 | 26.57 | 200 | 6.62 | 33.83 | 26.57 | 150 | 0.47 |
| 225 | 6.39 | 33.894 | 3.44 | 26.65 | 225 | 6.39 | 33.89 | 26.65 | 143 | 0.50 |
| 250 | 6.16 | 33.934 | 2.78 | 26.71 | 250 | 6.16 | 33.93 | 26.71 | 137 | 0.54 |
| 300 | 5.88 | 33.957 | 2.22 | 26.77 | 300 | 5.88 | 33.96 | 26.77 | 133 | 0.60 |
| 385 | 5.46 | 34.051 | 1.13 | 26.89 | 400 | 5.37 | 34.06 | 26.91 | 120 | 0.73 |
| 480 | 4.80 | 34.085 | 0.92 | 26.99 | 500 | 4.71 | 34.10 | 27.02 | 110 | 0.85 |
| 574 | 4.54 | 34.170 | 0.53 | 27.09 | 600 | 4.47 | 34.19 | 27.11 | 102 | 0.96 |
| 761 | 4.06 | 34.276 | 0.34 | 27.23 | 700 | 4.21 | 34.25 | 27.19 | 95 | 1.06 |
| 947 | 3.41 | 34.391 | 0.36 | 27.38 | 800 | 3.94 | 34.30 | 27.26 | 89 | 1.15 |
| 1130 | 2.94 | 34.449 | 0.41 | 27.47 | 1000 | 3.26 | 34.41 | 27.42 | 75 | 1.31 |
| 1200 | (2.80)a) | (34.457)a) | - | (27.49) | 1200 | 2.80 | 34.46 | 27.49 | 68 | 1.46 |

HMCS OSHAWA; March 15, 1958; 2351 GCT; 50°13'N, 128°46'W; sounding, 890 fm; wind, 050°, 5 kt; weather, partly cloudy; sea, smooth. 15

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (9.10)a) | (31.822)a) | - | (24.64) | 0 | 9.10 | 31.82 | 24.64 | 331 | 0.00 |
| 5 | 8.94 | 31.665 | 7.08 | 24.54 | 10 | 8.86 | 31.59 | 24.50 | 345 | 0.03 |
| 19 | 8.93 | 31.664 | 7.01 | 24.54 | 20 | 8.95 | 31.69 | 24.56 | 339 | 0.07 |
| 29 | 9.33 | 32.060 | 6.72 | 24.79 | 30 | 9.36 | 32.09 | 24.81 | 315 | 0.10 |
| 48 | 9.74 | 32.535 | 6.26 | 25.09 | 50 | 9.71 | 32.55 | 25.11 | 287 | 0.16 |
| 72 | 8.42 | 32.393 | 6.46 | 25.19 | 75 | 8.31 | 32.39 | 25.20 | 279 | 0.23 |
| 97 | 7.91 | 32.418 | 6.57 | 25.28 | 100 | 7.93 | 32.47 | 25.32 | 268 | 0.30 |
| 121 | 8.54 | 33.071 | 5.10 | 25.70 | 125 | 8.41 | 33.13 | 25.77 | 226 | 0.36 |
| 145 | 6.78 | 33.244 | 5.00 | 26.09 | 150 | 6.63 | 33.30 | 26.15 | 189 | 0.42 |
| 169 | 6.74 | 33.543 | 4.38 | 26.33 | 175 | 6.73 | 33.59 | 26.37 | 169 | 0.46 |
| 193 | 6.67 | 33.648 | 4.13 | 26.42 | 200 | 6.65 | 33.69 | 26.46 | 161 | 0.50 |
| 218 | 6.58 | 33.826 | 4.14 | 26.57 | 225 | 6.54 | 33.86 | 26.60 | 148 | 0.54 |
| 242 | 6.41 | 33.902 | 3.36 | 26.65 | 250 | 6.33 | 33.92 | 26.68 | 140 | 0.58 |
| 290 | 5.82 | 33.971 | 2.03 | 26.78 | 300 | 5.72 | 33.98 | 26.81 | 129 | 0.65 |
| 389 | 5.18 | 34.020 | 1.41 | 26.90 | 400 | 5.13 | 34.03 | 26.91 | 120 | 0.77 |
| 488 | 4.85 | 34.086 | 0.94 | 26.99 | 500 | 4.81 | 34.10 | 27.00 | 112 | 0.89 |
| 587 | 4.51 | 34.191 | 0.57 | 27.11 | 600 | 4.47 | 34.20 | 27.12 | 101 | 1.00 |
| 784 | 3.94 | 34.295 | 0.36 | 27.25 | 700 | 4.17 | 34.27 | 27.21 | 93 | 1.09 |
| 982 | 3.44 | 34.377 | 0.39 | 27.37 | 800 | 3.90 | 34.30 | 27.26 | 88 | 1.18 |
| 1180 | 3.00 | 34.446 | 0.47 | 27.47 | 1000 | 3.40 | 34.38 | 27.38 | 78 | 1.35 |
| 1200 | (2.96)a) | (34.452)a) | - | (27.47) | 1200 | 2.96 | 34.45 | 27.47 | 70 | 1.50 |

HMCS OSHAWA; March 15, 1958; 1635 GCT; 50°24.5'N, 128°18.5'W; sounding, 100 fm; wind, 050°, 5 kt; weather, partly cloudy; sea, calm. 16

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.60 | 31.830 | 7.24 | 24.72 | 0 | 8.60 | 31.83 | 24.72 | 323 | 0.00 |
| 10 | 8.82 | 31.816 | 7.28 | 24.68 | 10 | 8.82 | 31.82 | 24.68 | 327 | 0.03 |
| 20 | 8.83 | 31.864 | 6.75 | 24.71 | 20 | 8.83 | 31.86 | 24.71 | 324 | 0.06 |
| 30 | 8.82 | 32.009 | 6.66 | 24.83 | 30 | 8.82 | 32.01 | 24.83 | 313 | 0.10 |
| 50 | 8.22 | 32.329 | 6.64 | 25.17 | 50 | 8.22 | 32.33 | 25.17 | 281 | 0.16 |
| 75 | 8.02 | 32.461 | 5.81 | 25.30 | 75 | 8.02 | 32.46 | 25.30 | 269 | 0.23 |
| 100 | 7.56 | 32.928 | 5.53 | 25.73 | 100 | 7.56 | 32.93 | 25.73 | 228 | 0.29 |
| 125 | 7.25 | 33.374 | 4.51 | 26.13 | 125 | 7.25 | 33.37 | 26.13 | 191 | 0.34 |
| 150 | 7.22 | 33.685 | 3.39 | 26.37 | 150 | 7.22 | 33.69 | 26.37 | 168 | 0.39 |
| 170 | 6.94 | 33.839 | 2.70 | 26.53 | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 17 | HMCS OSHAWA; March 15, 1958; 2050 GCT; 50°42'N, 128°55'W; sounding, 100 fm; wind, 300°, 5 kt; weather, clear; sea, smooth. | | | | | | | | | |
| 0 | (8.72)a) | (31.790)a) | - | (24.67) | 0 | 8.72 | 31.79 | 24.67 | 328 | 0.00 |
| 5 | 8.72 | 31.720 | 8.31 | 24.62 | 10 | 8.71 | 31.71 | 24.61 | 334 | 0.03 |
| 20 | 8.66 | 31.842 | 7.36 | 24.72 | 20 | 8.66 | 31.84 | 24.72 | 323 | 0.07 |
| 30 | 8.56 | 32.199 | 6.74 | 25.02 | 30 | 8.56 | 32.20 | 25.02 | 296 | 0.10 |
| 50 | 8.84 | 32.407 | 6.63 | 25.14 | 50 | 8.84 | 32.41 | 25.14 | 284 | 0.16 |
| 74 | 8.49 | 32.598 | 6.10 | 25.34 | 75 | 8.48 | 32.61 | 25.35 | 265 | 0.22 |
| 99 | 8.32 | 32.825 | 5.50 | 25.54 | 100 | 8.31 | 32.84 | 25.55 | 246 | 0.29 |
| 124 | 7.84 | 33.144 | - | 25.86 | 125 | 7.81 | 33.16 | 25.88 | 215 | 0.35 |
| 149 | 6.85 | 33.647 | 3.74 | 26.40 | 150 | 6.83 | 33.66 | 26.41 | 165 | 0.40 |
| 173 | 6.71 | 33.854 | 2.83 | 26.58 | 175 | 6.73 | 33.86 | 26.58 | 149 | 0.43 |
| 175 | (6.73)a) | (33.859)a) | - | (26.58) | | | | | | |
| 18 | HMCS OSHAWA; March 15, 1958; 2249 GCT; 50°50'N, 129°20'W; sounding, 77 fm; wind, 250°, 5 kt; weather, clear; sea, smooth. | | | | | | | | | |
| 0 | (9.07)a) | (31.286)a) | - | (24.23) | 0 | 9.07 | 31.29 | 24.23 | 370 | 0.00 |
| 5 | 9.02 | 31.414 | 8.61 | 24.33 | 10 | 8.97 | 31.52 | 24.42 | 352 | 0.04 |
| 20 | 8.87 | 31.670 | 6.78 | 24.56 | 20 | 8.87 | 31.67 | 24.56 | 339 | 0.07 |
| 30 | 8.76 | 31.734 | 6.78 | 24.62 | 30 | 8.76 | 31.73 | 24.62 | 333 | 0.10 |
| 49 | 9.01 | 32.087 | 6.55 | 24.86 | 50 | 9.01 | 32.10 | 24.87 | 310 | 0.17 |
| 74 | 8.86 | 32.322 | 5.92 | 25.07 | 75 | 8.85 | 32.33 | 25.08 | 290 | 0.24 |
| 99 | 8.72 | 32.690 | 5.33 | 25.38 | 100 | 8.70 | 32.71 | 25.40 | 260 | 0.31 |
| 124 | 7.66 | 33.528 | 3.36 | 26.19 | 125 | 7.60 | 33.57 | 26.23 | 182 | 0.37 |
| 125 | (7.60)a) | (33.571)a) | - | (26.23) | | | | | | |
| 19 | HMCS OSHAWA; March 16, 1958; 0511 GCT; 51°00'N, 128°10'W; sounding, 45 fm; wind, 010°, 8 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | 8.40 | 31.332 | 6.78 | 24.36 | 0 | 8.40 | 31.33 | 24.36 | 357 | 0.00 |
| 10 | 8.44 | 31.306 | 6.88 | 24.34 | 10 | 8.44 | 31.31 | 24.34 | 360 | 0.04 |
| 20 | 8.52 | 31.340 | 6.88 | 24.35 | 20 | 8.52 | 31.34 | 24.35 | 359 | 0.07 |
| 30 | 8.42 | 31.420 | 6.90 | 24.43 | 30 | 8.42 | 31.42 | 24.43 | 352 | 0.11 |
| 50 | 8.68 | 31.683 | 7.00 | 24.60 | 50 | 8.68 | 31.68 | 24.60 | 336 | 0.18 |
| 70 | 8.82 | 32.080 | 6.90 | 24.88 | | | | | | |
| 20 | HMCS OSHAWA; March 16, 1958; 0823 GCT; 51°00'N, 128°55'W; sounding, 35 fm; wind, 320°, 5 kt; weather, clear; sea, calm. | | | | | | | | | |
| 0 | 8.60 | 31.374 | 8.90 | 24.37 | 0 | 8.60 | 31.37 | 24.37 | 357 | 0.00 |
| 10 | 8.78 | 31.407 | 6.45 | 24.37 | 10 | 8.78 | 31.41 | 24.37 | 357 | 0.04 |
| 20 | 8.80 | 31.688 | 6.55 | 24.58 | 20 | 8.80 | 31.69 | 24.58 | 337 | 0.07 |
| 30 | 8.76 | 31.814 | 6.79 | 24.69 | 30 | 8.76 | 31.81 | 24.69 | 327 | 0.10 |
| 50 | 8.80 | 31.874 | 8.27 | 24.73 | 50 | 8.80 | 31.87 | 24.73 | 324 | 0.17 |
| 21 | HMCS OSHAWA; March 16, 1958; 0316 GCT; 51°16'N, 129°33'W; sounding, 128 fm; wind, calm; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | (8.44)a) | (31.437)a) | - | (24.44) | 0 | 8.44 | 31.44 | 24.44 | 350 | 0.00 |
| 5 | 8.52 | 31.501 | 6.69 | 24.48 | 10 | 8.59 | 31.56 | 24.52 | 343 | 0.04 |
| 20 | 8.70 | 31.688 | 6.52 | 24.60 | 20 | 8.70 | 31.69 | 24.60 | 335 | 0.07 |
| 30 | 8.78 | 31.808 | 6.20 | 24.68 | 30 | 8.78 | 31.81 | 24.68 | 328 | 0.10 |
| 50 | 9.02 | 32.196 | 6.32 | 24.94 | 50 | 9.02 | 32.20 | 24.94 | 303 | 0.17 |
| 75 | 8.98 | 32.554 | 5.94 | 25.23 | 75 | 8.98 | 32.55 | 25.23 | 276 | 0.24 |
| 100 | 8.62 | 32.883 | 5.17 | 25.54 | 100 | 8.62 | 32.88 | 25.54 | 247 | 0.30 |
| 125 | 7.52 | 33.557 | 3.33 | 26.23 | 125 | 7.52 | 33.56 | 26.23 | 182 | 0.36 |
| 150 | 6.45 | 33.929 | 2.04 | 26.67 | 150 | 6.45 | 33.93 | 26.67 | 140 | 0.40 |
| 175 | 6.24 | 33.961 | 1.96 | 26.72 | 175 | 6.24 | 33.96 | 26.72 | 135 | 0.43 |
| 200 | 6.04 | 33.994 | 1.77 | 26.77 | 200 | 6.04 | 33.99 | 26.77 | 131 | 0.47 |
| 225 | 5.91 | 33.999 | 1.68 | 26.80 | 225 | 5.91 | 34.00 | 26.80 | 129 | 0.50 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HMCS OSHAWA; March 16, 1958; 1444 GCT; 51°32'N, 130°11'W; sounding, 510 fm; wind, calm; weather, cloudy; sea, calm. | | | | | | | | | | 22 |
| 0 | (8.52)a) | (31.427)a) | - | (24.42) | 0 | 8.52 | 31.43 | 24.42 | 352 | 0.00 |
| 5 | 8.39 | 31.393 | 7.04 | 24.41 | 10 | 8.31 | 31.38 | 24.41 | 353 | 0.04 |
| 20 | 8.29 | 31.399 | 7.03 | 24.43 | 20 | 8.29 | 31.40 | 24.43 | 351 | 0.07 |
| 30 | 8.47 | 31.493 | 7.00 | 24.48 | 30 | 8.47 | 31.49 | 24.48 | 347 | 0.11 |
| 50 | 8.88 | 31.794 | 6.56 | 24.65 | 50 | 8.88 | 31.79 | 24.65 | 331 | 0.17 |
| 75 | 8.98 | 32.298 | 6.34 | 25.03 | 75 | 8.98 | 32.30 | 25.03 | 295 | 0.25 |
| 100 | 8.72 | 32.620 | 5.80 | 25.32 | 100 | 8.72 | 32.62 | 25.32 | 268 | 0.32 |
| 125 | 8.13 | 33.278 | 4.40 | 25.93 | 125 | 8.13 | 33.28 | 25.93 | 211 | 0.38 |
| 150 | 7.15 | 33.538 | 4.20 | 26.27 | 150 | 7.15 | 33.54 | 26.27 | 178 | 0.43 |
| 175 | 7.18 | 33.789 | 3.01 | 26.46 | 175 | 7.18 | 33.79 | 26.46 | 160 | 0.48 |
| 200 | 6.78 | 33.886 | 2.73 | 26.59 | 200 | 6.78 | 33.89 | 26.59 | 148 | 0.51 |
| 225 | 6.56 | 33.907 | 2.62 | 26.64 | 225 | 6.56 | 33.91 | 26.64 | 144 | 0.55 |
| 250 | 6.37 | 33.934 | 2.44 | 26.69 | 250 | 6.37 | 33.93 | 26.69 | 140 | 0.59 |
| 300 | 5.94 | 33.965 | 2.22 | 26.76 | 300 | 5.94 | 33.97 | 26.76 | 133 | 0.66 |
| 399 | 5.20 | 34.044 | 1.43 | 26.92 | 400 | 5.19 | 34.04 | 26.92 | 119 | 0.78 |
| 499 | 4.82 | 34.122 | 0.94 | 27.02 | 500 | 4.82 | 34.12 | 27.02 | 110 | 0.90 |
| 599 | 4.32 | 34.196 | 0.62 | 27.14 | 600 | 4.32 | 34.20 | 27.14 | 99 | 1.00 |
| 798 | 3.74 | 34.292 | 0.59 | 27.27 | 700 | 3.96 | 34.25 | 27.22 | 92 | 1.10 |
| 898 | 3.66 | 34.313 | 0.54 | 27.30 | 800 | 3.74 | 34.29 | 27.27 | 88 | 1.19 |
| HMCS OSHAWA; March 16, 1958; 1745 GCT; 51°50.5'N, 130°48'W; sounding, 130 fm; wind, 020°, 8 kt; weather, overcast; sea, smooth. | | | | | | | | | | 23 |
| 0 | 8.20 | 31.729 | 6.97 | 24.70 | 0 | 8.20 | 31.73 | 24.70 | 325 | 0.00 |
| 10 | 8.46 | 31.851 | 6.94 | 24.76 | 10 | 8.46 | 31.85 | 24.76 | 320 | 0.03 |
| 20 | 8.50 | 31.986 | 6.90 | 24.86 | 20 | 8.50 | 31.99 | 24.86 | 310 | 0.06 |
| 29 | 8.49 | 31.996 | 6.82 | 24.87 | 30 | 8.49 | 32.00 | 24.87 | 309 | 0.10 |
| 49 | 8.55 | 32.101 | 6.94 | 24.94 | 50 | 8.55 | 32.11 | 24.95 | 303 | 0.16 |
| 73 | 8.54 | 32.204 | 6.66 | 25.02 | 75 | 8.54 | 32.21 | 25.03 | 295 | 0.23 |
| 98 | 8.55 | 32.252 | 6.51 | 25.06 | 100 | 8.55 | 32.26 | 25.07 | 292 | 0.31 |
| 122 | 8.62 | 32.462 | 6.45 | 25.21 | 125 | 8.60 | 32.49 | 25.24 | 276 | 0.38 |
| 147 | 8.25 | 32.737 | 5.57 | 25.48 | 150 | 8.18 | 32.78 | 25.53 | 249 | 0.44 |
| 171 | 7.50 | 33.183 | 4.38 | 25.94 | 175 | 7.37 | 33.25 | 26.01 | 203 | 0.50 |
| 196 | 6.67 | 33.599 | 3.21 | 26.38 | 200 | 6.53 | 33.66 | 26.45 | 162 | 0.55 |
| 220 | 5.84 | 33.916 | 2.17 | 26.74 | | | | | | |
| HMCS OSHAWA; March 18, 1958; 0307 GCT; 51°56'N, 131°05'W; sounding, 98 fm; wind, direction missing, 3 kt; weather, overcast; sea, calm. | | | | | | | | | | 24 |
| 0 | 8.60 | 32.310 | 6.52 | 25.10 | 0 | 8.60 | 32.31 | 25.10 | 287 | 0.00 |
| 10 | 8.67 | 32.234 | 6.81 | 25.03 | 10 | 8.67 | 32.23 | 25.03 | 294 | 0.03 |
| 20 | 8.62 | 32.244 | 6.53 | 25.04 | 20 | 8.62 | 32.24 | 25.04 | 293 | 0.06 |
| 30 | 8.62 | 32.267 | 6.42 | 25.06 | 30 | 8.62 | 32.27 | 25.06 | 291 | 0.09 |
| 50 | 8.55 | 32.284 | 6.44 | 25.08 | 50 | 8.55 | 32.28 | 25.08 | 289 | 0.15 |
| 75 | 8.48 | 32.369 | 6.01 | 25.16 | 75 | 8.48 | 32.37 | 25.16 | 282 | 0.22 |
| 100 | 8.44 | 32.409 | 6.00 | 25.20 | 100 | 8.44 | 32.41 | 25.20 | 279 | 0.29 |
| 125 | 8.47 | 32.495 | 5.85 | 25.26 | 125 | 8.47 | 32.50 | 25.26 | 274 | 0.36 |
| 150 | 8.34 | 32.749 | 5.33 | 25.48 | 150 | 8.34 | 32.75 | 25.48 | 253 | 0.42 |
| 175 | 8.27 | 32.832 | 5.10 | 25.56 | 175 | 8.27 | 32.83 | 25.56 | 247 | 0.49 |

a) Value extrapolated by three-point parabolic method.

POG

NP-58-I

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 25 | HMCS OSHAWA; March 18, 1958; 0424 GCT; 51°56'N, 131°13'W; sounding, 505 fm; wind, direction missing, 3 kt; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | (8.65)a) | (32.228)a) | - | (25.03) | 0 | 8.65 | 32.23 | 25.03 | 294 | 0.00 |
| 5 | 8.66 | 32.232 | 6.72 | 25.03 | 10 | 8.66 | 32.24 | 25.03 | 294 | 0.03 |
| 20 | 8.66 | 32.239 | 6.75 | 25.03 | 20 | 8.66 | 32.24 | 25.03 | 294 | 0.06 |
| 30 | 8.64 | 32.240 | 6.71 | 25.04 | 30 | 8.64 | 32.24 | 25.04 | 294 | 0.09 |
| 50 | 8.69 | 32.299 | 6.53 | 25.08 | 50 | 8.69 | 32.30 | 25.08 | 290 | 0.15 |
| 73 | 8.72 | 32.338 | 6.41 | 25.10 | 75 | 8.72 | 32.34 | 25.10 | 288 | 0.22 |
| 100 | 8.72 | 32.386 | 6.24 | 25.14 | 100 | 8.72 | 32.39 | 25.14 | 285 | 0.29 |
| 125 | 8.66 | 32.539 | 6.00 | 25.27 | 125 | 8.66 | 32.54 | 25.27 | 273 | 0.36 |
| 150 | 8.28 | 32.886 | 5.19 | 25.60 | 150 | 8.28 | 32.89 | 25.60 | 242 | 0.43 |
| 174 | 7.92 | 33.158 | 4.39 | 25.86 | 175 | 7.90 | 33.17 | 25.88 | 216 | 0.48 |
| 199 | 7.42 | 33.586 | 3.47 | 26.27 | 200 | 7.40 | 33.60 | 26.28 | 178 | 0.54 |
| 224 | 6.90 | 33.854 | 2.77 | 26.55 | 225 | 6.88 | 33.86 | 26.56 | 152 | 0.58 |
| 249 | 6.36 | 33.906 | 2.44 | 26.66 | 250 | 6.34 | 33.91 | 26.67 | 142 | 0.61 |
| 299 | 5.59 | 33.972 | 1.85 | 26.81 | 300 | 5.58 | 33.97 | 26.82 | 128 | 0.68 |
| 398 | 4.78 | 34.072 | 1.10 | 26.99 | 400 | 4.77 | 34.07 | 26.99 | 112 | 0.80 |
| 498 | 4.51 | 34.136 | 0.78 | 27.07 | 500 | 4.51 | 34.14 | 27.07 | 105 | 0.91 |
| 598 | 4.32 | 34.177 | 0.69 | 27.12 | 600 | 4.32 | 34.18 | 27.12 | 101 | 1.02 |
| 798 | 3.73 | 34.286 | 0.48 | 27.27 | 700 | 4.05 | 34.23 | 27.19 | 95 | 1.11 |
| 898 | 3.52 | 34.322 | 0.47 | 27.32 | 800 | 3.73 | 34.29 | 27.27 | 88 | 1.21 |
| 26 | HMCS OSHAWA; March 18, 1958; 0552 GCT; 51°55'N, 131°23'W; sounding, 1090 fm; wind, calm; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | (8.41)a) | (31.756)a) | - | (24.69) | 0 | 8.41 | 31.76 | 24.69 | 326 | 0.00 |
| 5 | 8.54 | 31.748 | 6.97 | 24.67 | 10 | 8.62 | 31.77 | 24.67 | 328 | 0.03 |
| 20 | 8.62 | 31.896 | 7.21 | 24.77 | 20 | 8.62 | 31.90 | 24.77 | 319 | 0.06 |
| 30 | 8.42 | 32.137 | 7.24 | 24.99 | 30 | 8.42 | 32.14 | 24.99 | 298 | 0.10 |
| 50 | 8.56 | 32.232 | 6.66 | 25.04 | 50 | 8.56 | 32.23 | 25.04 | 293 | 0.16 |
| 75 | 8.58 | 32.434 | 6.08 | 25.20 | 75 | 8.58 | 32.43 | 25.20 | 279 | 0.23 |
| 100 | 8.18 | 32.602 | 5.53 | 25.39 | 100 | 8.18 | 32.60 | 25.39 | 261 | 0.30 |
| 125 | 8.50 | 32.976 | 4.74 | 25.63 | 125 | 8.50 | 32.98 | 25.63 | 238 | 0.36 |
| 150 | 7.76 | 33.449 | 3.68 | 26.11 | 150 | 7.76 | 33.45 | 26.11 | 193 | 0.41 |
| 175 | 7.44 | 33.626 | 3.30 | 26.30 | 175 | 7.44 | 33.63 | 26.30 | 176 | 0.46 |
| 200 | 7.28 | 33.723 | 3.25 | 26.40 | 200 | 7.28 | 33.72 | 26.40 | 167 | 0.50 |
| 225 | 6.89 | 33.872 | 2.86 | 26.57 | 225 | 6.89 | 33.87 | 26.57 | 151 | 0.54 |
| 250 | 6.60 | 33.925 | 2.50 | 26.65 | 250 | 6.60 | 33.92 | 26.65 | 144 | 0.58 |
| 300 | 6.09 | 33.960 | 2.18 | 26.74 | 300 | 6.09 | 33.96 | 26.74 | 135 | 0.65 |
| 398 | 5.28 | 34.026 | 1.40 | 26.89 | 400 | 5.27 | 34.03 | 26.90 | 121 | 0.78 |
| 497 | 4.89 | 34.098 | 0.93 | 27.00 | 500 | 4.87 | 34.10 | 27.00 | 112 | 0.90 |
| 596 | 4.27 | 34.149 | 0.72 | 27.10 | 600 | 4.25 | 34.15 | 27.11 | 102 | 1.00 |
| 794 | 3.66 | 34.306 | 0.56 | 27.29 | 700 | 3.84 | 34.22 | 27.21 | 93 | 1.10 |
| 992 | 3.23 | 34.380 | 0.45 | 27.39 | 800 | 3.64 | 34.31 | 27.30 | 85 | 1.19 |
| 1191 | 2.88 | 34.435 | 0.48 | 27.47 | 1000 | 3.21 | 34.38 | 27.39 | 76 | 1.36 |
| 1489 | 2.32 | 34.500 | 0.74 | 27.57 | 1200 | 2.86 | 34.44 | 27.47 | 70 | 1.51 |
| 1500 | (2.30)a) | (34.502)a) | - | (27.57) | 1500 | 2.30 | 34.50 | 27.57 | 60 | 1.70 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

27

HMCS OSHAWA; March 18, 1958; 0948 GCT; 51°51'N, 132°11'W; sounding, 1353 fm; wind, 070°, 8 kt; weather, intermittent slight rain; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.45)a) | (32.243)a) | - | (25.21) | 0 | 7.45 | 32.24 | 25.21 | 276 | 0.00 |
| 5 | 7.47 | 32.302 | 6.93 | 25.25 | 10 | 7.49 | 32.35 | 25.29 | 269 | 0.03 |
| 20 | 7.50 | 32.426 | 7.20 | 25.35 | 20 | 7.50 | 32.43 | 25.35 | 264 | 0.05 |
| 30 | 7.49 | 32.464 | 6.99 | 25.38 | 30 | 7.49 | 32.46 | 25.38 | 261 | 0.08 |
| 50 | 7.48 | 32.545 | 6.68 | 25.44 | 50 | 7.48 | 32.55 | 25.44 | 255 | 0.13 |
| 75 | 6.96 | 32.818 | 6.04 | 25.73 | 75 | 6.96 | 32.82 | 25.73 | 228 | 0.19 |
| 100 | 6.84 | 33.370 | 4.70 | 26.18 | 100 | 6.84 | 33.37 | 26.18 | 186 | 0.25 |
| 125 | 6.92 | 33.609 | 3.67 | 26.36 | 125 | 6.92 | 33.61 | 26.36 | 170 | 0.29 |
| 150 | 6.66 | 33.734 | 3.62 | 26.49 | 150 | 6.66 | 33.73 | 26.49 | 157 | 0.33 |
| 175 | 6.54 | 33.853 | 3.27 | 26.60 | 175 | 6.54 | 33.85 | 26.60 | 147 | 0.37 |
| 200 | 6.43 | 33.911 | 2.88 | 26.66 | 200 | 6.43 | 33.91 | 26.66 | 142 | 0.41 |
| 225 | 6.14 | 33.926 | 2.70 | 26.71 | 225 | 6.14 | 33.93 | 26.71 | 137 | 0.44 |
| 250 | 5.93 | 33.960 | 2.28 | 26.76 | 250 | 5.93 | 33.96 | 26.76 | 132 | 0.48 |
| 300 | 5.57 | 33.978 | 1.74 | 26.82 | 300 | 5.57 | 33.98 | 26.82 | 127 | 0.54 |
| 402 | 4.95 | 34.022 | 1.14 | 26.93 | 400 | 4.96 | 34.02 | 26.93 | 118 | 0.66 |
| 503 | 4.56 | 34.123 | 0.81 | 27.05 | 500 | 4.57 | 34.12 | 27.05 | 107 | 0.78 |
| 604 | 4.03 | 34.156 | 0.57 | 27.13 | 600 | 4.05 | 34.16 | 27.13 | 100 | 0.88 |
| 805 | 3.62 | 34.276 | 0.68 | 27.27 | 700 | 3.73 | 34.20 | 27.20 | 93 | 0.98 |
| 1004 | 3.13 | 34.390 | 0.63 | 27.41 | 800 | 3.62 | 34.27 | 27.27 | 88 | 1.07 |
| 1202 | 2.77 | 34.449 | 0.72 | 27.49 | 1000 | 3.14 | 34.39 | 27.41 | 75 | 1.24 |
| 1500 | 2.30 | 34.499 | 0.77 | 27.57 | 1200 | 2.77 | 34.45 | 27.49 | 68 | 1.38 |
| 1995 | 1.87 | 34.613 | 1.56 | 27.69 | 1500 | 2.30 | 34.50 | 27.57 | 60 | 1.58 |
| 2391 | 1.73 | 34.630 | 2.03 | 27.72 | 2000 | 1.87 | 34.61 | 27.69 | 49 | 1.85 |
| 2500 | (1.72)a) | (34.623)a) | - | (27.71) | 2500 | 1.72 | 34.62 | 27.71 | 48 | 2.10 |

28

HMCS OSHAWA; March 18, 1958; 1708 GCT; 51°34'N, 133°27'W; sounding, 1640 fm; wind, direction missing, 3 kt; weather, cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.38)a) | (32.463)a) | - | (25.39) | 0 | 7.38 | 32.46 | 25.39 | 259 | 0.00 |
| 5 | 7.40 | 32.486 | 6.85 | 25.41 | 10 | 7.41 | 32.50 | 25.42 | 257 | 0.03 |
| 20 | 7.40 | 32.503 | 6.76 | 25.42 | 20 | 7.40 | 32.50 | 25.42 | 257 | 0.05 |
| 30 | 7.36 | 32.470 | 5.70 | 25.40 | 30 | 7.36 | 32.47 | 25.40 | 259 | 0.08 |
| 50 | 7.34 | 32.499 | 5.98 | 25.43 | 50 | 7.34 | 32.50 | 25.43 | 257 | 0.13 |
| 75 | 7.33 | 32.549 | 5.02 | 25.47 | 75 | 7.33 | 32.55 | 25.47 | 253 | 0.19 |
| 100 | 7.52 | 33.198 | 3.96 | 25.95 | 100 | 7.52 | 33.20 | 25.95 | 208 | 0.25 |
| 125 | 7.26 | 33.552 | 3.40 | 26.26 | 125 | 7.26 | 33.55 | 26.26 | 178 | 0.30 |
| 150 | 7.10 | 33.709 | 2.84 | 26.41 | 150 | 7.10 | 33.71 | 26.41 | 165 | 0.34 |
| 175 | 6.86 | 33.805 | 2.54 | 26.52 | 175 | 6.86 | 33.81 | 26.52 | 155 | 0.38 |
| 200 | 6.64 | 33.876 | 2.49 | 26.60 | 200 | 6.64 | 33.88 | 26.60 | 147 | 0.42 |
| 225 | 6.38 | 33.910 | 2.16 | 26.66 | 225 | 6.38 | 33.91 | 26.66 | 142 | 0.46 |
| 250 | 6.12 | 33.978 | 1.93 | 26.75 | 250 | 6.12 | 33.98 | 26.75 | 134 | 0.49 |
| 300 | 5.48 | 33.965 | 2.08 | 26.82 | 300 | 5.48 | 33.97 | 26.82 | 127 | 0.56 |
| 400 | 5.34 | 33.989 | 1.58 | 26.86 | 400 | 5.34 | 33.99 | 26.86 | 125 | 0.69 |
| 500 | 4.50 | 34.116 | 0.82 | 27.05 | 500 | 4.50 | 34.12 | 27.05 | 107 | 0.80 |
| 600 | 4.04 | 34.166 | 0.66 | 27.14 | 600 | 4.04 | 34.17 | 27.14 | 99 | 0.91 |
| 800 | 3.60 | 34.272 | 0.50 | 27.27 | 700 | 3.74 | 34.22 | 27.21 | 92 | 1.00 |
| 1000 | 3.20 | 34.368 | 0.50 | 27.38 | 800 | 3.60 | 34.27 | 27.27 | 87 | 1.09 |
| 1200 | 2.82 | 34.428 | 0.52 | 27.47 | 1000 | 3.20 | 34.37 | 27.38 | 77 | 1.26 |
| 1500 | 2.36 | 34.510 | 0.86 | 27.57 | 1200 | 2.82 | 34.43 | 27.47 | 70 | 1.41 |
| 2000 | 1.88 | 34.606 | 1.56 | 27.69 | 1500 | 2.36 | 34.51 | 27.57 | 60 | 1.61 |
| 2502 | 1.71 | 34.638 | 2.15 | 27.73 | 2000 | 1.88 | 34.61 | 27.69 | 50 | 1.89 |
| 2900 | 1.59 | 34.662 | 2.50 | 27.75 | 2500 | 1.71 | 34.64 | 27.73 | 47 | 2.13 |
| 3000 | (1.56)a) | (34.668)a) | - | (27.76) | 3000 | 1.56 | 34.67 | 27.76 | 44 | 2.37 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 29 | HMCS OSHAWA; March 19, 1958; 0148 GCT; 51°34'N, 135°26'W; sounding, 1926 fm; wind, direction missing, 3 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | (7.47)a) | (32.473)a) | - | (25.39) | 0 | 7.47 | 32.47 | 25.39 | 260 | 0.00 |
| 5 | 7.39 | 32.478 | - | 25.40 | 10 | 7.32 | 32.48 | 25.42 | 257 | 0.03 |
| 20 | 7.21 | 32.490 | - | 25.44 | 20 | 7.21 | 32.49 | 25.44 | 255 | 0.05 |
| 30 | 7.15 | 32.496 | - | 25.45 | 30 | 7.15 | 32.50 | 25.45 | 254 | 0.08 |
| 49 | 7.17 | 32.503 | - | 25.45 | 50 | 7.17 | 32.50 | 25.45 | 254 | 0.13 |
| 74 | 7.15 | 32.548 | - | 25.49 | 75 | 7.15 | 32.56 | 25.50 | 250 | 0.19 |
| 99 | 7.03 | 33.243 | - | 26.05 | 100 | 7.02 | 33.26 | 26.07 | 196 | 0.25 |
| 124 | 6.65 | 33.544 | - | 26.34 | 125 | 6.64 | 33.55 | 26.35 | 170 | 0.29 |
| 149 | 6.43 | 33.722 | - | 26.51 | 150 | 6.43 | 33.73 | 26.52 | 155 | 0.34 |
| 173 | 6.45 | 33.874 | - | 26.63 | 175 | 6.45 | 33.88 | 26.63 | 144 | 0.37 |
| 198 | 6.42 | 33.941 | - | 26.68 | 200 | 6.41 | 33.94 | 26.69 | 139 | 0.41 |
| 223 | 6.11 | 33.955 | - | 26.74 | 225 | 6.09 | 33.96 | 26.74 | 134 | 0.44 |
| 247 | 5.84 | 33.949 | - | 26.76 | 250 | 5.81 | 33.95 | 26.77 | 132 | 0.48 |
| 297 | 5.51 | 33.982 | - | 26.83 | 300 | 5.49 | 33.98 | 26.83 | 126 | 0.54 |
| 400 | 4.93 | 34.063 | 1.05 | 26.96 | 400 | 4.93 | 34.06 | 26.96 | 114 | 0.66 |
| 500 | 5.03 | (34.132)b) | - | (27.01) | 500 | 5.03 | 34.13 | 27.01 | 112 | 0.78 |
| 600 | 4.18 | 34.192 | 0.56 | 27.15 | 600 | 4.18 | 34.19 | 27.15 | 98 | 0.88 |
| 800 | 3.61 | 34.311 | 0.40 | 27.30 | 700 | 3.71 | 34.25 | 27.24 | 89 | 0.98 |
| 1000 | 3.19 | 34.390 | 0.44 | 27.40 | 800 | 3.61 | 34.31 | 27.30 | 85 | 1.06 |
| 1200 | 2.81 | 34.454 | 0.47 | 27.49 | 1000 | 3.19 | 34.39 | 27.40 | 76 | 1.23 |
| 1501 | 2.36 | 34.521 | 0.75 | 27.58 | 1200 | 2.81 | 34.45 | 27.49 | 68 | 1.37 |
| 1952 | 1.96 | 34.606 | 1.37 | 27.68 | 1500 | 2.36 | 34.52 | 27.58 | 60 | 1.57 |
| 2452 | 1.74 | 34.647 | 1.89 | 27.73 | 2000 | 1.93 | 34.61 | 27.69 | 50 | 1.84 |
| 2953 | 1.59 | 34.672 | 2.42 | 27.76 | 2500 | 1.72 | 34.65 | 27.73 | 46 | 2.09 |
| 3454 | 1.55 | 34.683 | - | 27.77 | 3000 | 1.58 | 34.67 | 27.76 | 44 | 2.32 |
| 3500 | (1.55)a) | (34.683)a) | - | (27.77) | 3500 | 1.55 | 34.68 | 27.77 | 45 | 2.55 |
| 30 | HMCS OSHAWA; March 19, 1958; 0851 GCT; 51°26'N, 137°00'W; sounding, 1950 fm; wind, 350°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | (6.69)a) | c) | - | | | | | | | |
| 5 | 6.72 | | 7.08 | | | | | | | |
| 20 | 6.74 | | 7.18 | | | | | | | |
| 29 | 6.71 | | 7.00 | | | | | | | |
| 49 | 6.73 | | 6.94 | | | | | | | |
| 73 | 6.78 | | 6.50 | | | | | | | |
| 98 | 6.60 | | 4.23 | | | | | | | |
| 123 | 6.54 | | 3.56 | | | | | | | |
| 147 | 6.37 | | 3.04 | | | | | | | |
| 171 | 6.14 | | 2.55 | | | | | | | |
| 196 | 6.00 | | 2.30 | | | | | | | |
| 221 | 5.68 | | 2.13 | | | | | | | |
| 245 | 5.51 | | 1.95 | | | | | | | |
| 294 | 5.18 | | 1.61 | | | | | | | |
| 400 | 4.61 | | 1.09 | | | | | | | |
| 500 | 4.30 | | 0.67 | | | | | | | |
| 600 | 3.98 | | 0.54 | | | | | | | |
| 801 | 3.56 | | 0.35 | | | | | | | |
| 1002 | 3.10 | | 0.39 | | | | | | | |
| 1203 | 2.72 | | 0.63 | | | | | | | |
| 1504 | 2.30 | | 0.83 | | | | | | | |
| 2004 | 1.90 | | 1.43 | | | | | | | |
| 2505 | 1.72 | | 2.00 | | | | | | | |
| 3006 | 1.58 | | 2.58 | | | | | | | |
| 3507 | 1.55 | | 1.64 | | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.
c) Salinity determinations unreliable.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | δ<br>cl/ton | ΔD<br>dyn m |

31

HMCS OSHAWA; March 19, 1958; 1755 GCT; 52°21'N, 135°32'W; sounding, 1945 fm; wind, 010°, 25 kt; weather, moderate rain showers; sea, moderate.

| | | | |
|---|---|---|---|
| 0 | 7.12 | a) | 6.61 |
| 19 | 7.14 | | 6.76 |
| 29 | 7.11 | | 6.79 |
| 48 | 7.15 | | 7.01 |
| 72 | 7.09 | | 6.23 |
| 96 | 7.28 | | 5.10 |
| 120 | 7.14 | | 3.49 |
| 144 | 7.10 | | 3.21 |
| 168 | 6.82 | | 2.99 |
| 192 | 6.74 | | 2.67 |
| 216 | 6.50 | | 2.52 |
| 240 | 6.29 | | 2.42 |
| 288 | 5.85 | | 2.25 |
| 390 | 5.06 | | 1.55 |
| 490 | 4.67 | | 1.10 |
| 590 | 4.28 | | 0.81 |
| 790 | 3.69 | | 0.49 |
| 991 | 3.24 | | 0.39 |
| 1192 | 2.86 | | 0.43 |
| 1494 | 2.44 | | 0.71 |
| 1998 | 1.96 | | 1.43 |
| 2468 | 1.87 | | 1.84 |
| 2970 | 1.62 | | 2.56 |
| 3372 | 1.58 | | 2.79 |

32

HMCS OSHAWA; March 20, 1958; 0302 GCT; 52°55'N, 134°04'W; sounding, 1519 fm; wind, 360°, 30 kt; weather, partly cloudy; sea, moderate.

| | | | |
|---|---|---|---|
| 5 | 8.40 | a) | 6.98 |
| 20 | 8.40 | | 7.02 |
| 30 | 8.39 | | 6.06 |
| 50 | 7.89 | | 6.45 |
| 75 | 8.39 | | 5.94 |
| 99 | 8.53 | | 5.62 |
| 124 | 8.35 | | 5.19 |
| 149 | 7.80 | | 4.16 |
| 174 | 7.58 | | 3.37 |
| 199 | 7.25 | | 2.93 |
| 223 | 7.09 | | 2.90 |
| 248 | 6.94 | | 2.77 |
| 298 | 6.18 | | 2.24 |
| 397 | 5.25 | | 1.42 |
| 497 | 4.75 | | 1.06 |
| 596 | 4.09 | | 0.62 |
| 796 | 3.63 | | 0.50 |
| 995 | 3.21 | | 0.40 |
| 1193 | 2.83 | | 0.59 |
| 1490 | 2.35 | | 0.75 |
| 1985 | 1.88 | | 1.23 |
| 2480 | 1.67 | | 1.84 |
| 2725 | 1.65 | | 2.13 |

a) Salinity determinations unreliable.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 33 | HMCS OSHAWA; March 20, 1958; 0905 GCT; 53°23'N, 133°32'W; sounding, 1150 fm; wind, 360°, 20 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 5 | 7.58 | | a) 7.30 | | | | | | | |
| 19 | 7.63 | | 7.04 | | | | | | | |
| 29 | 7.46 | | 6.93 | | | | | | | |
| 49 | 7.02 | | 6.88 | | | | | | | |
| 73 | 6.98 | | 6.88 | | | | | | | |
| 97 | 7.14 | | 6.20 | | | | | | | |
| 122 | 7.64 | | 4.51 | | | | | | | |
| 146 | 6.93 | | 4.30 | | | | | | | |
| 170 | 6.74 | | 3.58 | | | | | | | |
| 194 | 6.61 | | 2.96 | | | | | | | |
| 219 | 6.43 | | 2.70 | | | | | | | |
| 243 | 6.24 | | 2.48 | | | | | | | |
| 292 | 5.70 | | 2.06 | | | | | | | |
| 347 | 5.32 | | 1.71 | | | | | | | |
| 439 | 4.80 | | 1.14 | | | | | | | |
| 531 | 4.44 | | 0.80 | | | | | | | |
| 710 | 3.74 | | 0.57 | | | | | | | |
| 890 | 3.37 | | 0.39 | | | | | | | |
| 1073 | 3.07 | | 0.38 | | | | | | | |
| 1350 | 2.50 | | 0.67 | | | | | | | |
| 1820 | 1.98 | | 1.30 | | | | | | | |
| 34 | HMCS OSHAWA; March 20, 1958; 1232 GCT; 53°25'N, 133°14'W; sounding, 550 fm; wind, 360°, 20 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | (8.01)b) | (32.301)b) | - | (25.18) | 0 | 8.01 | 32.30 | 25.18 | 280 | 0.00 |
| 5 | 8.00 | 32.299 | 6.73 | 25.18 | 10 | 8.00 | 32.30 | 25.18 | 280 | 0.03 |
| 20 | 8.00 | 32.299 | 6.64 | 25.18 | 20 | 8.00 | 32.30 | 25.18 | 280 | 0.06 |
| 29 | 8.02 | 32.304 | 6.74 | 25.18 | 30 | 8.01 | 32.31 | 25.18 | 280 | 0.08 |
| 49 | 7.52 | 32.501 | 6.68 | 25.40 | 50 | 7.50 | 32.51 | 25.41 | 258 | 0.14 |
| 73 | 7.08 | 32.552 | 6.71 | 25.50 | 75 | 7.05 | 32.55 | 25.51 | 249 | 0.20 |
| 98 | 6.72 | 32.549 | 6.91 | 25.55 | 100 | 6.69 | 32.55 | 25.55 | 245 | 0.26 |
| 122 | 6.38 | 32.554 | 6.91 | 25.60 | 125 | 6.40 | 32.60 | 25.63 | 238 | 0.32 |
| 146 | 6.90 | 33.194 | 4.72 | 26.03 | 150 | 6.95 | 33.28 | 26.09 | 195 | 0.38 |
| 171 | 7.08 | 33.636 | 3.16 | 26.36 | 175 | 7.07 | 33.68 | 26.39 | 167 | 0.42 |
| 195 | 6.90 | 33.797 | 3.05 | 26.51 | 200 | 6.87 | 33.82 | 26.53 | 154 | 0.47 |
| 220 | 6.80 | 33.871 | 3.04 | 26.58 | 225 | 6.77 | 33.88 | 26.59 | 149 | 0.50 |
| 244 | 6.64 | 33.896 | 2.87 | 26.62 | 250 | 6.60 | 33.90 | 26.63 | 145 | 0.54 |
| 293 | 6.27 | 33.931 | 2.42 | 26.70 | 300 | 6.21 | 33.94 | 26.71 | 138 | 0.61 |
| 392 | 5.37 | 33.981 | 1.78 | 26.85 | 400 | 5.30 | 33.99 | 26.86 | 124 | 0.74 |
| 489 | 4.47 | 34.069 | 1.05 | 27.02 | 500 | 4.41 | 34.08 | 27.03 | 108 | 0.86 |
| 587 | 4.16 | 34.146 | 0.69 | 27.11 | 600 | 4.12 | 34.16 | 27.12 | 100 | 0.97 |
| 783 | 3.59 | 34.292 | 0.60 | 27.29 | 700 | 3.82 | 34.23 | 27.22 | 92 | 1.07 |
| 881 | 3.46 | 34.314 | 0.43 | 27.32 | 800 | 3.56 | 34.30 | 27.29 | 85 | 1.16 |
| 35 | HMCS OSHAWA; March 20, 1958; 1415 GCT; 53°30'N, 133°01'W; sounding, 101 fm; wind, 360°, 10 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | (8.38)b) | (32.174)b) | - | (25.02) | 0 | 8.38 | 32.17 | 25.02 | 294 | 0.00 |
| 5 | 8.28 | 32.178 | 7.20 | 25.04 | 10 | 8.21 | 32.19 | 25.06 | 291 | 0.03 |
| 20 | 8.15 | 32.228 | 6.75 | 25.10 | 20 | 8.15 | 32.23 | 25.10 | 287 | 0.06 |
| 30 | 8.20 | 32.293 | 6.65 | 25.14 | 30 | 8.20 | 32.29 | 25.14 | 283 | 0.09 |
| 50 | 8.27 | 32.327 | 6.55 | 25.16 | 50 | 8.27 | 32.33 | 25.16 | 282 | 0.14 |
| 75 | 8.28 | 32.385 | 6.38 | 25.20 | 75 | 8.28 | 32.39 | 25.20 | 278 | 0.22 |
| 99 | 8.18 | 32.551 | 6.05 | 25.35 | 100 | 8.18 | 32.56 | 25.35 | 264 | 0.28 |
| 124 | 8.12 | 32.729 | 5.33 | 25.50 | 125 | 8.12 | 32.73 | 25.50 | 251 | 0.35 |
| 149 | 8.20 | 32.817 | 5.12 | 25.55 | 150 | 8.20 | 32.82 | 25.56 | 246 | 0.41 |
| 174 | 8.07 | 33.006 | 4.78 | 25.72 | 175 | 8.06 | 33.02 | 25.73 | 230 | 0.47 |
| 175 | (8.06)b) | (33.016)b) | - | (25.73) | | | | | | |

a) Salinity determinations unreliable.

b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

36

HMCS OSHAWA; March 20, 1958; 1757 GCT; 54°00'N, 133°30'W; sounding, 105 fm; wind, 360°, 15 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (8.09)a) | (32.339)a) | - | (25.20) | 0 | 8.09 | 32.34 | 25.20 | 278 | 0.00 |
| 5 | 8.07 | 32.334 | 6.80 | 25.19 | 10 | 8.06 | 32.33 | 25.19 | 278 | 0.03 |
| 20 | 8.07 | 32.336 | 6.72 | 25.20 | 20 | 8.07 | 32.34 | 25.20 | 278 | 0.06 |
| 30 | 8.13 | 32.351 | 6.69 | 25.20 | 30 | 8.13 | 32.35 | 25.20 | 278 | 0.08 |
| 50 | 8.10 | 32.500 | 6.06 | 25.32 | 50 | 8.10 | 32.50 | 25.32 | 267 | 0.14 |
| 75 | 7.19 | 32.558 | 6.63 | 25.49 | 75 | 7.19 | 32.56 | 25.49 | 251 | 0.20 |
| 100 | 6.73 | 32.636 | 6.59 | 25.62 | 100 | 6.73 | 32.64 | 25.62 | 239 | 0.27 |
| 125 | 7.39 | 33.313 | 4.55 | 26.06 | 125 | 7.39 | 33.31 | 26.06 | 198 | 0.32 |
| 150 | 7.20 | 33.752 | 3.11 | 26.43 | 150 | 7.20 | 33.75 | 26.43 | 163 | 0.37 |
| 175 | 6.65 | 33.886 | 2.59 | 26.61 | 175 | 6.65 | 33.89 | 26.61 | 146 | 0.40 |

37

HMCS OSHAWA; March 20, 1958; 1937 GCT; 54°00'N, 133°44'W; sounding, 542 fm; wind, 360°, 15 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.29)a) | (32.489)a) | - | (25.43) | 0 | 7.29 | 32.49 | 25.43 | 256 | 0.00 |
| 5 | 7.50 | 32.434 | 7.15 | 25.35 | 10 | 7.60 | 32.41 | 25.32 | 267 | 0.03 |
| 19 | 7.50 | 32.422 | 7.16 | 25.34 | 20 | 7.47 | 32.43 | 25.35 | 263 | 0.05 |
| 28 | 7.04 | 32.525 | 7.02 | 25.49 | 30 | 6.95 | 32.54 | 25.51 | 248 | 0.08 |
| 47 | 6.42 | 32.545 | 7.10 | 25.59 | 50 | 6.37 | 32.55 | 25.59 | 241 | 0.13 |
| 71 | 6.37 | 32.563 | 6.99 | 25.61 | 75 | 6.33 | 32.59 | 25.63 | 238 | 0.19 |
| 94 | 6.06 | 32.785 | 6.44 | 25.82 | 100 | 6.18 | 32.93 | 25.92 | 210 | 0.24 |
| 118 | 7.02 | 33.587 | 3.84 | 26.33 | 125 | 7.14 | 33.70 | 26.40 | 165 | 0.29 |
| 142 | 7.13 | 33.764 | 3.23 | 26.45 | 150 | 7.07 | 33.79 | 26.48 | 158 | 0.33 |
| 165 | 6.82 | 33.813 | 2.88 | 26.53 | 175 | 6.72 | 33.83 | 26.56 | 151 | 0.37 |
| 189 | 6.60 | 33.857 | 2.89 | 26.59 | 200 | 6.30 | 33.86 | 26.64 | 144 | 0.41 |
| 212 | 5.83 | 33.848 | 2.99 | 26.69 | 225 | 5.72 | 33.87 | 26.72 | 136 | 0.44 |
| 236 | 5.81 | 33.902 | 2.42 | 26.73 | 250 | 5.72 | 33.93 | 26.76 | 132 | 0.48 |
| 283 | 5.30 | 33.982 | 1.68 | 26.86 | 300 | 5.13 | 34.00 | 26.89 | 121 | 0.54 |
| 378 | 4.48 | 33.991 | 1.43 | 26.96 | 400 | 4.37 | 34.00 | 26.98 | 112 | 0.66 |
| 472 | 4.20 | 34.073 | 0.90 | 27.05 | 500 | 4.15 | 34.10 | 27.08 | 104 | 0.77 |
| 567 | 4.08 | 34.156 | 0.66 | 27.13 | 600 | 4.02 | 34.18 | 27.15 | 97 | 0.87 |
| 756 | 3.60 | 34.266 | 0.49 | 27.26 | 700 | 3.78 | 34.24 | 27.23 | 91 | 0.96 |
| 850 | 3.46 | 34.310 | 0.41 | 27.31 | 800 | 3.53 | 34.29 | 27.29 | 86 | 1.05 |

38

HMCS OSHAWA; March 20, 1958; 2153 GCT; 53°58'N, 134°09'W; sounding, 1234 fm; wind, 020°, 30 kt; weather, partly cloudy; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.26)a) | (32.526)a) | - | (25.46) | 0 | 7.26 | 32.53 | 25.46 | 253 | 0.00 |
| 5 | 7.24 | 32.518 | 7.19 | 25.46 | 10 | 7.23 | 32.51 | 25.45 | 254 | 0.02 |
| 19 | 7.22 | 32.513 | 7.02 | 25.45 | 20 | 7.22 | 32.51 | 25.46 | 254 | 0.05 |
| 28 | 7.23 | 32.523 | 6.96 | 25.46 | 30 | 7.23 | 32.52 | 25.46 | 253 | 0.08 |
| 47 | 7.26 | 32.492 | 6.93 | 25.43 | 50 | 7.23 | 32.52 | 25.46 | 254 | 0.13 |
| 71 | 6.78 | 32.920 | 5.57 | 25.83 | 75 | 6.82 | 32.99 | 25.88 | 214 | 0.19 |
| 95 | 7.56 | 33.330 | 4.19 | 26.05 | 100 | 7.59 | 33.40 | 26.10 | 194 | 0.24 |
| 118 | 7.31 | 33.626 | 3.76 | 26.32 | 125 | 7.25 | 33.69 | 26.37 | 168 | 0.28 |
| 142 | 7.12 | 33.790 | 3.16 | 26.47 | 150 | 7.06 | 33.82 | 26.50 | 156 | 0.32 |
| 166 | 6.96 | 33.826 | 2.89 | 26.52 | 175 | 6.88 | 33.84 | 26.54 | 152 | 0.36 |
| 190 | 6.74 | 33.869 | 2.76 | 26.59 | 200 | 6.67 | 33.88 | 26.61 | 147 | 0.40 |
| 213 | 6.61 | 33.902 | 2.76 | 26.63 | 225 | 6.45 | 33.92 | 26.66 | 142 | 0.44 |
| 237 | 6.22 | 33.930 | 2.53 | 26.70 | 250 | 6.06 | 33.94 | 26.73 | 135 | 0.47 |
| 284 | 5.78 | 33.964 | 2.05 | 26.78 | 300 | 5.61 | 33.97 | 26.81 | 128 | 0.54 |
| 376 | 4.64 | 33.969 | 1.74 | 26.92 | 400 | 4.45 | 33.98 | 26.95 | 116 | 0.66 |
| 471 | 4.18 | 34.020 | 1.27 | 27.01 | 500 | 4.09 | 34.04 | 27.04 | 107 | 0.77 |
| 567 | 3.97 | 34.117 | 0.84 | 27.11 | 600 | 3.90 | 34.15 | 27.14 | 98 | 0.88 |
| 760 | 3.59 | 34.276 | 0.59 | 27.27 | 700 | 3.70 | 34.23 | 27.23 | 91 | 0.97 |
| 955 | 3.12 | 34.363 | 0.54 | 27.39 | 800 | 3.50 | 34.30 | 27.30 | 84 | 1.06 |
| 1152 | 2.87 | 34.418 | 0.55 | 27.45 | 1000 | 3.04 | 34.38 | 27.41 | 75 | 1.22 |
| 1454 | 2.35 | 34.516 | 0.83 | 27.58 | 1200 | 2.80 | 34.43 | 27.47 | 69 | 1.37 |
| 1968 | 1.94 | 34.592 | 1.44 | 27.67 | 1500 | 2.29 | 34.53 | 27.59 | 58 | 1.56 |
| 2000 | (1.93)a) | (34.593)a) | - | (27.67) | 2000 | 1.93 | 34.59 | 27.67 | 51 | 1.84 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 39 | HMCS OSHAWA; March 21, 1958; 0316 GCT; 54°00'N, 135°06'W; sounding, 1430 fm; wind, 030°, 20 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | |
| 0 | (6.93)a) | (32.526)a) | - | (25.50) | 0 | 6.93 | 32.53 | 25.50 | 249 | 0.00 |
| 5 | 6.93 | 32.525 | 6.53 | 25.50 | 10 | 6.93 | 32.52 | 25.50 | 249 | 0.02 |
| 19 | 6.93 | 32.526 | 6.66 | 25.50 | 20 | 6.93 | 32.53 | 25.50 | 249 | 0.05 |
| 29 | 6.94 | 32.529 | 6.91 | 25.50 | 30 | 6.93 | 32.53 | 25.51 | 249 | 0.08 |
| 48 | 6.45 | 32.575 | 6.74 | 25.60 | 50 | 6.41 | 32.58 | 25.61 | 239 | 0.12 |
| 73 | 6.20 | 32.685 | 6.42 | 25.72 | 75 | 6.17 | 32.70 | 25.74 | 227 | 0.18 |
| 97 | 5.74 | 33.020 | 5.77 | 26.04 | 100 | 5.69 | 33.06 | 26.08 | 195 | 0.24 |
| 121 | 5.39 | 33.328 | 5.22 | 26.33 | 125 | 5.35 | 33.37 | 26.37 | 168 | 0.28 |
| 145 | 5.23 | 33.540 | 4.67 | 26.51 | 150 | 5.22 | 33.58 | 26.55 | 151 | 0.32 |
| 170 | 5.25 | 33.729 | 3.70 | 26.66 | 175 | 5.25 | 33.76 | 26.68 | 139 | 0.36 |
| 194 | 5.22 | 33.818 | 3.37 | 26.74 | 200 | 5.20 | 33.83 | 26.75 | 133 | 0.39 |
| 218 | 5.14 | 33.868 | 3.06 | 26.78 | 225 | 5.12 | 33.88 | 26.80 | 128 | 0.42 |
| 243 | 5.05 | (33.913)b) | 2.67 | (26.83) | 250 | 5.04 | 33.92 | 26.84 | 124 | 0.46 |
| 291 | 5.07 | 33.977 | 1.59 | 26.88 | 300 | 5.04 | 33.98 | 26.89 | 121 | 0.52 |
| 375 | 4.39 | 33.978 | 1.49 | 26.96 | 400 | 4.27 | 33.99 | 26.98 | 112 | 0.64 |
| 470 | 4.11 | 34.069 | 0.95 | 27.06 | 500 | 4.05 | 34.10 | 27.09 | 103 | 0.74 |
| 566 | 3.95 | 34.168 | 0.69 | 27.15 | 600 | 3.89 | 34.20 | 27.18 | 94 | 0.84 |
| 764 | 3.54 | 34.302 | 0.46 | 27.30 | 700 | 3.68 | 34.27 | 27.26 | 88 | 0.94 |
| 958 | 3.15 | (34.389)b) | 0.46 | (27.41) | 800 | 3.47 | 34.32 | 27.32 | 82 | 1.02 |
| 1151 | 2.83 | 34.432 | 0.46 | 27.47 | 1000 | 3.07 | 34.40 | 27.42 | 73 | 1.18 |
| 1440 | 2.43 | 34.512 | 0.67 | 27.57 | 1200 | 2.76 | 34.44 | 27.49 | 68 | 1.32 |
| 2017 | 1.90 | 34.600 | 1.58 | 27.68 | 1500 | 2.36 | 34.53 | 27.58 | 59 | 1.52 |
| 2400 | 1.72 | 34.643 | 2.00 | 27.73 | 2000 | 1.91 | 34.60 | 27.68 | 51 | 1.80 |
| 2500 | (1.70)a) | (34.652)a) | - | (27.74) | 2500 | 1.70 | 34.65 | 27.74 | 46 | 2.04 |
| 40 | HMCS OSHAWA; March 21, 1958; 1035 GCT; 54°00'N, 136°36'W; sounding, 1700 fm; wind, 020°, 30 kt; weather, partly cloudy; sea, rough. | | | | | | | | | |
| 0 | (6.32)a) | (32.613)a) | - | (25.65) | 0 | 6.32 | 32.61 | 25.65 | 235 | 0.00 |
| 5 | 6.30 | 32.609 | 7.24 | 25.65 | 10 | 6.29 | 32.61 | 25.65 | 235 | 0.02 |
| 20 | 6.28 | 32.601 | 7.12 | 25.65 | 20 | 6.28 | 32.60 | 25.65 | 235 | 0.05 |
| 30 | 6.29 | 32.600 | 7.10 | 25.64 | 30 | 6.29 | 32.60 | 25.64 | 236 | 0.07 |
| 50 | 6.27 | 32.605 | 7.09 | 25.65 | 50 | 6.27 | 32.61 | 25.65 | 235 | 0.12 |
| 75 | 5.96 | 32.588 | 7.07 | 25.68 | 75 | 5.96 | 32.59 | 25.68 | 233 | 0.18 |
| 99 | 5.82 | 32.860 | 6.36 | 25.91 | 100 | 5.83 | 32.88 | 25.92 | 210 | 0.23 |
| 124 | 6.43 | 33.605 | 4.29 | 26.42 | 125 | 6.44 | 33.62 | 26.43 | 162 | 0.28 |
| 149 | 6.20 | 33.764 | 3.89 | 26.57 | 150 | 6.19 | 33.77 | 26.58 | 149 | 0.32 |
| 174 | 6.08 | 33.855 | 3.38 | 26.66 | 175 | 6.08 | 33.86 | 26.66 | 141 | 0.36 |
| 199 | 6.01 | 33.888 | 3.14 | 26.70 | 200 | 6.01 | 33.89 | 26.70 | 138 | 0.39 |
| 224 | 5.89 | 33.920 | 2.64 | 26.74 | 225 | 5.88 | 33.92 | 26.74 | 134 | 0.42 |
| 229 | 5.74 | 33.927 | 2.46 | 26.76 | 250 | 5.58 | 33.92 | 26.77 | 131 | 0.46 |
| 298 | 4.82 | 33.919 | 2.52 | 26.86 | 300 | 4.82 | 33.92 | 26.86 | 123 | 0.52 |
| 394 | 4.74 | 34.024 | 1.29 | 26.95 | 400 | 4.72 | 34.03 | 26.96 | 115 | 0.64 |
| 493 | 4.14 | 34.070 | 1.01 | 27.05 | 500 | 4.11 | 34.08 | 27.06 | 105 | 0.75 |
| 592 | 3.86 | 34.175 | 0.67 | 27.17 | 600 | 3.84 | 34.18 | 27.17 | 95 | 0.86 |
| 789 | 3.48 | 34.287 | 0.46 | 27.29 | 700 | 3.62 | 34.25 | 27.25 | 88 | 0.95 |
| 988 | 3.10 | 34.359 | 0.46 | 27.39 | 800 | 3.46 | 34.29 | 27.30 | 84 | 1.04 |
| 1185 | 2.76 | 34.428 | 0.54 | 27.47 | 1000 | 3.08 | 34.36 | 27.39 | 76 | 1.20 |
| 1482 | 2.37 | 34.504 | 0.69 | 27.57 | 1200 | 2.74 | 34.43 | 27.48 | 69 | 1.34 |
| 1976 | 1.93 | 34.604 | 1.43 | 27.68 | 1500 | 2.35 | 34.51 | 27.57 | 60 | 1.54 |
| 2470 | 1.72 | 34.636 | 2.11 | 27.72 | 2000 | 1.91 | 34.61 | 27.69 | 50 | 1.82 |
| 2965 | 1.61 | 34.665 | 2.55 | 27.75 | 2500 | 1.71 | 34.64 | 27.73 | 47 | 2.07 |
| 3000 | (1.61)a) | (34.667)a) | - | (27.76) | 3000 | 1.61 | 34.67 | 27.76 | 45 | 2.30 |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

41

HMCS OSHAWA; March 21, 1958; 1731 GCT; 54°00'N, 138°00'W; sounding, 1767 fm; wind, 020°, 30 kt; weather, cloudy; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.19)a) | (32.624)a) | - | (25.68) | 0 | 6.19 | 32.62 | 25.68 | 232 | 0.00 |
| 5 | 6.18 | 32.623 | 7.20 | 25.68 | 10 | 6.17 | 32.62 | 25.68 | 232 | 0.02 |
| 17 | 6.16 | 32.619 | 7.02 | 25.68 | 20 | 6.16 | 32.62 | 25.68 | 233 | 0.05 |
| 30 | 6.16 | 32.612 | 7.11 | 25.67 | 30 | 6.16 | 32.61 | 25.67 | 233 | 0.07 |
| 50 | 5.97 | 32.616 | 7.06 | 25.70 | 50 | 5.97 | 32.62 | 25.70 | 231 | 0.12 |
| 75 | 5.78 | 32.624 | 7.06 | 25.73 | 75 | 5.78 | 32.62 | 25.73 | 228 | 0.18 |
| 100 | 5.63 | 32.697 | 6.44 | 25.80 | 100 | 5.63 | 32.70 | 25.80 | 221 | 0.23 |
| 125 | 4.88 | 33.414 | 5.06 | 26.45 | 125 | 4.88 | 33.41 | 26.45 | 160 | 0.28 |
| 150 | 4.87 | 33.633 | 4.27 | 26.63 | 150 | 4.87 | 33.63 | 26.63 | 143 | 0.32 |
| 175 | 4.67 | 33.720 | 3.88 | 26.72 | 175 | 4.67 | 33.72 | 26.72 | 135 | 0.35 |
| 200 | 4.56 | 33.818 | 3.23 | 26.81 | 200 | 4.56 | 33.82 | 26.81 | 127 | 0.38 |
| 225 | 4.52 | 33.869 | 2.59 | 26.85 | 225 | 4.52 | 33.87 | 26.85 | 123 | 0.42 |
| 250 | 4.36 | 33.897 | 2.51 | 26.89 | 250 | 4.36 | 33.90 | 26.89 | 119 | 0.45 |
| 300 | 4.21 | 33.942 | 1.89 | 26.95 | 300 | 4.21 | 33.94 | 26.95 | 114 | 0.51 |
| 388 | 4.01 | 34.044 | 1.19 | 27.05 | 400 | 3.98 | 34.06 | 27.06 | 104 | 0.62 |
| 485 | 3.82 | 34.140 | 0.91 | 27.14 | 500 | 3.80 | 34.15 | 27.16 | 96 | 0.72 |
| 583 | 3.68 | 34.219 | 0.69 | 27.22 | 600 | 3.65 | 34.23 | 27.23 | 90 | 0.81 |
| 777 | 3.27 | 34.314 | 0.54 | 27.33 | 700 | 3.45 | 34.29 | 27.30 | 84 | 0.90 |
| 971 | 2.98 | 34.388 | 0.56 | 27.42 | 800 | 3.23 | 34.32 | 27.35 | 80 | 0.98 |
| 1165 | 2.70 | 34.440 | 0.73 | 27.49 | 1000 | 2.94 | 34.40 | 27.43 | 72 | 1.14 |
| 1456 | 2.35 | 34.504 | 0.76 | 27.57 | 1200 | 2.65 | 34.45 | 27.50 | 66 | 1.28 |
| 1941 | 1.93 | 34.589 | 1.47 | 27.67 | 1500 | 2.30 | 34.51 | 27.58 | 59 | 1.47 |
| 2427 | 1.72 | 34.630 | 2.06 | 27.72 | 2000 | 1.89 | 34.60 | 27.68 | 51 | 1.75 |
| 2915 | 1.60 | 34.657 | 2.69 | 27.75 | 2500 | 1.70 | 34.63 | 27.72 | 47 | 2.00 |
| 3000 | (1.59)a) | (34.660)a) | - | (27.75) | 3000 | 1.59 | 34.66 | 27.75 | 46 | 2.23 |

42

HMCS OSHAWA; March 22, 1958; 0118 GCT; 55°00'N, 138°00'W; sounding, 2588 fm; wind, 350°, 12 kt; weather, partly cloudy; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (5.76)a) | (32.569)a) | - | (25.69) | 0 | 5.76 | 32.57 | 25.69 | 232 | 0.00 |
| 5 | 5.76 | 32.570 | 7.04 | 25.69 | 10 | 5.75 | 32.57 | 25.69 | 231 | 0.02 |
| 20 | 5.72 | 32.571 | 7.15 | 25.69 | 20 | 5.72 | 32.57 | 25.69 | 231 | 0.05 |
| 30 | 5.67 | 32.570 | 7.18 | 25.70 | 30 | 5.67 | 32.57 | 25.70 | 231 | 0.07 |
| 50 | 5.65 | 32.569 | 7.12 | 25.70 | 50 | 5.65 | 32.57 | 25.70 | 231 | 0.12 |
| 75 | 5.69 | 32.568 | 7.06 | 25.69 | 75 | 5.69 | 32.57 | 25.69 | 232 | 0.17 |
| 100 | 5.83 | 33.016 | 5.67 | 26.03 | 100 | 5.83 | 33.02 | 26.03 | 200 | 0.23 |
| 125 | 6.08 | 33.512 | 4.07 | 26.39 | 125 | 6.08 | 33.51 | 26.39 | 166 | 0.28 |
| 150 | 5.26 | 33.605 | 4.30 | 26.56 | 150 | 5.26 | 33.61 | 26.56 | 150 | 0.32 |
| 175 | 5.35 | 33.777 | 3.47 | 26.69 | 175 | 5.35 | 33.78 | 26.69 | 138 | 0.35 |
| 200 | 5.07 | 33.820 | 3.24 | 26.75 | 200 | 5.07 | 33.82 | 26.75 | 132 | 0.38 |
| 225 | 4.63 | 33.838 | 3.04 | 26.82 | 225 | 4.63 | 33.84 | 26.82 | 126 | 0.42 |
| 250 | 4.83 | 33.909 | 2.12 | 26.85 | 250 | 4.83 | 33.91 | 26.85 | 123 | 0.45 |
| 300 | 4.65 | 33.965 | 1.56 | 26.92 | 300 | 4.65 | 33.97 | 26.92 | 118 | 0.51 |
| 402 | 4.37 | 34.035 | 1.08 | 27.00 | 400 | 4.37 | 34.03 | 27.00 | 110 | 0.62 |
| 503 | 4.12 | 34.112 | 0.82 | 27.09 | 500 | 4.13 | 34.11 | 27.09 | 103 | 0.73 |
| 604 | 3.83 | 34.174 | 0.55 | 27.17 | 600 | 3.84 | 34.17 | 27.17 | 96 | 0.83 |
| 805 | 3.39 | 34.306 | 0.49 | 27.32 | 700 | 3.60 | 34.24 | 27.24 | 89 | 0.93 |
| 1006 | 3.05 | 34.391 | 0.43 | 27.42 | 800 | 3.40 | 34.30 | 27.31 | 83 | 1.01 |
| 1208 | 2.73 | 34.441 | 0.54 | 27.49 | 1000 | 3.06 | 34.39 | 27.41 | 74 | 1.17 |
| 1510 | 2.27 | 34.513 | 0.84 | 27.58 | 1200 | 2.74 | 34.44 | 27.48 | 68 | 1.32 |
| 2014 | 1.89 | 34.596 | 1.52 | 27.68 | 1500 | 2.28 | 34.51 | 27.58 | 59 | 1.51 |
| 2516 | 1.69 | 34.644 | 2.08 | 27.73 | 2000 | 1.89 | 34.59 | 27.68 | 51 | 1.79 |
| 2868 | 1.57 | 34.669 | 2.51 | 27.76 | 2500 | 1.69 | 34.64 | 27.73 | 46 | 2.04 |
| 3000 | (1.53)a) | (34.677)a) | - | (27.77) | 3000 | 1.53 | 34.68 | 27.77 | 44 | 2.27 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 43 | HMCS OSHAWA; March 22, 1958; 0653 GCT; 55°00'N, 136°48.5'W; sounding, 1600 fm; wind, 020°, 10 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | (5.83)a) | (32.592)a) | - | (25.69) | 0 | 5.83 | 32.59 | 25.69 | 231 | 0.00 |
| 5 | 5.83 | 32.590 | 7.10 | 25.69 | 10 | 5.83 | 32.59 | 25.69 | 231 | 0.02 |
| 20 | 5.83 | 32.590 | 7.08 | 25.69 | 20 | 5.83 | 32.59 | 25.69 | 231 | 0.05 |
| 30 | 5.83 | 32.594 | 7.13 | 25.70 | 30 | 5.83 | 32.59 | 25.70 | 231 | 0.07 |
| 50 | 5.73 | 32.600 | 7.11 | 25.71 | 50 | 5.73 | 32.60 | 25.71 | 229 | 0.12 |
| 75 | 5.59 | 32.674 | 6.81 | 25.79 | 75 | 5.59 | 32.67 | 25.79 | 222 | 0.17 |
| 100 | 5.49 | 32.986 | 5.96 | 26.05 | 100 | 5.49 | 32.99 | 26.05 | 198 | 0.23 |
| 125 | 5.41 | 33.506 | 4.51 | 26.47 | 125 | 5.41 | 33.51 | 26.47 | 159 | 0.27 |
| 150 | 5.31 | 33.747 | 3.54 | 26.67 | 150 | 5.31 | 33.75 | 26.67 | 140 | 0.31 |
| 175 | 5.36 | 33.912 | 2.86 | 26.79 | 175 | 5.36 | 33.91 | 26.79 | 128 | 0.34 |
| 200 | 5.21 | 33.900 | 2.45 | 26.80 | 200 | 5.21 | 33.90 | 26.80 | 128 | 0.37 |
| 225 | 4.92 | 33.908 | 2.30 | 26.84 | 225 | 4.92 | 33.91 | 26.84 | 124 | 0.41 |
| 250 | 4.77 | 33.914 | 2.07 | 26.86 | 250 | 4.77 | 33.91 | 26.86 | 122 | 0.44 |
| 300 | 4.50 | 33.965 | 1.65 | 26.93 | 300 | 4.50 | 33.97 | 26.93 | 116 | 0.50 |
| 399 | 4.19 | 34.031 | 1.10 | 27.02 | 400 | 4.19 | 34.03 | 27.02 | 108 | 0.61 |
| 499 | 3.92 | 34.117 | 0.92 | 27.11 | 500 | 3.92 | 34.12 | 27.12 | 100 | 0.72 |
| 598 | 3.73 | 34.186 | 0.63 | 27.19 | 600 | 3.73 | 34.19 | 27.19 | 94 | 0.81 |
| 798 | 3.42 | 34.318 | 0.43 | 27.32 | 700 | 3.56 | 34.25 | 27.26 | 88 | 0.90 |
| 997 | 3.03 | 34.393 | 0.41 | 27.42 | 800 | 3.42 | 34.32 | 27.32 | 82 | 0.99 |
| 1197 | 2.73 | 34.446 | 0.62 | 27.49 | 1000 | 3.02 | 34.39 | 27.42 | 73 | 1.15 |
| 1496 | 2.29 | 34.514 | 0.81 | 27.58 | 1200 | 2.73 | 34.45 | 27.49 | 67 | 1.29 |
| 1995 | 1.89 | 34.594 | 1.55 | 27.68 | 1500 | 2.29 | 34.51 | 27.58 | 59 | 1.48 |
| 2494 | 1.70 | 34.644 | 2.16 | 27.73 | 2000 | 1.89 | 34.59 | 27.68 | 51 | 1.76 |
| 2500 | (1.70)a) | (34.644)a) | - | (27.73) | 2500 | 1.70 | 34.64 | 27.73 | 46 | 2.01 |
| 44 | HMCS OSHAWA; March 22, 1958; 1239 GCT; 55°00'N, 135°45'W; sounding, 1425 fm; wind, 360°, 12 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | (7.37)a) | (32.525)a) | - | (25.44) | 0 | 7.37 | 32.52 | 25.44 | 254 | 0.00 |
| 5 | 7.09 | 32.535 | 6.74 | 25.49 | 10 | 6.84 | 32.54 | 25.53 | 246 | 0.02 |
| 20 | 6.43 | 32.560 | 6.91 | 25.60 | 20 | 6.43 | 32.56 | 25.60 | 240 | 0.05 |
| 30 | 6.13 | 32.572 | 7.00 | 25.64 | 30 | 6.13 | 32.57 | 25.64 | 236 | 0.07 |
| 50 | 6.10 | 32.582 | 6.98 | 25.65 | 50 | 6.10 | 32.58 | 25.65 | 235 | 0.12 |
| 75 | 6.23 | 32.680 | 6.52 | 25.72 | 75 | 6.23 | 32.68 | 25.72 | 230 | 0.18 |
| 100 | 6.64 | 33.293 | 4.63 | 26.15 | 100 | 6.64 | 33.29 | 26.15 | 189 | 0.23 |
| 125 | 5.74 | 33.532 | 4.37 | 26.45 | 125 | 5.74 | 33.53 | 26.45 | 161 | 0.28 |
| 150 | 5.84 | 33.761 | 3.51 | 26.62 | 150 | 5.84 | 33.76 | 26.62 | 145 | 0.32 |
| 175 | 5.82 | 33.843 | 3.10 | 26.68 | 175 | 5.82 | 33.84 | 26.68 | 139 | 0.35 |
| 200 | 5.79 | 33.917 | 2.44 | 26.75 | 200 | 5.79 | 33.92 | 26.75 | 133 | 0.38 |
| 225 | 5.38 | 33.932 | 2.28 | 26.81 | 225 | 5.38 | 33.93 | 26.81 | 128 | 0.42 |
| 250 | 5.14 | 33.961 | 1.88 | 26.86 | 250 | 5.14 | 33.96 | 26.86 | 123 | 0.45 |
| 300 | 4.87 | 34.008 | 1.62 | 26.93 | 300 | 4.87 | 34.01 | 26.93 | 117 | 0.51 |
| 400 | 4.63 | 34.065 | 1.12 | 27.00 | 400 | 4.63 | 34.06 | 27.00 | 111 | 0.62 |
| 500 | 4.12 | 34.130 | 0.94 | 27.10 | 500 | 4.12 | 34.13 | 27.10 | 101 | 0.73 |
| 600 | 3.89 | 34.214 | 0.54 | 27.19 | 600 | 3.89 | 34.21 | 27.19 | 93 | 0.83 |
| 800 | 3.40 | 34.306 | 0.41 | 27.32 | 700 | 3.65 | 34.27 | 27.27 | 87 | 0.92 |
| 1000 | 3.03 | 34.386 | 0.46 | 27.41 | 800 | 3.40 | 34.31 | 27.32 | 83 | 1.01 |
| 1200 | 2.69 | 34.444 | 0.47 | 27.49 | 1000 | 3.03 | 34.39 | 27.41 | 74 | 1.17 |
| 1500 | 2.30 | 34.513 | 0.78 | 27.58 | 1200 | 2.69 | 34.44 | 27.49 | 67 | 1.31 |
| 2000 | 1.89 | 34.592 | 1.51 | 27.68 | 1500 | 2.30 | 34.51 | 27.58 | 59 | 1.50 |
| 2500 | 1.69 | (34.626)a) | 2.13 | (27.72) | 2000 | 1.89 | 34.59 | 27.68 | 51 | 1.78 |
| | | | | | 2500 | 1.69 | 34.63 | 27.72 | 48 | 2.03 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HMCS OSHAWA; March 22, 1958; 1816 GCT; 54°58'N, 134°58'W; sounding, 1150 fm; wind, 040°, 15 kt; weather, cloudy; sea, slight. | | | | | | | | | | 45 |
| 0 | (6.12)a) | (32.529)a) | - | (25.61) | 0 | 6.12 | 32.53 | 25.61 | 239 | 0.00 |
| 5 | 6.16 | 32.536 | 7.13 | 25.61 | 10 | 6.18 | 32.54 | 25.61 | 238 | 0.02 |
| 19 | 6.15 | 32.544 | 7.36 | 25.62 | 20 | 6.14 | 32.54 | 25.62 | 238 | 0.05 |
| 29 | 6.04 | 32.540 | 7.31 | 25.63 | 30 | 6.03 | 32.54 | 25.63 | 237 | 0.07 |
| 48 | 5.74 | 32.581 | 7.19 | 25.70 | 50 | 5.72 | 32.58 | 25.70 | 230 | 0.12 |
| 73 | 5.68 | 32.584 | 7.25 | 25.71 | 75 | 5.68 | 32.59 | 25.71 | 230 | 0.18 |
| 97 | 5.74 | 32.657 | 6.90 | 25.76 | 100 | 5.73 | 32.69 | 25.79 | 223 | 0.23 |
| 121 | 5.62 | 33.122 | 5.69 | 26.14 | 125 | 5.60 | 33.20 | 26.20 | 184 | 0.28 |
| 145 | 5.46 | 33.549 | 4.37 | 26.49 | 150 | 5.47 | 33.61 | 26.54 | 152 | 0.33 |
| 170 | 5.64 | 33.782 | 3.45 | 26.66 | 175 | 5.62 | 33.81 | 26.68 | 139 | 0.36 |
| 194 | 5.34 | 33.830 | 3.30 | 26.73 | 200 | 5.26 | 33.84 | 26.75 | 133 | 0.40 |
| 218 | 5.00 | 33.864 | 3.10 | 26.80 | 225 | 4.93 | 33.87 | 26.81 | 127 | 0.43 |
| 242 | 4.83 | 33.900 | 2.36 | 26.85 | 250 | 4.78 | 33.91 | 26.86 | 123 | 0.46 |
| 291 | 4.60 | 33.960 | 1.67 | 26.92 | 300 | 4.56 | 33.97 | 26.93 | 116 | 0.52 |
| 395 | 4.28 | 34.071 | 1.11 | 27.04 | 400 | 4.27 | 34.07 | 27.04 | 106 | 0.64 |
| 494 | 4.14 | 34.102 | 0.94 | 27.08 | 500 | 4.13 | 34.10 | 27.08 | 103 | 0.74 |
| 592 | 4.01 | 34.143 | 0.81 | 27.13 | 600 | 4.00 | 34.15 | 27.13 | 100 | 0.84 |
| 790 | 3.62 | 34.261 | 0.56 | 27.26 | 700 | 3.82 | 34.20 | 27.19 | 94 | 0.94 |
| 988 | 3.12 | 34.370 | 0.50 | 27.39 | 800 | 3.60 | 34.27 | 27.27 | 88 | 1.03 |
| 1285 | 2.78 | 34.423 | 0.57 | 27.47 | 1000 | 3.10 | 34.37 | 27.40 | 76 | 1.20 |
| 1480 | 2.38 | 34.507 | 0.84 | 27.57 | 1200 | 2.83 | 34.42 | 27.46 | 70 | 1.35 |
| 1826 | 2.01 | 34.582 | 1.32 | 27.66 | 1500 | 2.35 | 34.51 | 27.58 | 60 | 1.54 |
| 2000 | (1.99)a) | (34.584)a) | - | (27.66) | 2000 | 1.99 | 34.58 | 27.66 | 53 | 1.83 |
| HMCS OSHAWA; March 22, 1958; 2110 GCT; 54°58'N, 134°29'W; sounding, 440 fm; wind, 020°, 10 kt; weather, overcast; sea, slight. | | | | | | | | | | 46 |
| 0 | 7.00 | 32.490 | - | 25.47 | 0 | 7.00 | 32.49 | 25.47 | 252 | 0.00 |
| 5 | 6.92 | 32.495 | 7.08 | 25.48 | 10 | 6.73 | 32.51 | 25.52 | 248 | 0.02 |
| 20 | 6.02 | 32.574 | 7.12 | 25.66 | 20 | 6.02 | 32.57 | 25.66 | 234 | 0.05 |
| 30 | 5.95 | 32.576 | 7.11 | 25.67 | 30 | 5.95 | 32.58 | 25.67 | 233 | 0.07 |
| 50 | 5.92 | 32.580 | 7.06 | 25.67 | 50 | 5.92 | 32.58 | 25.67 | 233 | 0.12 |
| 74 | 5.85 | 32.604 | 7.07 | 25.70 | 75 | 5.85 | 32.61 | 25.71 | 230 | 0.18 |
| 99 | 5.75 | 33.004 | 5.87 | 26.03 | 100 | 5.74 | 33.02 | 26.04 | 199 | 0.23 |
| 124 | 5.50 | 33.396 | 5.00 | 26.37 | 125 | 5.49 | 33.41 | 26.38 | 167 | 0.28 |
| 149 | 5.45 | 33.575 | 4.48 | 26.52 | 150 | 5.45 | 33.58 | 26.52 | 154 | 0.32 |
| 174 | 5.67 | 33.786 | 3.51 | 26.66 | 175 | 5.67 | 33.79 | 26.66 | 141 | 0.36 |
| 199 | 5.43 | 33.871 | 2.90 | 26.75 | 200 | 5.42 | 33.87 | 26.76 | 132 | 0.39 |
| 223 | 5.17 | 33.898 | 2.46 | 26.80 | 225 | 5.16 | 33.90 | 26.81 | 127 | 0.42 |
| 248 | 5.06 | 33.920 | 2.33 | 26.83 | 250 | 5.05 | 33.92 | 26.84 | 125 | 0.45 |
| 298 | 4.82 | 33.934 | 2.04 | 26.87 | 300 | 4.81 | 33.94 | 26.87 | 122 | 0.52 |
| 397 | 4.40 | 34.025 | 1.23 | 26.99 | 400 | 4.39 | 34.03 | 26.99 | 111 | 0.63 |
| 496 | 4.05 | 34.108 | 0.72 | 27.09 | 500 | 4.04 | 34.11 | 27.10 | 102 | 0.74 |
| 595 | 3.83 | 34.208 | 0.49 | 27.20 | 600 | 3.82 | 34.21 | 27.20 | 93 | 0.84 |
| 744 | 3.57 | 34.275 | 0.49 | 27.27 | 700 | 3.64 | 34.27 | 27.26 | 88 | 0.93 |
| 800 | (3.49)a) | (34.274)a) | - | (27.28) | 800 | 3.49 | 34.27 | 27.28 | 86 | 1.02 |
| HMCS OSHAWA; March 22, 1958; 2305 GCT; 54°57'N, 134°14'W; sounding, 104 fm; wind, 020°, 8 kt; weather, drizzle; sea, slight. | | | | | | | | | | 47 |
| 0 | 7.70 | 32.356 | 6.79 | 25.26 | 0 | 7.70 | 32.36 | 25.26 | 272 | 0.00 |
| 10 | 7.70 | 32.324 | 6.96 | 25.24 | 10 | 7.70 | 32.32 | 25.24 | 274 | 0.03 |
| 20 | 7.69 | 32.331 | 7.01 | 25.25 | 20 | 7.69 | 32.33 | 25.25 | 274 | 0.06 |
| 30 | 7.71 | 32.326 | 6.97 | 25.24 | 30 | 7.71 | 32.33 | 25.24 | 274 | 0.08 |
| 50 | 7.71 | 32.332 | 6.78 | 25.24 | 50 | 7.71 | 32.33 | 25.24 | 274 | 0.14 |
| 75 | 7.80 | 32.592 | 6.20 | 25.44 | 75 | 7.80 | 32.59 | 25.44 | 256 | 0.20 |
| 100 | 7.64 | 33.038 | 5.01 | 25.81 | 100 | 7.64 | 33.04 | 25.81 | 221 | 0.26 |
| 125 | 7.40 | 33.369 | 4.02 | 26.10 | 125 | 7.40 | 33.37 | 26.10 | 194 | 0.32 |
| 150 | 7.18 | 33.518 | 3.63 | 26.25 | 150 | 7.18 | 33.52 | 26.25 | 180 | 0.36 |
| 175 | 7.14 | 33.528 | 3.55 | 26.26 | 175 | 7.14 | 33.53 | 26.26 | 179 | 0.41 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 48 | HMCS OSHAWA; March 23, 1958; 0204 GCT; 54°43'N, 133°30'W; sounding, 106 fm; wind, direction missing, 3 kt; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | 7.30 | 32.016 | 6.59 | 25.05 | 0 | 7.30 | 32.02 | 25.05 | 292 | 0.00 |
| 10 | 7.47 | 32.137 | 6.53 | 25.13 | 10 | 7.47 | 32.14 | 25.13 | 285 | 0.03 |
| 20 | 7.44 | 32.144 | 6.52 | 25.14 | 20 | 7.44 | 32.14 | 25.14 | 284 | 0.06 |
| 30 | 7.49 | 32.152 | 6.50 | 25.13 | 30 | 7.49 | 32.15 | 25.13 | 284 | 0.09 |
| 50 | 7.53 | 32.213 | 6.45 | 25.18 | 50 | 7.53 | 32.21 | 25.18 | 280 | 0.14 |
| 75 | 7.58 | 32.334 | 6.24 | 25.26 | 75 | 7.58 | 32.33 | 25.26 | 272 | 0.21 |
| 100 | 7.37 | 32.572 | 5.32 | 25.48 | 100 | 7.37 | 32.57 | 25.48 | 252 | 0.28 |
| 125 | 7.31 | 32.762 | 5.00 | 25.64 | 125 | 7.31 | 32.76 | 25.64 | 238 | 0.34 |
| 150 | 7.26 | 32.981 | 4.47 | 25.82 | 150 | 7.26 | 32.98 | 25.82 | 221 | 0.40 |
| 175 | 7.13 | 33.235 | 3.94 | 26.03 | 175 | 7.13 | 33.23 | 26.03 | 201 | 0.45 |
| 49 | HMCS OSHAWA; March 23, 1958; 0352 GCT; 54°30'N, 133°17'W; sounding, 173 fm; wind, 120°, 12 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | (6.67)a) | (31.460)a) | - | (24.70) | 0 | 6.67 | 31.46 | 24.70 | 325 | 0.00 |
| 5 | 6.68 | 31.466 | 6.63 | 24.70 | 10 | 6.70 | 31.48 | 24.71 | 324 | 0.03 |
| 19 | 6.73 | 31.531 | 6.44 | 24.75 | 20 | 6.73 | 31.54 | 24.75 | 320 | 0.06 |
| 29 | 6.78 | 31.620 | 6.38 | 24.81 | 30 | 6.79 | 31.63 | 24.82 | 314 | 0.10 |
| 48 | 7.07 | 31.896 | 6.72 | 24.99 | 50 | 7.09 | 31.92 | 25.00 | 297 | 0.16 |
| 72 | 7.11 | 32.026 | 5.94 | 25.09 | 75 | 7.12 | 32.04 | 25.10 | 288 | 0.23 |
| 96 | 7.17 | 32.131 | 5.60 | 25.16 | 100 | 7.17 | 32.14 | 25.17 | 282 | 0.30 |
| 120 | 7.17 | 32.187 | 5.81 | 25.21 | 125 | 7.18 | 32.20 | 25.22 | 278 | 0.37 |
| 144 | 7.21 | 32.255 | 5.57 | 25.25 | 150 | 7.20 | 32.33 | 25.31 | 269 | 0.44 |
| 168 | 7.14 | 32.664 | 4.60 | 25.58 | 175 | 7.13 | 32.73 | 25.64 | 238 | 0.51 |
| 192 | 7.14 | 32.801 | 4.61 | 25.69 | 200 | 7.10 | 32.92 | 25.79 | 224 | 0.56 |
| 216 | 6.96 | 33.277 | 3.76 | 26.09 | 225 | 6.88 | 33.40 | 26.20 | 186 | 0.62 |
| 240 | 6.73 | 33.526 | 3.27 | 26.32 | 250 | 6.64 | 33.60 | 26.39 | 168 | 0.66 |
| 288 | 6.37 | 33.769 | 2.79 | 26.56 | 300 | 6.30 | 33.78 | 26.57 | 151 | 0.74 |
| 300 | (6.30)a) | (33.777)a) | - | (26.57) | | | | | | |
| 50 | HMCS OSHAWA; March 23, 1958; 0616 GCT; 54°15.5'N, 133°05'W; sounding, 205 fm; wind, 120°, 15 kt; weather, drizzle; sea, smooth. | | | | | | | | | |
| 0 | (7.13)a) | (32.347)a) | - | (25.34) | 0 | 7.13 | 32.35 | 25.34 | 265 | 0.00 |
| 5 | 7.14 | 32.324 | 5.61 | 25.32 | 10 | 7.15 | 32.31 | 25.30 | 268 | 0.03 |
| 20 | 7.17 | 32.291 | 5.86 | 25.29 | 20 | 7.17 | 32.29 | 25.29 | 270 | 0.05 |
| 30 | 7.18 | 32.300 | 5.72 | 25.29 | 30 | 7.18 | 32.30 | 25.29 | 269 | 0.08 |
| 50 | 7.19 | 32.314 | 5.62 | 25.30 | 50 | 7.19 | 32.31 | 25.30 | 268 | 0.14 |
| 75 | 7.18 | 32.352 | 5.73 | 25.33 | 75 | 7.18 | 32.35 | 25.33 | 266 | 0.20 |
| 100 | 7.31 | 32.482 | 5.59 | 25.42 | 100 | 7.31 | 32.48 | 25.42 | 258 | 0.27 |
| 124 | 7.18 | 32.712 | 5.11 | 25.62 | 125 | 7.17 | 32.72 | 25.63 | 239 | 0.33 |
| 149 | 6.98 | 32.982 | 4.37 | 25.86 | 150 | 6.97 | 32.99 | 25.87 | 216 | 0.39 |
| 174 | 6.72 | 33.340 | 3.64 | 26.17 | 175 | 6.71 | 33.35 | 26.18 | 187 | 0.44 |
| 199 | 6.43 | 33.568 | 3.15 | 26.39 | 200 | 6.42 | 33.58 | 26.40 | 166 | 0.48 |
| 224 | 6.08 | 33.752 | 2.53 | 26.58 | 225 | 6.07 | 33.76 | 26.58 | 149 | 0.52 |
| 249 | 6.00 | 33.794 | 2.53 | 26.62 | 250 | 6.00 | 33.80 | 26.62 | 146 | 0.56 |
| 298 | 5.84 | 33.837 | 2.53 | 26.68 | 300 | 5.83 | 33.84 | 26.68 | 141 | 0.63 |
| 348 | 5.52 | 33.875 | 2.42 | 26.75 | | | | | | |
| 51 | HMCS OSHAWA; March 26, 1958; 1523 GCT; 56°30'N, 135°36'W; sounding, 92 fm; wind, 230°, 12 kt; weather, moderate rain showers; sea, slight. | | | | | | | | | |
| 0 | 6.40 | 31.896 | 6.89 | 25.08 | 0 | 6.40 | 31.90 | 25.08 | 289 | 0.00 |
| 10 | 6.60 | 31.899 | 6.97 | 25.05 | 10 | 6.60 | 31.90 | 25.05 | 292 | 0.03 |
| 20 | 6.80 | 32.002 | 6.71 | 25.11 | 20 | 6.80 | 32.00 | 25.11 | 286 | 0.06 |
| 30 | 6.92 | 32.063 | 6.72 | 25.14 | 30 | 6.92 | 32.06 | 25.14 | 284 | 0.09 |
| 50 | 7.38 | 32.251 | 6.48 | 25.23 | 50 | 7.38 | 32.25 | 25.23 | 276 | 0.14 |
| 75 | 7.52 | 32.420 | 6.25 | 25.34 | 75 | 7.52 | 32.42 | 25.34 | 265 | 0.21 |
| 100 | 6.91 | 32.732 | 5.19 | 25.67 | 100 | 6.91 | 32.73 | 25.67 | 234 | 0.27 |
| 125 | 6.77 | 32.790 | 5.15 | 25.73 | 125 | 6.77 | 32.79 | 25.73 | 229 | 0.33 |
| 150 | 6.71 | 32.894 | 4.72 | 25.82 | 150 | 6.71 | 32.89 | 25.82 | 220 | 0.39 |
| 174 | 6.66 | 33.044 | 4.44 | 25.95 | 175 | 6.66 | 33.05 | 25.95 | 208 | 0.44 |
| 175 | (6.66)a) | (33.051)a) | - | (25.95) | | | | | | |



a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

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HMCS OSHAWA; March 26, 1958; 1701 GCT; 56°30'N, 135°55'W; sounding, 540 fm; wind, 240°, 12 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.96)a) | (32.400)a) | - | (25.40) | 0 | 6.96 | 32.40 | 25.40 | 259 | 0.00 |
| 5 | 6.96 | 32.359 | 7.06 | 25.37 | 10 | 6.95 | 32.34 | 25.36 | 263 | 0.03 |
| 18 | 6.94 | 32.363 | 6.93 | 25.37 | 20 | 6.94 | 32.38 | 25.39 | 260 | 0.05 |
| 27 | 6.92 | 32.459 | 6.85 | 25.45 | 30 | 6.92 | 32.49 | 25.47 | 252 | 0.08 |
| 45 | 6.95 | 32.593 | 6.55 | 25.55 | 50 | 6.81 | 32.61 | 25.58 | 242 | 0.13 |
| 68 | 5.75 | 32.584 | 6.82 | 25.70 | 75 | 5.61 | 32.59 | 25.72 | 229 | 0.19 |
| 91 | 5.69 | 32.632 | 6.84 | 25.74 | 100 | 6.03 | 32.75 | 25.80 | 222 | 0.24 |
| 114 | 6.96 | 33.062 | 4.88 | 25.92 | 125 | 6.72 | 33.24 | 26.09 | 195 | 0.30 |
| 136 | 5.92 | 33.392 | 4.51 | 26.32 | 150 | 5.57 | 33.53 | 26.47 | 159 | 0.34 |
| 159 | 5.47 | 33.586 | 4.23 | 26.52 | 175 | 5.58 | 33.73 | 26.62 | 145 | 0.38 |
| 182 | 5.74 | 33.793 | 3.36 | 26.65 | 200 | 5.92 | 33.87 | 26.69 | 138 | 0.42 |
| 204 | 5.96 | 33.881 | 2.62 | 26.70 | 225 | 5.79 | 33.91 | 26.74 | 134 | 0.45 |
| 227 | 5.76 | 33.911 | 2.44 | 26.74 | 250 | 5.55 | 33.93 | 26.78 | 130 | 0.48 |
| 269 | 5.38 | 33.926 | 2.24 | 26.80 | 300 | 5.09 | 33.94 | 26.84 | 125 | 0.55 |
| 360 | 4.48 | 33.949 | 1.68 | 26.92 | 400 | 4.32 | 33.99 | 26.97 | 113 | 0.67 |
| 452 | 4.32 | 34.080 | 0.87 | 27.04 | 500 | 4.18 | 34.12 | 27.09 | 103 | 0.78 |
| 544 | 4.03 | 34.131 | 0.66 | 27.11 | 600 | 3.88 | 34.17 | 27.16 | 97 | 0.88 |
| 730 | 3.61 | 34.256 | 0.45 | 27.26 | 700 | 3.66 | 34.23 | 27.23 | 90 | 0.97 |
| 800 | (3.51)a) | (34.311)a) | - | (27.31) | 800 | 3.51 | 34.31 | 27.31 | 84 | 1.06 |

53

HMCS OSHAWA; March 26, 1958; 1950 GCT; 56°32'N, 136°30'W; sounding, 1105 fm; wind, 270°, 15 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.31)a) | (32.343)a) | - | (25.31) | 0 | 7.31 | 32.34 | 25.31 | 267 | 0.00 |
| 5 | 7.26 | 32.300 | 7.91 | 25.28 | 10 | 7.20 | 32.29 | 25.28 | 270 | 0.03 |
| 20 | 7.05 | 32.348 | 7.07 | 25.35 | 20 | 7.05 | 32.35 | 25.35 | 264 | 0.05 |
| 29 | 6.88 | 32.504 | 6.93 | 25.49 | 30 | 6.86 | 32.52 | 25.51 | 249 | 0.08 |
| 50 | 6.21 | 32.628 | 6.81 | 25.68 | 50 | 6.21 | 32.63 | 25.68 | 233 | 0.13 |
| 75 | 5.57 | 32.643 | 6.74 | 25.77 | 75 | 5.57 | 32.64 | 25.77 | 224 | 0.19 |
| 100 | 5.83 | 33.030 | 5.53 | 26.04 | 100 | 5.83 | 33.03 | 26.04 | 199 | 0.24 |
| 125 | 6.12 | 33.336 | 4.55 | 26.25 | 125 | 6.12 | 33.34 | 26.25 | 180 | 0.29 |
| 150 | 6.16 | 33.644 | 3.28 | 26.48 | 150 | 6.16 | 33.64 | 26.48 | 158 | 0.33 |
| 175 | 5.92 | 33.812 | 3.09 | 26.65 | 175 | 5.92 | 33.81 | 26.65 | 142 | 0.37 |
| 200 | 5.64 | 33.890 | 2.50 | 26.74 | 200 | 5.64 | 33.89 | 26.74 | 134 | 0.40 |
| 224 | 5.30 | 33.924 | 2.35 | 26.81 | 225 | 5.29 | 33.93 | 26.81 | 127 | 0.44 |
| 250 | 5.20 | 33.950 | 2.02 | 26.84 | 250 | 5.20 | 33.95 | 26.84 | 124 | 0.47 |
| 300 | 4.82 | 33.976 | 1.60 | 26.91 | 300 | 4.82 | 33.98 | 26.91 | 119 | 0.53 |
| 400 | 4.33 | 34.031 | 1.12 | 27.00 | 400 | 4.33 | 34.03 | 27.00 | 110 | 0.64 |
| 500 | 4.17 | 34.106 | 0.78 | 27.08 | 500 | 4.17 | 34.11 | 27.08 | 104 | 0.75 |
| 600 | 3.93 | 34.172 | 0.63 | 27.16 | 600 | 3.93 | 34.17 | 27.16 | 97 | 0.85 |
| 800 | 3.51 | 34.289 | 0.46 | 27.29 | 700 | 3.71 | 34.23 | 27.23 | 91 | 0.95 |
| 1000 | 3.12 | 34.377 | 0.46 | 27.40 | 800 | 3.51 | 34.29 | 27.29 | 85 | 1.04 |
| 1200 | 2.79 | 34.429 | 0.48 | 27.47 | 1000 | 3.12 | 34.38 | 27.40 | 76 | 1.20 |
| 1500 | 2.38 | 34.512 | 0.73 | 27.57 | 1200 | 2.79 | 34.43 | 27.47 | 70 | 1.35 |
| 2001 | 1.90 | 34.598 | 1.64 | 27.68 | 1500 | 2.38 | 34.51 | 27.57 | 60 | 1.54 |
| | | | | | 2000 | 1.90 | 34.60 | 27.68 | 51 | 1.82 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 54 | HMCS OSHAWA; March 27, 1958; 0039 GCT; 56°30'N, 137°25'W; sounding, 1300 fm; wind, 260°, 10 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | |
| 0 | (6.79)a) | (31.944)a) | - | (25.07) | 0 | 6.79 | 31.94 | 25.07 | 290 | 0.00 |
| 5 | 6.84 | 32.017 | 6.91 | 25.12 | 10 | 6.90 | 32.10 | 25.17 | 280 | 0.03 |
| 20 | 7.02 | 32.276 | 7.07 | 25.30 | 20 | 7.02 | 32.28 | 25.30 | 269 | 0.06 |
| 30 | 7.16 | 32.483 | 6.90 | 25.44 | 30 | 7.16 | 32.48 | 25.44 | 255 | 0.08 |
| 50 | 6.80 | 32.606 | 6.56 | 25.58 | 50 | 6.80 | 32.61 | 25.58 | 242 | 0.13 |
| 75 | 6.04 | 32.669 | 6.73 | 25.73 | 75 | 6.04 | 32.67 | 25.73 | 228 | 0.19 |
| 100 | 6.48 | 32.884 | 5.76 | 25.84 | 100 | 6.48 | 32.88 | 25.84 | 218 | 0.25 |
| 124 | 6.51 | 33.235 | 4.69 | 26.12 | 125 | 6.49 | 33.25 | 26.13 | 191 | 0.30 |
| 149 | 5.40 | 33.488 | 4.65 | 26.45 | 150 | 5.38 | 33.50 | 26.46 | 159 | 0.34 |
| 174 | 5.32 | 33.665 | 4.13 | 26.60 | 175 | 5.32 | 33.67 | 26.61 | 146 | 0.38 |
| 199 | 5.34 | 33.791 | 3.49 | 26.70 | 200 | 5.34 | 33.79 | 26.70 | 137 | 0.42 |
| 224 | 5.16 | 33.847 | 3.14 | 26.77 | 225 | 5.15 | 33.85 | 26.77 | 131 | 0.45 |
| 248 | 5.04 | 33.886 | 2.61 | 26.81 | 250 | 5.03 | 33.89 | 26.81 | 127 | 0.48 |
| 298 | 4.72 | 33.935 | 1.98 | 26.89 | 300 | 4.71 | 33.94 | 26.89 | 120 | 0.55 |
| 397 | 4.36 | 34.016 | 1.22 | 26.99 | 400 | 4.35 | 34.02 | 26.99 | 111 | 0.66 |
| 497 | 4.06 | 34.112 | 0.75 | 27.10 | 500 | 4.05 | 34.11 | 27.10 | 102 | 0.77 |
| 597 | 3.82 | 34.200 | 0.44 | 27.19 | 600 | 3.81 | 34.20 | 27.19 | 93 | 0.87 |
| 796 | 3.42 | 34.311 | 0.45 | 27.32 | 700 | 3.60 | 34.27 | 27.27 | 87 | 0.96 |
| 996 | 3.06 | 34.402 | 0.40 | 27.42 | 800 | 3.41 | 34.31 | 27.32 | 82 | 1.05 |
| 1197 | 2.69 | 34.455 | 0.63 | 27.50 | 1000 | 3.05 | 34.40 | 27.43 | 73 | 1.20 |
| 1497 | 2.28 | 34.538 | 0.84 | 27.60 | 1200 | 2.69 | 34.46 | 27.50 | 66 | 1.34 |
| 1998 | 1.87 | 34.600 | 1.48 | 27.68 | 1500 | 2.28 | 34.54 | 27.60 | 57 | 1.53 |
| 2248 | 1.75 | 34.634 | 1.88 | 27.72 | 2000 | 1.87 | 34.60 | 27.68 | 50 | 1.80 |
| 55 | HMCS OSHAWA; March 27, 1958; 0620 GCT; 56°30'N, 138°44'W; sounding, 1720 fm; wind, 250°, 8 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | (6.92)a) | (32.054)a) | - | (25.13) | 0 | 6.92 | 32.05 | 25.13 | 284 | 0.00 |
| 5 | 6.88 | 32.050 | 6.79 | 25.14 | 10 | 6.85 | 32.05 | 25.14 | 284 | 0.03 |
| 20 | 6.86 | 32.063 | 6.75 | 25.15 | 20 | 6.86 | 32.06 | 25.15 | 283 | 0.06 |
| 30 | 6.94 | 32.093 | 6.73 | 25.16 | 30 | 6.94 | 32.09 | 25.16 | 282 | 0.08 |
| 50 | 7.62 | 32.318 | 6.52 | 25.25 | 50 | 7.62 | 32.32 | 25.25 | 274 | 0.14 |
| 75 | 7.41 | 32.461 | 6.37 | 25.39 | 75 | 7.41 | 32.46 | 25.39 | 261 | 0.21 |
| 100 | 7.13 | 32.507 | 6.68 | 25.46 | 100 | 7.13 | 32.51 | 25.46 | 254 | 0.27 |
| 125 | 6.98 | 32.663 | 5.99 | 25.60 | 125 | 6.98 | 32.66 | 25.60 | 241 | 0.34 |
| 150 | 7.15 | 33.019 | 5.14 | 25.86 | 150 | 7.15 | 33.02 | 25.86 | 217 | 0.39 |
| 175 | 6.66 | 33.358 | 4.17 | 26.19 | 175 | 6.66 | 33.36 | 26.19 | 186 | 0.44 |
| 200 | 6.31 | 33.578 | 3.67 | 26.41 | 200 | 6.31 | 33.58 | 26.41 | 165 | 0.49 |
| 225 | 5.94 | 33.749 | 3.07 | 26.59 | 225 | 5.94 | 33.75 | 26.59 | 148 | 0.53 |
| 249 | 5.79 | 33.828 | 2.90 | 26.68 | 250 | 5.78 | 33.83 | 26.68 | 140 | 0.56 |
| 299 | 5.30 | 33.904 | 2.32 | 26.79 | 300 | 5.29 | 33.91 | 26.80 | 129 | 0.63 |
| 400 | 4.66 | 33.987 | 1.56 | 26.93 | 400 | 4.66 | 33.99 | 26.93 | 117 | 0.76 |
| 500 | 4.24 | 34.073 | 0.93 | 27.05 | 500 | 4.24 | 34.07 | 27.05 | 107 | 0.87 |
| 600 | 4.04 | 34.143 | 0.60 | 27.12 | 600 | 4.04 | 34.14 | 27.12 | 100 | 0.97 |
| 800 | 3.52 | 34.260 | 0.52 | 27.27 | 700 | 3.80 | 34.21 | 27.20 | 94 | 1.07 |
| 1000 | 3.20 | 34.353 | 0.60 | 27.37 | 800 | 3.52 | 34.26 | 27.27 | 87 | 1.16 |
| 1200 | 2.79 | 34.421 | 0.76 | 27.46 | 1000 | 3.20 | 34.35 | 27.37 | 78 | 1.33 |
| 1500 | 2.37 | 34.508 | 1.02 | 27.57 | 1200 | 2.79 | 34.42 | 27.46 | 70 | 1.48 |
| 2000 | 1.93 | 34.586 | 1.31 | 27.67 | 1500 | 2.37 | 34.51 | 27.57 | 60 | 1.68 |
| 2501 | 1.70 | 34.635 | 2.26 | 27.72 | 2000 | 1.93 | 34.59 | 27.67 | 52 | 1.97 |
| 3102 | 1.51 | (34.655)a) | 0.56 | (27.75) | 2500 | 1.70 | 34.63 | 27.72 | 47 | 2.22 |
| | | | | | 3000 | 1.54 | 34.65 | 27.75 | 45 | 2.45 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

56

HMCS OSHAWA; March 27, 1958; 1202 GCT; 56°30'N, 140°00'W; sounding, 1850 fm; wind, 200°, 5 kt; weather, moderate snow showers; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.30)a) | (32.184)a) | - | (25.32) | 0 | 6.30 | 32.18 | 25.32 | 266 | 0.00 |
| 5 | 6.25 | 32.182 | 7.17 | 25.32 | 10 | 6.22 | 32.18 | 25.33 | 266 | 0.03 |
| 20 | 6.18 | 32.189 | 7.39 | 25.34 | 20 | 6.18 | 32.19 | 25.34 | 265 | 0.05 |
| 30 | 6.19 | 32.204 | 7.21 | 25.35 | 30 | 6.19 | 32.20 | 25.35 | 264 | 0.08 |
| 50 | 6.40 | 32.288 | 6.84 | 25.39 | 50 | 6.40 | 32.29 | 25.39 | 261 | 0.13 |
| 75 | 6.69 | 32.435 | 6.40 | 25.46 | 75 | 6.69 | 32.44 | 25.46 | 254 | 0.20 |
| 100 | 6.64 | 32.515 | 6.50 | 25.53 | 100 | 6.64 | 32.52 | 25.53 | 247 | 0.26 |
| 125 | 6.36 | 32.555 | 6.56 | 25.60 | 125 | 6.36 | 32.56 | 25.60 | 241 | 0.32 |
| 150 | 5.50 | 32.595 | 6.79 | 25.74 | 150 | 5.50 | 32.59 | 25.74 | 228 | 0.38 |
| 175 | 6.67 | 33.068 | 4.83 | 25.96 | 175 | 6.67 | 33.07 | 25.96 | 207 | 0.44 |
| 200 | 6.69 | 33.389 | 4.13 | 26.21 | 200 | 6.69 | 33.39 | 26.21 | 184 | 0.48 |
| 225 | 6.46 | 33.570 | 3.30 | 26.39 | 225 | 6.46 | 33.57 | 26.39 | 168 | 0.53 |
| 250 | 6.31 | 33.728 | 3.01 | 26.53 | 250 | 6.31 | 33.73 | 26.53 | 154 | 0.57 |
| 284 | 6.21 | 33.825 | 2.96 | 26.62 | 300 | 5.98 | 33.88 | 26.69 | 140 | 0.64 |
| 300 | 5.98 | 33.880 | 2.67 | 26.69 | 400 | 4.87 | 34.11 | 27.01 | 110 | 0.77 |
| 568 | 4.26 | 34.077 | 0.94 | 27.05 | 500 | 4.32 | 34.16 | 27.10 | 102 | 0.88 |
| 1041 | 3.18 | 34.347 | 0.58 | 27.37 | 600 | 4.11 | 34.10 | 27.08 | 104 | 0.98 |
| 1515 | 2.42 | 34.487 | 0.69 | 27.55 | 700 | 3.71 | 34.16 | 27.17 | 96 | 1.08 |
| 1990 | 2.00 | 34.585 | 1.38 | 27.66 | 800 | 3.42 | 34.22 | 27.25 | 89 | 1.18 |
| 2180 | 1.87 | 34.617 | 1.57 | 27.70 | 1000 | 3.17 | 34.33 | 27.35 | 80 | 1.35 |
| | | | | | 1200 | 2.89 | 34.41 | 27.45 | 72 | 1.50 |
| | | | | | 1500 | 2.44 | 34.48 | 27.55 | 63 | 1.71 |
| | | | | | 2000 | 1.99 | 34.59 | 27.66 | 52 | 2.00 |

57

HMCS OSHAWA; March 27, 1958; 2212 GCT; 57°05'N, 139°46'W; sounding, 1825 fm; wind, 100°, 8 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.51)a) | (32.282)a) | - | (25.37) | 0 | 6.51 | 32.28 | 25.37 | 262 | 0.00 |
| 5 | 6.49 | 32.278 | 6.90 | 25.37 | 10 | 6.47 | 32.28 | 25.37 | 262 | 0.03 |
| 20 | 6.45 | 32.274 | 6.97 | 25.37 | 20 | 6.45 | 32.27 | 25.37 | 262 | 0.05 |
| 30 | 6.44 | 32.278 | 6.92 | 25.37 | 30 | 6.44 | 32.28 | 25.37 | 262 | 0.08 |
| 50 | 6.16 | 32.283 | 7.00 | 25.41 | 50 | 6.16 | 32.28 | 25.41 | 258 | 0.13 |
| 75 | 6.14 | 32.286 | 6.98 | 25.42 | 75 | 6.14 | 32.29 | 25.42 | 258 | 0.20 |
| 100 | 6.18 | 32.299 | 6.88 | 25.42 | 100 | 6.18 | 32.30 | 25.42 | 258 | 0.26 |
| 125 | 6.63 | 32.507 | 6.41 | 25.53 | 125 | 6.63 | 32.51 | 25.53 | 248 | 0.32 |
| 150 | 6.02 | 32.604 | 6.59 | 25.68 | 150 | 6.02 | 32.60 | 25.68 | 234 | 0.38 |
| 175 | 6.26 | 32.750 | 5.96 | 25.77 | 175 | 6.26 | 32.75 | 25.77 | 226 | 0.44 |
| 200 | 6.76 | 33.218 | 4.12 | 26.07 | 200 | 6.76 | 33.22 | 26.07 | 198 | 0.50 |
| 225 | 6.52 | 33.549 | 3.44 | 26.36 | 225 | 6.52 | 33.55 | 26.36 | 170 | 0.54 |
| 250 | 6.38 | 33.697 | 2.98 | 26.50 | 250 | 6.38 | 33.70 | 26.50 | 158 | 0.58 |
| 300 | 5.84 | 33.866 | 2.70 | 26.70 | 300 | 5.84 | 33.87 | 26.70 | 139 | 0.66 |
| 393 | 4.95 | 33.941 | 2.26 | 26.86 | 400 | 4.90 | 33.95 | 26.87 | 123 | 0.79 |
| 491 | 4.49 | 34.015 | 1.15 | 26.97 | 500 | 4.45 | 34.02 | 26.98 | 113 | 0.91 |
| 590 | 4.09 | 34.074 | 0.90 | 27.06 | 600 | 4.06 | 34.08 | 27.07 | 105 | 1.02 |
| 788 | 3.74 | 34.228 | 0.53 | 27.22 | 700 | 3.82 | 34.15 | 27.15 | 98 | 1.12 |
| 984 | 3.35 | 34.319 | 0.45 | 27.33 | 800 | 3.72 | 34.24 | 27.23 | 92 | 1.22 |
| 1182 | 2.98 | 34.384 | 0.46 | 27.42 | 1000 | 3.32 | 34.33 | 27.34 | 82 | 1.39 |
| 1477 | 2.57 | 34.458 | 0.55 | 27.51 | 1200 | 2.95 | 34.39 | 27.42 | 74 | 1.55 |
| 1969 | 2.04 | 34.565 | 1.13 | 27.64 | 1500 | 2.54 | 34.46 | 27.52 | 66 | 1.76 |
| 2462 | 1.78 | 34.625 | 1.84 | 27.71 | 2000 | 2.02 | 34.57 | 27.65 | 54 | 2.07 |
| 2500 | (1.77)a) | (34.628)a) | - | (27.71) | 2500 | 1.77 | 34.63 | 27.71 | 49 | 2.33 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 58 | HMCS OSHAWA; March 28, 1958; 0306 GCT; 57°35'N, 139°33'W; sounding, 1725 fm; wind, 110°, 10 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | (6.46)a) | (32.242)a) | - | (25.34) | 0 | 6.46 | 32.24 | 25.34 | 264 | 0.00 |
| 5 | 6.43 | 32.232 | 7.01 | 25.34 | 10 | 6.42 | 32.23 | 25.34 | 264 | 0.03 |
| 19 | 6.44 | 32.256 | 6.78 | 25.36 | 20 | 6.45 | 32.26 | 25.36 | 263 | 0.05 |
| 28 | 6.52 | 32.312 | 6.92 | 25.39 | 30 | 6.54 | 32.32 | 25.40 | 259 | 0.08 |
| 46 | 6.75 | 32.396 | 6.53 | 25.43 | 50 | 6.77 | 32.41 | 25.43 | 256 | 0.13 |
| 69 | 6.74 | 32.462 | 6.09 | 25.48 | 75 | 6.72 | 32.48 | 25.49 | 251 | 0.20 |
| 93 | 6.64 | 32.521 | 6.44 | 25.54 | 100 | 6.57 | 32.54 | 25.56 | 244 | 0.26 |
| 116 | 6.32 | 32.594 | 6.12 | 25.64 | 125 | 6.20 | 32.62 | 25.67 | 234 | 0.32 |
| 140 | 6.01 | 32.648 | 6.37 | 25.72 | 150 | 6.03 | 32.71 | 25.76 | 226 | 0.38 |
| 164 | 6.20 | 32.822 | 5.85 | 25.83 | 175 | 6.42 | 32.96 | 25.91 | 212 | 0.43 |
| 188 | 6.80 | 33.174 | 4.29 | 26.03 | 200 | 6.82 | 33.32 | 26.14 | 191 | 0.48 |
| 213 | 6.64 | 33.464 | 3.58 | 26.28 | 225 | 6.54 | 33.57 | 26.37 | 169 | 0.53 |
| 238 | 6.42 | 33.654 | 3.07 | 26.46 | 250 | 6.33 | 33.72 | 26.52 | 155 | 0.57 |
| 286 | 6.12 | 33.841 | 2.61 | 26.64 | 300 | 6.02 | 33.88 | 26.69 | 140 | 0.64 |
| 400 | 5.08 | 33.938 | 1.79 | 26.85 | 400 | 5.08 | 33.94 | 26.85 | 126 | 0.78 |
| 500 | 4.46 | 34.006 | 1.04 | 26.97 | 500 | 4.46 | 34.01 | 26.97 | 114 | 0.90 |
| 600 | 4.18 | 34.097 | 0.67 | 27.07 | 600 | 4.18 | 34.10 | 27.07 | 105 | 1.01 |
| 797 | 3.72 | 34.221 | 0.50 | 27.22 | 700 | 3.93 | 34.17 | 27.15 | 98 | 1.11 |
| 994 | 3.29 | 34.322 | 0.37 | 27.34 | 800 | 3.71 | 34.22 | 27.22 | 92 | 1.21 |
| 1193 | 2.91 | 34.399 | 0.43 | 27.44 | 1000 | 3.28 | 34.32 | 27.34 | 81 | 1.38 |
| 1491 | 2.43 | 34.485 | 0.60 | 27.55 | 1200 | 2.90 | 34.40 | 27.44 | 73 | 1.54 |
| 1989 | 1.93 | 34.590 | 1.29 | 27.67 | 1500 | 2.42 | 34.49 | 27.55 | 63 | 1.74 |
| 2488 | 1.72 | 34.638 | 1.99 | 27.73 | 2000 | 1.92 | 34.59 | 27.67 | 51 | 2.03 |
| 2500 | (1.72)a) | (34.638)a) | - | (27.73) | 2500 | 1.72 | 34.64 | 27.73 | 47 | 2.28 |
| 59 | HMCS OSHAWA; March 28, 1958; 0918 GCT; 58°13'N, 139°17'W; sounding, 1150 fm; wind, 140°, 8 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | (6.09)a) | (32.022)a) | - | (25.21) | 0 | 6.09 | 32.02 | 25.21 | 276 | 0.00 |
| 5 | 6.13 | 32.033 | 6.89 | 25.22 | 10 | 6.16 | 32.04 | 25.22 | 276 | 0.03 |
| 20 | 6.20 | 32.056 | 7.22 | 25.23 | 20 | 6.20 | 32.06 | 25.23 | 275 | 0.06 |
| 30 | 6.20 | 32.063 | 7.00 | 25.23 | 30 | 6.20 | 32.06 | 25.23 | 275 | 0.08 |
| 50 | 6.43 | 32.119 | 7.03 | 25.25 | 50 | 6.43 | 32.12 | 25.25 | 274 | 0.14 |
| 75 | 6.49 | 32.131 | 6.78 | 25.25 | 75 | 6.49 | 32.13 | 25.25 | 274 | 0.21 |
| 100 | 6.51 | 32.199 | 6.63 | 25.30 | 100 | 6.51 | 32.20 | 25.30 | 269 | 0.28 |
| 124 | 6.74 | 32.355 | 6.48 | 25.39 | 125 | 6.74 | 32.36 | 25.40 | 260 | 0.34 |
| 149 | 6.74 | 32.476 | 6.31 | 25.49 | 150 | 6.73 | 32.48 | 25.49 | 252 | 0.41 |
| 174 | 6.48 | 32.521 | 6.56 | 25.56 | 175 | 6.47 | 32.52 | 25.56 | 245 | 0.47 |
| 199 | 6.21 | 32.639 | 6.46 | 25.69 | 200 | 6.21 | 32.65 | 25.70 | 233 | 0.53 |
| 224 | 6.36 | 33.206 | 4.42 | 26.11 | 225 | 6.36 | 33.23 | 26.13 | 192 | 0.58 |
| 249 | 6.11 | 33.616 | 3.55 | 26.47 | 250 | 6.10 | 33.63 | 26.48 | 159 | 0.63 |
| 299 | 5.72 | 33.801 | 2.88 | 26.66 | 300 | 5.71 | 33.80 | 26.67 | 142 | 0.70 |
| 387 | 4.51 | 34.013 | 1.13 | 26.97 | 400 | 4.40 | 34.03 | 27.00 | 111 | 0.83 |
| 479 | 4.10 | 34.115 | 0.87 | 27.09 | 500 | 4.03 | 34.13 | 27.12 | 100 | 0.94 |
| 576 | 3.82 | 34.192 | 0.53 | 27.18 | 600 | 3.76 | 34.21 | 27.20 | 92 | 1.03 |
| 769 | 3.45 | 34.279 | 0.50 | 27.29 | 700 | 3.55 | 34.26 | 27.26 | 87 | 1.12 |
| 963 | 3.15 | 34.354 | 0.44 | 27.38 | 800 | 3.40 | 34.29 | 27.31 | 84 | 1.21 |
| 1158 | 2.83 | 34.409 | 0.53 | 27.45 | 1000 | 3.09 | 34.37 | 27.39 | 76 | 1.37 |
| 1453 | 2.32 | 34.507 | 0.81 | 27.57 | 1200 | 2.76 | 34.42 | 27.47 | 70 | 1.52 |
| 1845 | 1.94 | 34.582 | 1.33 | 27.66 | 1500 | 2.26 | 34.52 | 27.59 | 58 | 1.72 |
| 2000 | (1.88)a) | (34.594)a) | - | (27.68) | 2000 | 1.88 | 34.59 | 27.68 | 51 | 1.99 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |

60

HMCS OSHAWA; March 28, 1958; 1125 GCT; 58°18'N, 139°18'W; sounding, 525 fm; wind, 140°, 8 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.10)a) | (32.046)a) | - | (25.23) | 0 | 6.10 | 32.05 | 25.23 | 275 | 0.00 |
| 5 | 6.09 | 32.045 | 7.00 | 25.23 | 10 | 6.08 | 32.04 | 25.23 | 275 | 0.03 |
| 20 | 6.10 | 32.044 | 6.75 | 25.23 | 20 | 6.10 | 32.04 | 25.23 | 275 | 0.06 |
| 30 | 6.15 | 32.046 | 6.81 | 25.23 | 30 | 6.15 | 32.05 | 25.23 | 276 | 0.08 |
| 50 | 6.67 | 32.144 | 6.72 | 25.24 | 50 | 6.67 | 32.14 | 25.24 | 275 | 0.14 |
| 75 | 6.53 | 32.164 | 6.45 | 25.27 | 75 | 6.53 | 32.16 | 25.27 | 272 | 0.21 |
| 100 | 6.49 | 32.209 | 6.72 | 25.31 | 100 | 6.49 | 32.21 | 25.31 | 268 | 0.28 |
| 125 | 6.81 | 32.370 | 6.40 | 25.40 | 125 | 6.81 | 32.37 | 25.40 | 260 | 0.34 |
| 149 | 6.82 | 32.482 | 6.26 | 25.48 | 150 | 6.81 | 32.49 | 25.49 | 252 | 0.41 |
| 174 | 6.56 | 32.545 | 6.16 | 25.57 | 175 | 6.55 | 32.55 | 25.57 | 244 | 0.47 |
| 199 | 6.24 | 32.670 | 6.00 | 25.71 | 200 | 6.24 | 32.69 | 25.72 | 230 | 0.53 |
| 224 | 6.33 | 33.427 | 3.84 | 26.29 | 225 | 6.33 | 33.45 | 26.31 | 175 | 0.58 |
| 249 | 6.01 | 33.666 | 3.28 | 26.52 | 250 | 6.00 | 33.67 | 26.53 | 155 | 0.62 |
| 299 | 5.61 | 33.856 | 2.61 | 26.72 | 300 | 5.60 | 33.86 | 26.72 | 137 | 0.69 |
| 396 | 4.63 | 33.989 | 1.36 | 26.94 | 400 | 4.60 | 33.99 | 26.94 | 116 | 0.82 |
| 497 | 4.12 | 34.098 | 0.84 | 27.08 | 500 | 4.11 | 34.10 | 27.08 | 103 | 0.93 |
| 597 | 3.84 | 34.178 | 0.58 | 27.17 | 600 | 3.83 | 34.18 | 27.17 | 95 | 1.03 |
| 795 | 3.40 | 34.287 | 0.47 | 27.30 | 700 | 3.59 | 34.24 | 27.25 | 89 | 1.12 |
| 893 | 3.31 | 34.314 | 0.57 | 27.33 | 800 | 3.39 | 34.29 | 27.30 | 84 | 1.21 |

61

HMCS OSHAWA; March 28, 1958; 1222 GCT; 58°20'N, 139°18'W; sounding, 120 fm; wind, 140°, 8 kt; weather, clear; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.21)a) | (32.058)a) | - | (25.23) | 0 | 6.21 | 32.06 | 25.23 | 275 | 0.00 |
| 5 | 6.37 | 32.098 | 6.89 | 25.24 | 10 | 6.48 | 32.13 | 25.25 | 273 | 0.03 |
| 20 | 6.55 | 32.156 | 6.88 | 25.26 | 20 | 6.55 | 32.16 | 25.26 | 272 | 0.06 |
| 30 | 6.43 | 32.142 | 6.94 | 25.27 | 30 | 6.43 | 32.14 | 25.27 | 272 | 0.08 |
| 50 | 6.24 | 32.149 | 7.03 | 25.30 | 50 | 6.24 | 32.15 | 25.30 | 269 | 0.14 |
| 75 | 6.14 | 32.152 | 6.99 | 25.31 | 75 | 6.14 | 32.15 | 25.31 | 268 | 0.20 |
| 100 | 6.52 | 32.280 | 6.65 | 25.36 | 100 | 6.52 | 32.28 | 25.36 | 263 | 0.27 |
| 125 | 6.32 | 32.333 | 6.83 | 25.43 | 125 | 6.32 | 32.33 | 25.43 | 257 | 0.34 |
| 150 | 6.63 | 32.495 | 6.56 | 25.52 | 150 | 6.63 | 32.50 | 25.52 | 249 | 0.40 |
| 175 | 6.32 | 32.495 | 6.09 | 25.56 | 175 | 6.32 | 32.50 | 25.56 | 246 | 0.46 |
| 200 | 6.41 | 32.851 | 5.58 | 25.83 | 200 | 6.41 | 32.85 | 25.83 | 220 | 0.52 |

62

HMCS OSHAWA; March 28, 1958; 1603 GCT; 58°53'N, 139°03'W; sounding, 85 fm; wind, 050°, 10 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.00 | 32.228 | 7.41 | 25.39 | 0 | 6.00 | 32.23 | 25.39 | 260 | 0.00 |
| 10 | 6.14 | 32.212 | 7.44 | 25.36 | 10 | 6.14 | 32.21 | 25.36 | 263 | 0.03 |
| 20 | 6.16 | 32.226 | 7.31 | 25.37 | 20 | 6.16 | 32.23 | 25.37 | 262 | 0.05 |
| 30 | 6.24 | 32.299 | 7.01 | 25.41 | 30 | 6.24 | 32.30 | 25.41 | 258 | 0.08 |
| 50 | 6.44 | 32.388 | 6.62 | 25.46 | 50 | 6.44 | 32.39 | 25.46 | 254 | 0.13 |
| 75 | 6.29 | 32.545 | 6.63 | 25.60 | 75 | 6.29 | 32.55 | 25.60 | 240 | 0.19 |
| 100 | 6.02 | 32.577 | 6.55 | 25.66 | 100 | 6.02 | 32.58 | 25.66 | 235 | 0.25 |
| 125 | 5.66 | 32.625 | 6.54 | 25.74 | 125 | 5.66 | 32.63 | 25.74 | 227 | 0.31 |

63

HMCS OSHAWA; March 29, 1958; 0107 GCT; 59°42'N, 141°30'W; sounding, 30 fm; wind, 050°, 5 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.20 | 32.065 | 7.06 | 25.35 | 0 | 5.20 | 32.06 | 25.35 | 263 | 0.00 |
| 10 | 5.27 | 32.042 | 7.27 | 25.33 | 10 | 5.27 | 32.04 | 25.33 | 264 | 0.03 |
| 20 | 5.25 | 32.054 | 7.34 | 25.34 | 20 | 5.25 | 32.05 | 25.34 | 265 | 0.05 |
| 30 | 5.34 | 32.086 | 7.04 | 25.35 | 30 | 5.34 | 32.09 | 25.35 | 263 | 0.08 |
| 40 | 5.37 | 32.094 | 7.00 | 25.36 | | | | | | |
| 45 | 5.38 | 32.084 | 6.93 | 25.35 | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 64 | HMCS OSHAWA; March 29, 1958; 0259 GCT; 59°28'N, 141°28'W; sounding, 90 fm; wind, 090°, 10 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | 5.70 | 32.199 | 7.16 | 25.40 | 0 | 5.70 | 32.20 | 25.40 | 258 | 0.00 |
| 10 | 5.77 | 32.178 | 6.96 | 25.38 | 10 | 5.77 | 32.18 | 25.38 | 261 | 0.03 |
| 20 | 5.72 | 32.184 | 5.97 | 25.39 | 20 | 5.72 | 32.18 | 25.39 | 260 | 0.05 |
| 30 | 5.71 | 32.190 | 5.97 | 25.39 | 30 | 5.71 | 32.19 | 25.39 | 260 | 0.08 |
| 50 | 5.85 | 32.211 | 6.85 | 25.39 | 50 | 5.85 | 32.21 | 25.39 | 260 | 0.13 |
| 75 | 5.90 | 32.253 | 6.38 | 25.42 | 75 | 5.90 | 32.25 | 25.42 | 258 | 0.20 |
| 100 | 6.32 | 32.358 | 6.62 | 25.45 | 100 | 6.32 | 32.36 | 25.45 | 255 | 0.26 |
| 125 | 6.44 | 32.450 | 6.48 | 25.51 | 125 | 6.44 | 32.45 | 25.51 | 250 | 0.32 |
| 150 | 6.47 | 32.597 | 5.60 | 25.62 | 150 | 6.47 | 32.60 | 25.62 | 240 | 0.38 |
| 65 | HMCS OSHAWA; March 29, 1958; 0430 GCT; 59°17'N, 142°14'W; sounding, 531 fm; wind, 110°, 10 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | (5.89)a) | (32.197)a) | - | (25.38) | 0 | 5.89 | 32.20 | 25.38 | 261 | 0.00 |
| 5 | 5.88 | 32.196 | 6.50 | 25.38 | 10 | 5.88 | 32.20 | 25.38 | 261 | 0.03 |
| 20 | 5.87 | 32.199 | 7.07 | 25.38 | 20 | 5.87 | 32.20 | 25.38 | 261 | 0.05 |
| 29 | 5.87 | 32.205 | 6.91 | 25.39 | 30 | 5.87 | 32.21 | 25.39 | 260 | 0.08 |
| 49 | 5.85 | 32.217 | 6.73 | 25.40 | 50 | 5.85 | 32.22 | 25.40 | 259 | 0.13 |
| 73 | 6.12 | 32.312 | 6.47 | 25.44 | 75 | 6.15 | 32.32 | 25.44 | 255 | 0.20 |
| 98 | 6.51 | 32.480 | 6.40 | 25.52 | 100 | 6.52 | 32.49 | 25.53 | 248 | 0.26 |
| 122 | 6.40 | 32.574 | 6.04 | 25.61 | 125 | 6.36 | 32.60 | 25.64 | 238 | 0.32 |
| 146 | 5.96 | 32.882 | 5.56 | 25.91 | 150 | 5.91 | 32.94 | 25.96 | 207 | 0.38 |
| 171 | 5.80 | 33.266 | 4.39 | 26.23 | 175 | 5.82 | 33.32 | 26.27 | 178 | 0.42 |
| 195 | 6.10 | 33.586 | 3.38 | 26.45 | 200 | 6.12 | 33.63 | 26.48 | 158 | 0.47 |
| 220 | 6.03 | 33.760 | 2.79 | 26.59 | 225 | 6.00 | 33.78 | 26.61 | 146 | 0.50 |
| 244 | 5.84 | 33.828 | 2.67 | 26.67 | 250 | 5.79 | 33.84 | 26.69 | 140 | 0.54 |
| 293 | 5.32 | 33.907 | 1.92 | 26.79 | 300 | 5.25 | 33.92 | 26.81 | 128 | 0.61 |
| 390 | 4.55 | 33.993 | 1.16 | 26.95 | 400 | 4.50 | 34.00 | 26.96 | 114 | 0.73 |
| 488 | 4.23 | 34.072 | 0.83 | 27.05 | 500 | 4.19 | 34.08 | 27.06 | 106 | 0.84 |
| 586 | 3.94 | 34.158 | 0.49 | 27.15 | 600 | 3.90 | 34.17 | 27.16 | 97 | 0.94 |
| 783 | 3.49 | 34.266 | 0.36 | 27.28 | 700 | 3.66 | 34.23 | 27.23 | 90 | 1.04 |
| 881 | 3.26 | 34.326 | 0.41 | 27.35 | 800 | 3.45 | 34.28 | 27.29 | 86 | 1.13 |
| 66 | HMCS OSHAWA; March 29, 1958; 0709 GCT; 59°10'N, 142°20'W; sounding, 1116 fm; wind, 090°, 5 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | (5.81)a) | (32.213)a) | - | (25.40) | 0 | 5.81 | 32.21 | 25.40 | 259 | 0.00 |
| 5 | 5.84 | 32.208 | 6.44 | 25.39 | 10 | 5.89 | 32.22 | 25.39 | 259 | 0.03 |
| 20 | 6.02 | 32.273 | 6.10 | 25.42 | 20 | 6.02 | 32.27 | 25.42 | 257 | 0.05 |
| 30 | 6.21 | 32.384 | 5.79 | 25.48 | 30 | 6.21 | 32.38 | 25.48 | 251 | 0.08 |
| 50 | 6.22 | 32.510 | 6.33 | 25.58 | 50 | 6.22 | 32.51 | 25.58 | 242 | 0.13 |
| 75 | 5.80 | 32.578 | 6.53 | 25.69 | 75 | 5.80 | 32.58 | 25.69 | 232 | 0.19 |
| 100 | 5.42 | 32.596 | 5.75 | 25.75 | 100 | 5.42 | 32.60 | 25.75 | 227 | 0.24 |
| 125 | 5.36 | 32.657 | 6.43 | 25.80 | 125 | 5.36 | 32.66 | 25.80 | 222 | 0.30 |
| 150 | 5.87 | 33.199 | 4.59 | 26.17 | 150 | 5.87 | 33.20 | 26.17 | 187 | 0.35 |
| 175 | 6.09 | 33.608 | 3.37 | 26.46 | 175 | 6.09 | 33.61 | 26.46 | 160 | 0.40 |
| 200 | 5.90 | 33.756 | 3.01 | 26.60 | 200 | 5.90 | 33.76 | 26.60 | 147 | 0.44 |
| 225 | 5.68 | 33.840 | 2.55 | 26.70 | 225 | 5.68 | 33.84 | 26.70 | 138 | 0.47 |
| 250 | 5.44 | 33.865 | 2.31 | 26.75 | 250 | 5.44 | 33.86 | 26.75 | 134 | 0.50 |
| 300 | 5.02 | 33.922 | 1.92 | 26.84 | 300 | 5.02 | 33.92 | 26.84 | 125 | 0.57 |
| 400 | 4.44 | 34.028 | 1.13 | 26.99 | 400 | 4.44 | 34.03 | 26.99 | 112 | 0.69 |
| 500 | 4.14 | 34.096 | 0.68 | 27.08 | 500 | 4.14 | 34.10 | 27.08 | 104 | 0.80 |
| 600 | 3.92 | 34.168 | 0.47 | 27.15 | 600 | 3.92 | 34.17 | 27.15 | 97 | 0.90 |
| 800 | 3.50 | 34.282 | 0.46 | 27.29 | 700 | 3.71 | 34.23 | 27.23 | 91 | 1.00 |
| 1000 | 3.09 | 34.364 | 0.41 | 27.39 | 800 | 3.50 | 34.28 | 27.29 | 86 | 1.08 |
| 1200 | 2.72 | 34.434 | 0.50 | 27.48 | 1000 | 3.09 | 34.36 | 27.39 | 76 | 1.25 |
| 1500 | 2.30 | 34.512 | 0.78 | 27.58 | 1200 | 2.72 | 34.43 | 27.48 | 68 | 1.40 |
| 2000 | 1.93 | 34.587 | 1.38 | 27.67 | 1500 | 2.30 | 34.51 | 27.58 | 59 | 1.59 |
| | | | | | 2000 | 1.93 | 34.59 | 27.67 | 52 | 1.87 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

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HMCS OSHAWA; March 29, 1958; 1213 GCT; 58°44'N, 142°48'W; sounding, 1700 fm; wind, 070°, 8 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (5.81)a) | (32.250)a) | - | (25.43) | 0 | 5.81 | 32.25 | 25.43 | 256 | 0.00 |
| 5 | 5.87 | 32.280 | 7.10 | 25.44 | 10 | 5.91 | 32.30 | 25.46 | 253 | 0.03 |
| 20 | 5.97 | 32.335 | 6.98 | 25.48 | 20 | 5.97 | 32.33 | 25.48 | 252 | 0.05 |
| 30 | 5.98 | 32.342 | 7.11 | 25.48 | 30 | 5.98 | 32.34 | 25.48 | 251 | 0.08 |
| 50 | 6.13 | 32.455 | 6.14 | 25.55 | 50 | 6.13 | 32.45 | 25.55 | 245 | 0.13 |
| 75 | 6.19 | 32.590 | 6.36 | 25.65 | 75 | 6.19 | 32.59 | 25.65 | 236 | 0.19 |
| 100 | 5.89 | 32.642 | 6.40 | 25.73 | 100 | 5.89 | 32.64 | 25.73 | 229 | 0.24 |
| 125 | 5.96 | 32.727 | 6.07 | 25.79 | 125 | 5.96 | 32.73 | 25.79 | 223 | 0.30 |
| 150 | 6.13 | 32.913 | 5.38 | 25.91 | 150 | 6.13 | 32.91 | 25.91 | 212 | 0.36 |
| 175 | 5.80 | 33.212 | 4.77 | 26.19 | 175 | 5.80 | 33.21 | 26.19 | 186 | 0.41 |
| 200 | 6.09 | 33.569 | 3.56 | 26.43 | 200 | 6.09 | 33.57 | 26.43 | 163 | 0.45 |
| 225 | 5.82 | 33.716 | 4.32 | 26.58 | 225 | 5.82 | 33.72 | 26.58 | 149 | 0.49 |
| 250 | 5.71 | 33.808 | 2.90 | 26.67 | 250 | 5.71 | 33.81 | 26.67 | 141 | 0.53 |
| 300 | 5.44 | (33.931)b) | 2.30 | (26.80) | 300 | 5.44 | 33.93 | 26.80 | 129 | 0.60 |
| 386 | 4.85 | 33.950 | 1.31 | 26.88 | 400 | 4.77 | 33.96 | 26.90 | 120 | 0.72 |
| 483 | 4.42 | 34.026 | 1.06 | 26.99 | 500 | 4.36 | 34.04 | 27.01 | 111 | 0.84 |
| 579 | 4.10 | 34.104 | 0.76 | 27.09 | 600 | 4.04 | 34.12 | 27.10 | 102 | 0.94 |
| 771 | 3.66 | 34.231 | 0.44 | 27.23 | 700 | 3.79 | 34.19 | 27.18 | 95 | 1.04 |
| 965 | 3.19 | 34.341 | 0.41 | 27.36 | 800 | 3.59 | 34.25 | 27.25 | 89 | 1.14 |
| 1152 | 2.86 | 34.398 | 0.46 | 27.44 | 1000 | 3.12 | 34.36 | 27.38 | 77 | 1.31 |
| 1435 | 2.44 | 34.480 | 0.69 | 27.54 | 1200 | 2.78 | 34.41 | 27.46 | 71 | 1.46 |
| 1912 | 1.93 | 34.586 | 1.36 | 27.67 | 1500 | 2.36 | 34.50 | 27.56 | 61 | 1.66 |
| 2390 | 1.75 | 34.648 | 1.90 | 27.73 | 2000 | 1.87 | 34.60 | 27.68 | 50 | 1.94 |
| 2500 | (1.76)a) | (34.656)a) | - | (27.74) | 2500 | 1.76 | 34.66 | 27.74 | 46 | 2.18 |

68

HMCS OSHAWA; March 29, 1958; 1740 GCT; 58°10'N, 143°33'W; sounding, 1850 fm; wind, 140°, 10 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.26) | (32.475) | (7.87) | (25.55) | 0 | 6.26 | 32.48 | 25.55 | 0.00 |
| 5 | 6.26 | 32.480 | 7.74 | 25.55 | 10 | 6.26 | 32.48 | 25.56 | 0.02 |
| 20 | 6.26 | 32.487 | 7.50 | 25.56 | 20 | 6.26 | 32.49 | 25.56 | 0.05 |
| 30 | 6.26 | 32.485 | 7.21 | 25.56 | 30 | 6.26 | 32.48 | 25.56 | 0.07 |
| 50 | 6.27 | 32.504 | 7.20 | 25.57 | 50 | 6.27 | 32.50 | 25.57 | 0.12 |
| 75 | 5.98 | 32.599 | 7.04 | 25.68 | 75 | 5.98 | 32.60 | 25.68 | 0.18 |
| 99 | 5.37 | 32.651 | 6.88 | 25.80 | 100 | 5.36 | 32.65 | 25.80 | 0.24 |
| 124 | 5.12 | 32.725 | 7.06 | 25.88 | 125 | 5.19 | 32.75 | 25.90 | 0.29 |
| 149 | 6.80 | 33.374 | 4.13 | 26.19 | 150 | 6.78 | 33.38 | 26.20 | 0.34 |
| 174 | 6.31 | 33.573 | 3.74 | 26.41 | 175 | 6.30 | 33.58 | 26.41 | 0.39 |
| 199 | 6.12 | 33.692 | 3.43 | 26.53 | 200 | 6.13 | 33.70 | 26.53 | 0.43 |
| 223 | 6.27 | 33.839 | 2.98 | 26.62 | 250 | 5.84 | 33.86 | 26.70 | 0.50 |
| 248 | 5.86 | 33.862 | 2.86 | 26.69 | 300 | 5.35 | 33.92 | 26.80 | 0.57 |
| 298 | 5.37 | 33.915 | 2.25 | 26.79 | 400 | 4.68 | 33.97 | 26.92 | 0.70 |
| 397 | 4.69 | 33.971 | 1.42 | 26.92 | 500 | 4.30 | 34.06 | 27.03 | 0.81 |
| 495 | 4.32 | 34.054 | 0.95 | 27.02 | 600 | 4.02 | 34.14 | 27.12 | 0.92 |
| 594 | 4.04 | 34.134 | 0.35 | 27.12 | 700 | 3.78 | 34.21 | 27.20 | 1.01 |
| 791 | 3.58 | 34.262 | 0.46 | 27.26 | 800 | 3.56 | 34.27 | 27.27 | 1.10 |
| 986 | 3.22 | 34.346 | 0.41 | 27.37 | 1000 | 3.20 | 34.35 | 27.37 | 1.27 |
| 1182 | 2.96 | 34.402 | 0.44 | 27.43 | 1200 | 2.93 | 34.41 | 27.44 | 1.43 |
| 1478 | 2.48 | 34.478 | 0.62 | 27.54 | 1500 | 2.46 | 34.48 | 27.54 | 1.63 |
| 1975 | 2.00 | 34.582 | 1.25 | 27.66 | 2000 | 1.99 | 34.58 | 27.66 | 1.93 |
| 2470 | 1.78 | 34.624 | 1.86 | 27.71 | 2500 | 1.77 | 34.63 | 27.71 | 2.18 |
| 2500 | (1.77) | (34.626) | (1.89) | (27.71) | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 69 | HMCS OSHAWA; March 29, 1958; 2329 GCT; 57°42'N, 144°28'W; sounding, 2000 fm; wind, 120°, 8 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | (5.23)a) | (32.678)a) | - | (25.83) | 0 | 5.23 | 32.68 | 25.83 | 217 | 0.00 |
| 5 | 5.28 | 32.672 | 7.12 | 25.82 | 10 | 5.29 | 32.67 | 25.82 | 219 | 0.02 |
| 20 | 5.17 | 32.672 | 7.19 | 25.84 | 20 | 5.17 | 32.67 | 25.84 | 217 | 0.04 |
| 29 | 4.92 | 32.685 | 7.24 | 25.87 | 30 | 4.90 | 32.69 | 25.88 | 214 | 0.07 |
| 49 | 4.66 | 32.730 | 7.21 | 25.94 | 50 | 4.65 | 32.73 | 25.94 | 208 | 0.11 |
| 73 | 4.41 | 32.788 | 6.88 | 26.01 | 75 | 4.39 | 32.81 | 26.03 | 199 | 0.16 |
| 98 | 4.26 | 33.254 | 5.02 | 26.39 | 100 | 4.25 | 33.28 | 26.42 | 163 | 0.20 |
| 122 | 4.07 | 33.501 | 4.82 | 26.61 | 125 | 4.06 | 33.53 | 26.64 | 142 | 0.24 |
| 147 | 4.07 | 33.745 | 2.20 | 26.80 | 150 | 4.07 | 33.77 | 26.82 | 125 | 0.28 |
| 171 | 4.12 | 33.858 | 1.48 | 26.89 | 175 | 4.12 | 33.87 | 26.90 | 118 | 0.31 |
| 195 | 4.10 | 33.924 | 1.02 | 26.94 | 200 | 4.09 | 33.93 | 26.95 | 113 | 0.34 |
| 219 | 4.07 | 33.953 | 0.74 | 26.97 | 225 | 4.06 | 33.96 | 26.98 | 111 | 0.36 |
| 243 | 4.02 | 33.984 | 0.56 | 27.00 | 250 | 4.01 | 33.99 | 27.01 | 108 | 0.39 |
| 290 | 3.96 | 34.030 | 0.41 | 27.04 | 300 | 3.94 | 34.04 | 27.05 | 104 | 0.45 |
| 387 | 3.78 | 34.112 | 0.48 | 27.12 | 400 | 3.76 | 34.12 | 27.13 | 97 | 0.55 |
| 485 | 3.68 | 34.178 | 0.49 | 27.19 | 500 | 3.65 | 34.19 | 27.20 | 92 | 0.64 |
| 584 | 3.46 | 34.242 | 0.38 | 27.26 | 600 | 3.43 | 34.25 | 27.27 | 86 | 0.73 |
| 780 | 3.19 | 34.330 | 0.40 | 27.36 | 700 | 3.27 | 34.30 | 27.32 | 81 | 0.82 |
| 979 | 2.87 | 34.394 | 0.46 | 27.44 | 800 | 3.16 | 34.34 | 27.36 | 78 | 0.90 |
| 1180 | 2.61 | 34.450 | 0.55 | 27.50 | 1000 | 2.84 | 34.40 | 27.44 | 71 | 1.05 |
| 1478 | 2.29 | 34.520 | 0.77 | 27.59 | 1200 | 2.59 | 34.46 | 27.51 | 65 | 1.19 |
| 1975 | 1.90 | 34.600 | 1.43 | 27.68 | 1500 | 2.27 | 34.52 | 27.59 | 58 | 1.37 |
| 2474 | 1.70 | 34.646 | 2.04 | 27.73 | 2000 | 1.89 | 34.60 | 27.68 | 50 | 1.65 |
| 2500 | (1.69)a) | (34.647)a) | - | (27.73) | 2500 | 1.69 | 34.65 | 27.73 | 46 | 1.89 |
| 70 | HMCS OSHAWA; March 30, 1958; 0507 GCT; 57°00'N, 145°00'W; sounding, 1980 fm; wind, 120°, 18 kt; weather, moderate rain showers; sea, slight. | | | | | | | | | |
| 0 | (5.00)a) | (32.633)a) | - | (25.82) | 0 | 5.00 | 32.63 | 25.82 | 218 | 0.00 |
| 5 | 5.01 | 32.654 | 7.11 | 25.84 | 10 | 5.01 | 32.67 | 25.85 | 216 | 0.02 |
| 20 | 5.00 | 32.711 | 7.03 | 25.89 | 20 | 5.00 | 32.71 | 25.89 | 213 | 0.04 |
| 30 | 4.96 | 32.745 | 7.01 | 25.92 | 30 | 4.96 | 32.75 | 25.92 | 210 | 0.06 |
| 50 | 4.94 | 32.792 | 6.98 | 25.96 | 50 | 4.94 | 32.79 | 25.96 | 206 | 0.11 |
| 75 | 4.53 | 33.043 | 7.02 | 26.20 | 75 | 4.53 | 33.04 | 26.20 | 183 | 0.16 |
| 99 | 4.28 | 33.299 | 6.50 | 26.43 | 100 | 4.28 | 33.31 | 26.43 | 161 | 0.20 |
| 123 | 4.50 | 33.384 | 4.86 | 26.47 | 125 | 4.49 | 33.39 | 26.48 | 157 | 0.24 |
| 148 | 4.17 | 33.527 | 4.24 | 26.62 | 150 | 4.15 | 33.54 | 26.63 | 143 | 0.28 |
| 172 | 4.02 | 33.756 | 2.60 | 26.82 | 175 | 4.01 | 33.78 | 26.83 | 124 | 0.31 |
| 197 | 4.00 | 33.859 | 1.89 | 26.90 | 200 | 4.00 | 33.87 | 26.91 | 117 | 0.34 |
| 222 | 4.00 | 33.877 | 1.62 | 26.92 | 225 | 4.00 | 33.88 | 26.92 | 116 | 0.37 |
| 246 | 4.00 | 33.939 | 1.25 | 26.96 | 250 | 4.00 | 33.95 | 26.97 | 112 | 0.40 |
| 296 | 3.94 | 33.996 | 0.66 | 27.02 | 300 | 3.94 | 34.00 | 27.02 | 107 | 0.45 |
| 400 | 3.94 | (34.119)b) | 0.60 | (27.11) | 400 | 3.94 | 34.12 | 27.11 | 99 | 0.56 |
| 500 | 3.69 | 34.243 | 0.52 | 27.24 | 500 | 3.69 | 34.24 | 27.24 | 88 | 0.65 |
| 600 | 3.52 | 34.269 | 0.60 | 27.28 | 600 | 3.52 | 34.27 | 27.28 | 85 | 0.74 |
| 800 | 3.20 | 34.332 | 0.57 | 27.36 | 700 | 3.36 | 34.30 | 27.31 | 82 | 0.82 |
| 1000 | 2.97 | 34.405 | 0.54 | 27.44 | 800 | 3.20 | 34.33 | 27.36 | 79 | 0.91 |
| 1202 | 2.64 | 34.464 | 0.54 | 27.51 | 1000 | 2.97 | 34.41 | 27.44 | 72 | 1.06 |
| 1504 | 2.25 | 34.547 | 0.80 | 27.61 | 1200 | 2.64 | 34.46 | 27.51 | 65 | 1.20 |
| 2005 | 1.86 | 34.608 | 1.53 | 27.69 | 1500 | 2.25 | 34.55 | 27.61 | 56 | 1.38 |
| 2506 | 1.68 | 34.650 | 2.22 | 27.74 | 2000 | 1.86 | 34.61 | 27.69 | 49 | 1.65 |
| | | | | | 2500 | 1.68 | 34.65 | 27.74 | 46 | 1.90 |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

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HMCS OSHAWA; March 30, 1958; 1122 GCT; 57°09'N, 146°05'W; sounding, 2000 fm; wind, 150°, 15 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (4.53)a) | (32.696)a) | - | (25.92) | 0 | 4.53 | 32.70 | 25.92 | 209 | 0.00 |
| 5 | 4.53 | 32.692 | 7.13 | 25.92 | 10 | 4.53 | 32.69 | 25.92 | 209 | 0.02 |
| 19 | 4.53 | 32.688 | 7.13 | 25.92 | 20 | 4.53 | 32.69 | 25.92 | 210 | 0.04 |
| 28 | 4.54 | 32.692 | 7.19 | 25.92 | 30 | 4.54 | 32.69 | 25.92 | 209 | 0.06 |
| 47 | 4.53 | 32.687 | 7.32 | 25.92 | 50 | 4.53 | 32.69 | 25.92 | 210 | 0.10 |
| 71 | 4.52 | 32.708 | 7.27 | 25.93 | 75 | 4.52 | 32.71 | 25.94 | 208 | 0.16 |
| 94 | 4.48 | 32.701 | 7.27 | 25.93 | 100 | 4.49 | 32.74 | 25.97 | 206 | 0.21 |
| 118 | 4.58 | 32.974 | 6.08 | 26.14 | 125 | 4.57 | 33.11 | 26.25 | 179 | 0.26 |
| 141 | 4.46 | 33.536 | 3.86 | 26.60 | 150 | 4.44 | 33.65 | 26.69 | 138 | 0.30 |
| 165 | 4.45 | 33.710 | 3.15 | 26.74 | 175 | 4.48 | 33.77 | 26.78 | 129 | 0.33 |
| 189 | 4.56 | 33.831 | 2.48 | 26.82 | 200 | 4.51 | 33.87 | 26.85 | 122 | 0.36 |
| 212 | 4.37 | 33.890 | 1.85 | 26.89 | 225 | 4.30 | 33.91 | 26.91 | 117 | 0.39 |
| 236 | 4.26 | 33.923 | 1.44 | 26.93 | 250 | 4.22 | 33.94 | 26.94 | 114 | 0.42 |
| 283 | 4.19 | 33.976 | 1.08 | 26.97 | 300 | 4.16 | 33.99 | 26.99 | 110 | 0.48 |
| 365 | 4.01 | 34.063 | 0.71 | 27.06 | 400 | 3.96 | 34.09 | 27.09 | 101 | 0.59 |
| 456 | 3.90 | 34.136 | 0.53 | 27.13 | 500 | 3.81 | 34.17 | 27.17 | 95 | 0.68 |
| 547 | 3.69 | 34.201 | 0.48 | 27.20 | 600 | 3.58 | 34.23 | 27.24 | 89 | 0.78 |
| 730 | 3.35 | 34.291 | 0.40 | 27.31 | 700 | 3.40 | 34.28 | 27.30 | 84 | 0.86 |
| 927 | 3.01 | 34.368 | 0.44 | 27.40 | 800 | 3.23 | 34.32 | 27.34 | 80 | 0.95 |
| 1129 | 2.74 | 34.443 | 0.49 | 27.49 | 1000 | 2.90 | 34.40 | 27.43 | 72 | 1.10 |
| 1438 | 2.32 | 34.508 | 0.81 | 27.57 | 1200 | 2.64 | 34.46 | 27.51 | 65 | 1.24 |
| 1955 | 1.92 | 34.599 | 1.42 | 27.68 | 1500 | 2.25 | 34.52 | 27.59 | 58 | 1.43 |
| 2450 | 1.69 | 34.638 | 2.07 | 27.73 | 2000 | 1.89 | 34.60 | 27.69 | 50 | 1.70 |
| 2500 | (1.68)a) | (34.639)a) | - | (27.73) | 2500 | 1.68 | 34.64 | 27.73 | 47 | 1.95 |

72

HMCS OSHAWA; March 30, 1958; 1743 GCT; 57°15'N, 147°25'W; sounding, 2600 fm; wind, 140°, 50 kt; weather, intermittent slight rain; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (4.42)a) | (32.697)a) | - | (25.94) | 0 | 4.42 | 32.70 | 25.94 | 208 | 0.00 |
| 5 | 4.42 | 32.692 | 6.99 | 25.93 | 10 | 4.42 | 32.69 | 25.93 | 208 | 0.02 |
| 19 | 4.42 | 32.683 | 7.44 | 25.93 | 20 | 4.42 | 32.68 | 25.93 | 209 | 0.04 |
| 28 | 4.43 | (32.681)b) | 6.59 | (25.92) | 30 | 4.43 | 32.68 | 25.92 | 209 | 0.06 |
| 47 | 4.42 | (32.685)b) | 7.06 | (25.93) | 50 | 4.42 | 32.69 | 25.93 | 209 | 0.10 |
| 70 | 4.42 | 32.706 | 7.21 | 25.94 | 75 | 4.44 | 32.73 | 25.96 | 206 | 0.16 |
| 94 | 4.58 | (32.884)b) | 6.14 | (26.07) | 100 | 4.60 | 32.95 | 26.12 | 191 | 0.21 |
| 118 | 4.61 | (33.222)b) | 4.35 | (26.33) | 125 | 4.68 | 33.35 | 26.43 | 162 | 0.25 |
| 141 | 4.92 | 33.696 | 3.38 | 26.67 | 150 | 4.97 | 33.79 | 26.74 | 133 | 0.29 |
| 165 | 4.96 | 33.837 | 2.67 | 26.78 | 175 | 4.91 | 33.86 | 26.81 | 127 | 0.32 |
| 188 | 4.78 | 33.862 | 2.25 | 26.82 | 200 | 4.71 | 33.88 | 26.84 | 124 | 0.35 |
| 212 | 4.66 | 33.904 | - | 26.87 | 225 | 4.53 | 33.92 | 26.89 | 119 | 0.38 |
| 235 | 4.41 | 33.926 | 1.59 | 26.91 | 250 | 4.32 | 33.94 | 26.93 | 115 | 0.41 |
| 282 | 4.33 | 33.986 | 1.10 | 26.97 | 300 | 4.45 | 34.01 | 26.98 | 112 | 0.47 |
| 300 | (4.45)a) | (34.014)a) | - | (26.98) | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 74 | HMCS OSHAWA; March 31, 1958; 1941 GCT; 57°29'N, 149°23'W; sounding, 1000 fm; wind, 100°, 10 kt; weather, overcast; sea, slight.[a] | | | | | | | | | |
| 0 | (4.77)b) | (32.636)b) | - | (25.85) | 0 | 4.77 | 32.64 | 25.85 | 216 | 0.00 |
| 5 | 4.77 | 32.634 | 6.78 | 25.85 | 10 | 4.77 | 32.63 | 25.85 | 216 | 0.02 |
| 20 | 4.77 | 32.632 | 8.01 | 25.85 | 20 | 4.77 | 32.63 | 25.85 | 216 | 0.04 |
| 30 | 4.77 | 32.635 | 6.76 | 25.85 | 30 | 4.77 | 32.64 | 25.85 | 216 | 0.06 |
| 50 | 4.76 | 32.637 | 6.90 | 25.85 | 50 | 4.76 | 32.64 | 25.85 | 216 | 0.11 |
| 75 | 4.70 | 32.721 | 6.32 | 25.93 | 75 | 4.70 | 32.72 | 25.93 | 209 | 0.16 |
| 100 | 4.80 | 33.061 | 5.35 | 26.18 | 100 | 4.80 | 33.06 | 26.18 | 185 | 0.21 |
| 125 | 4.78 | 33.407 | 4.28 | 26.46 | 125 | 4.78 | 33.41 | 26.46 | 159 | 0.26 |
| 150 | 4.69 | 33.642 | 3.38 | 26.66 | 150 | 4.69 | 33.64 | 26.66 | 141 | 0.29 |
| 172 | 4.66 | 33.789 | 2.28 | 26.78 | 175 | 4.66 | 33.80 | 26.79 | 129 | 0.33 |
| 196 | 4.64 | 33.830 | 1.64 | 26.81 | 200 | 4.64 | 33.84 | 26.82 | 126 | 0.36 |
| 300 | 4.42 | 33.897 | - | 26.89 | 225 | 4.60 | 33.87 | 26.84 | 124 | 0.39 |
| 343 | 4.15 | 34.003 | 0.88 | 27.00 | 250 | 4.55 | 33.89 | 26.87 | 122 | 0.42 |
| 441 | 4.00 | 34.080 | 0.58 | 27.08 | 300 | 4.42 | 33.90 | 26.89 | 120 | 0.48 |
| 539 | 3.84 | 34.150 | 0.46 | 27.15 | 400 | 3.98 | 34.08 | 27.08 | 103 | 0.60 |
| 735 | 3.46 | 34.273 | 0.40 | 27.28 | 500 | 3.90 | 34.12 | 27.12 | 100 | 0.70 |
| 931 | 3.14 | 34.347 | 0.35 | 27.37 | 600 | 3.73 | 34.19 | 27.19 | 93 | 0.80 |
| 1000 | (3.04)b) | (34.361)b) | - | (27.39) | 700 | 3.53 | 34.25 | 27.26 | 87 | 0.89 |
| | | | | | 800 | 3.35 | 34.30 | 27.32 | 82 | 0.97 |
| | | | | | 1000 | 3.04 | 34.36 | 27.39 | 76 | 1.13 |
| 75 | HMCS OSHAWA; March 31, 1958; 2346 GCT; 57°25'N, 149°57'W; sounding, 893 fm; wind, 130°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | (5.51)b) | (32.535)b) | - | (25.69) | 0 | 5.51 | 32.54 | 25.69 | 231 | 0.00 |
| 5 | 5.40 | 32.542 | 6.66 | 25.71 | 10 | 5.31 | 32.55 | 25.72 | 228 | 0.02 |
| 20 | 5.21 | 32.552 | 6.90 | 25.74 | 20 | 5.21 | 32.55 | 25.74 | 227 | 0.05 |
| 30 | 5.21 | 32.550 | 6.93 | 25.73 | 30 | 5.21 | 32.55 | 25.73 | 227 | 0.07 |
| 50 | 5.00 | 32.597 | 7.07 | 25.80 | 50 | 5.00 | 32.60 | 25.80 | 222 | 0.11 |
| 74 | 4.79 | 32.621 | 6.90 | 25.84 | 75 | 4.78 | 32.62 | 25.84 | 217 | 0.17 |
| 98 | 4.44 | 32.679 | 6.89 | 25.92 | 100 | 4.44 | 32.69 | 25.93 | 209 | 0.22 |
| 123 | 4.80 | 32.866 | 6.15 | 26.03 | 125 | 4.83 | 32.89 | 26.05 | 198 | 0.27 |
| 148 | 5.16 | 33.332 | 4.54 | 26.36 | 150 | 5.20 | 33.36 | 26.38 | 167 | 0.32 |
| 172 | 5.84 | 33.660 | 3.20 | 26.54 | 175 | 5.86 | 33.69 | 26.56 | 151 | 0.36 |
| 197 | 5.62 | 33.825 | 2.70 | 26.69 | 200 | 5.59 | 33.84 | 26.71 | 137 | 0.40 |
| 221 | 5.34 | 33.872 | 2.35 | 26.76 | 225 | 5.30 | 33.88 | 26.77 | 131 | 0.43 |
| 246 | 5.08 | 33.898 | 2.24 | 26.82 | 250 | 5.04 | 33.90 | 26.82 | 126 | 0.46 |
| 295 | 4.73 | 33.942 | 1.72 | 26.89 | 300 | 4.70 | 33.95 | 26.90 | 120 | 0.52 |
| 400 | 4.26 | 34.020 | 1.01 | 27.00 | 400 | 4.26 | 34.02 | 27.00 | 110 | 0.64 |
| 500 | 3.91 | 34.113 | 0.57 | 27.11 | 500 | 3.91 | 34.11 | 27.11 | 100 | 0.75 |
| 600 | 3.74 | 34.180 | 0.49 | 27.18 | 600 | 3.74 | 34.18 | 27.18 | 94 | 0.84 |
| 800 | 3.38 | 34.302 | 0.43 | 27.31 | 700 | 3.56 | 34.24 | 27.25 | 88 | 0.94 |
| 1000 | 3.05 | 34.372 | 0.43 | 27.40 | 800 | 3.38 | 34.30 | 27.31 | 83 | 1.02 |
| | | | | | 1000 | 3.05 | 34.37 | 27.40 | 75 | 1.18 |

a) Station 73 missed from numbering sequence.

b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

76

HMCS OSHAWA; April 1, 1958; 0317 GCT; 57°32'N, 149°49'W; sounding, 600 fm; wind, 100°, 10 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (5.61)a) | (32.514)a) | - | (25.66) | 0 | 5.61 | 32.51 | 25.66 | 234 | 0.00 |
| 5 | 5.62 | 32.502 | 7.25 | 25.65 | 10 | 5.62 | 32.50 | 25.64 | 236 | 0.02 |
| 20 | 5.59 | 32.496 | 7.10 | 25.65 | 20 | 5.59 | 32.50 | 25.65 | 235 | 0.05 |
| 29 | 5.53 | 32.513 | 7.16 | 25.67 | 30 | 5.52 | 32.51 | 25.67 | 233 | 0.07 |
| 49 | 5.44 | 32.524 | 6.61 | 25.69 | 50 | 5.44 | 32.52 | 25.69 | 232 | 0.12 |
| 73 | 5.43 | 32.516 | 6.68 | 25.68 | 75 | 5.44 | 32.52 | 25.69 | 232 | 0.18 |
| 98 | 5.60 | 32.644 | 6.15 | 25.76 | 100 | 5.60 | 32.66 | 25.77 | 224 | 0.23 |
| 122 | 5.49 | 32.831 | 5.88 | 25.92 | 125 | 5.47 | 32.85 | 25.95 | 208 | 0.29 |
| 147 | 5.22 | 33.017 | 5.61 | 26.10 | 150 | 5.25 | 33.05 | 26.13 | 191 | 0.34 |
| 171 | 5.88 | 33.390 | 4.09 | 26.32 | 175 | 5.83 | 33.43 | 26.36 | 170 | 0.38 |
| 196 | 4.79 | 33.526 | 4.14 | 26.55 | 200 | 4.72 | 33.56 | 26.59 | 148 | 0.42 |
| 220 | 4.82 | 33.750 | 3.16 | 26.73 | 225 | 4.84 | 33.78 | 26.75 | 132 | 0.46 |
| 244 | 4.94 | 33.874 | 2.31 | 26.81 | 250 | 4.95 | 33.89 | 26.83 | 126 | 0.49 |
| 293 | 4.88 | 33.917 | 1.94 | 26.85 | 300 | 4.85 | 33.92 | 26.86 | 123 | 0.55 |
| 351 | 4.40 | 33.986 | 1.00 | 26.96 | 400 | 4.18 | 34.03 | 27.02 | 109 | 0.67 |
| 445 | 4.14 | 34.057 | 0.92 | 27.04 | 500 | 4.01 | 34.10 | 27.09 | 102 | 0.78 |
| 534 | 3.94 | 34.131 | 0.62 | 27.12 | 600 | 3.76 | 34.18 | 27.18 | 94 | 0.88 |
| 712 | 3.37 | 34.249 | 0.47 | 27.27 | 700 | 3.42 | 34.24 | 27.26 | 87 | 0.97 |
| 890 | 3.16 | 34.347 | 0.12 | 27.37 | 800 | 3.22 | 34.30 | 27.33 | 81 | 1.05 |

77

HMCS OSHAWA; April 1, 1958; 0732 GCT; 57°36'N, 150°18'W; sounding, 98 fm; wind, 100°, 10 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (5.43)a) | (32.512)a) | - | (25.68) | 0 | 5.43 | 32.51 | 25.68 | 232 | 0.00 |
| 5 | 5.43 | 32.511 | 5.95 | 25.68 | 10 | 5.43 | 32.51 | 25.68 | 232 | 0.02 |
| 20 | 5.43 | 32.510 | 6.79 | 25.68 | 20 | 5.43 | 32.51 | 25.68 | 232 | 0.05 |
| 30 | 5.42 | 32.511 | 6.91 | 25.68 | 30 | 5.42 | 32.51 | 25.68 | 232 | 0.07 |
| 50 | 5.42 | 32.523 | 6.48 | 25.69 | 50 | 5.42 | 32.52 | 25.69 | 232 | 0.12 |
| 75 | 5.44 | 32.525 | 6.04 | 25.69 | 75 | 5.44 | 32.53 | 25.69 | 232 | 0.18 |
| 99 | 5.51 | 32.599 | 5.98 | 25.74 | 100 | 5.51 | 32.60 | 25.74 | 227 | 0.23 |
| 124 | 5.61 | 32.801 | 5.43 | 25.89 | 125 | 5.61 | 32.81 | 25.89 | 213 | 0.29 |
| 148 | 5.60 | 32.914 | 4.68 | 25.98 | 150 | 5.59 | 32.92 | 25.98 | 205 | 0.34 |
| 150 | (5.59)a) | (32.920)a) | - | (25.98) | | | | | | |

78

HMCS OSHAWA; April 1, 1958; 1218 GCT; 57°42'N, 151°06'W; sounding, 40 fm; wind, 180°, 8 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 4.30 | 32.436 | 5.33 | 25.74 | 0 | 4.30 | 32.44 | 25.74 | 226 | 0.00 |
| 10 | 4.42 | 32.399 | 5.79 | 25.70 | 10 | 4.42 | 32.40 | 25.70 | 230 | 0.02 |
| 20 | 4.48 | 32.411 | 6.31 | 25.70 | 20 | 4.48 | 32.41 | 25.70 | 230 | 0.05 |
| 30 | 4.52 | 32.428 | 6.43 | 25.71 | 30 | 4.52 | 32.43 | 25.71 | 229 | 0.07 |
| 40 | 4.56 | 32.438 | 6.23 | 25.72 | 50 | 4.55 | 32.44 | 25.72 | 229 | 0.12 |
| 50 | 4.55 | 32.439 | 4.02 | 25.72 | | | | | | |

79

HMCS OSHAWA; April 4, 1958; 1355 GCT; 55°56'N, 155°01'W; sounding, 78 fm; wind, 140°, 10 kt; weather, intermittent moderate rain; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 4.90 | 32.440 | 7.10 | 25.68 | 0 | 4.90 | 32.44 | 25.68 | 232 | 0.00 |
| 9 | 5.20 | 32.458 | 7.17 | 25.66 | 10 | 5.22 | 32.46 | 25.66 | 234 | 0.02 |
| 19 | 5.21 | 32.458 | 7.12 | 25.66 | 20 | 5.21 | 32.46 | 25.66 | 234 | 0.05 |
| 28 | 5.20 | 32.458 | 7.20 | 25.66 | 30 | 5.20 | 32.46 | 25.66 | 234 | 0.07 |
| 47 | 5.20 | 32.459 | 7.11 | 25.66 | 50 | 5.20 | 32.46 | 25.66 | 234 | 0.12 |
| 72 | 5.21 | 32.461 | 7.17 | 25.66 | 75 | 5.21 | 32.46 | 25.67 | 234 | 0.18 |
| 94 | 5.19 | 32.504 | 6.93 | 25.70 | 100 | 5.20 | 32.52 | 25.71 | 230 | 0.24 |
| 117 | 5.25 | 32.566 | 6.63 | 25.74 | 125 | 5.29 | 32.59 | 25.76 | 226 | 0.29 |
| 125 | (5.29)a) | (32.592)a) | - | (25.76) | | | | | | |

a) Value extrapolated by three-point parabolic method.

POG

NP-58-I

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 80 | HMCS OSHAWA; April 4, 1958; 1525 GCT; 55°55'N, 154°54'W; sounding, 100 fm; wind, 180°, 10 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | (5.35)a) | (32.494)a) | - | (25.67) | 0 | 5.35 | 32.49 | 25.67 | 232 | 0.00 |
| 5 | 5.35 | 32.489 | 7.19 | 25.67 | 10 | 5.35 | 32.48 | 25.67 | 233 | 0.02 |
| 20 | 5.35 | 32.480 | 7.19 | 25.66 | 20 | 5.35 | 32.48 | 25.66 | 234 | 0.05 |
| 30 | 5.35 | 32.480 | 6.93 | 25.66 | 30 | 5.35 | 32.48 | 25.66 | 234 | 0.07 |
| 49 | 5.36 | 32.477 | 7.02 | 25.66 | 50 | 5.36 | 32.48 | 25.66 | 234 | 0.12 |
| 74 | 5.34 | 32.480 | 7.04 | 25.66 | 75 | 5.34 | 32.48 | 25.66 | 234 | 0.18 |
| 99 | 5.32 | 32.478 | 7.07 | 25.67 | 100 | 5.32 | 32.48 | 25.67 | 234 | 0.24 |
| 124 | 5.30 | 32.490 | 7.02 | 25.68 | 125 | 5.30 | 32.49 | 25.68 | 233 | 0.29 |
| 149 | 5.33 | 32.581 | 6.56 | 25.75 | 150 | 5.33 | 32.59 | 25.75 | 227 | 0.35 |
| 174 | 5.29 | 32.745 | 5.97 | 25.88 | 175 | 5.29 | 32.75 | 25.89 | 214 | 0.41 |
| 175 | (5.29)a) | (32.753)a) | - | (25.89) | | | | | | |
| 81 | HMCS OSHAWA; April 4, 1958; 1940 GCT; 55°30'N, 154°21'W; sounding, 555 fm; wind, 130°, 12 kt; weather, intermittent slight rain; sea, slight. | | | | | | | | | |
| 0 | (4.90)a) | (32.622)a) | - | (25.83) | 0 | 4.90 | 32.62 | 25.83 | 218 | 0.00 |
| 5 | 4.87 | 32.612 | 7.39 | 25.82 | 10 | 4.82 | 32.61 | 25.83 | 218 | 0.02 |
| 19 | 4.67 | 32.647 | 7.32 | 25.87 | 20 | 4.65 | 32.65 | 25.88 | 213 | 0.04 |
| 29 | 4.43 | 32.730 | 7.34 | 25.96 | 30 | 4.42 | 32.74 | 25.97 | 205 | 0.06 |
| 48 | 4.50 | 32.875 | 7.28 | 26.07 | 50 | 4.54 | 32.90 | 26.09 | 194 | 0.10 |
| 72 | 5.31 | 33.361 | 4.51 | 26.36 | 75 | 5.35 | 33.41 | 26.39 | 165 | 0.15 |
| 96 | 5.27 | 33.614 | 3.73 | 26.57 | 100 | 5.23 | 33.64 | 26.60 | 146 | 0.19 |
| 120 | 4.85 | 33.713 | 3.20 | 26.69 | 125 | 4.82 | 33.74 | 26.72 | 135 | 0.22 |
| 144 | 4.86 | 33.847 | 2.55 | 26.80 | 150 | 4.81 | 33.86 | 26.82 | 126 | 0.26 |
| 167 | 4.58 | 33.862 | 2.23 | 26.84 | 175 | 4.52 | 33.87 | 26.85 | 122 | 0.29 |
| 191 | 4.47 | 33.881 | 1.98 | 26.87 | 200 | 4.46 | 33.89 | 26.88 | 120 | 0.32 |
| 215 | 4.48 | 33.926 | 1.64 | 26.90 | 225 | 4.47 | 33.94 | 26.91 | 117 | 0.35 |
| 239 | 4.45 | 33.948 | 1.43 | 26.92 | 250 | 4.43 | 33.96 | 26.94 | 115 | 0.38 |
| 287 | 4.32 | 33.993 | 1.16 | 26.97 | 300 | 4.28 | 34.00 | 26.99 | 111 | 0.44 |
| 390 | 3.97 | 34.069 | 0.65 | 27.07 | 400 | 3.94 | 34.08 | 27.08 | 102 | 0.54 |
| 494 | 3.60 | 34.126 | 0.50 | 27.15 | 500 | 3.59 | 34.13 | 27.16 | 96 | 0.64 |
| 585 | 3.56 | 34.239 | 0.43 | 27.25 | 600 | 3.54 | 34.25 | 27.26 | 87 | 0.74 |
| 780 | 3.15 | 34.327 | 0.40 | 27.36 | 700 | 3.37 | 34.32 | 27.33 | 81 | 0.82 |
| 975 | 3.04 | 34.352 | 0.38 | 27.39 | 800 | 3.12 | 34.33 | 27.36 | 78 | 0.90 |
| 1000 | (3.05)a) | (34.351)a) | - | (27.38) | 1000 | 3.05 | 34.35 | 27.38 | 77 | 1.06 |
| 82 | HMCS OSHAWA; April 4, 1958; 2303 GCT; 55°21'N, 154°03'W; sounding, 2100 fm; wind, 060°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | (4.46)a) | (32.749)a) | - | (25.97) | 0 | 4.46 | 32.75 | 25.97 | 204 | 0.00 |
| 5 | 4.39 | 32.756 | 7.25 | 25.99 | 10 | 4.34 | 32.76 | 26.00 | 202 | 0.02 |
| 20 | 4.26 | 32.769 | 7.32 | 26.01 | 20 | 4.26 | 32.77 | 26.01 | 201 | 0.04 |
| 30 | 4.23 | 32.772 | 7.31 | 26.02 | 30 | 4.23 | 32.77 | 26.02 | 200 | 0.06 |
| 50 | 4.16 | 32.780 | 7.27 | 26.03 | 50 | 4.16 | 32.78 | 26.03 | 199 | 0.10 |
| 74 | 4.01 | 32.948 | 6.82 | 26.18 | 75 | 4.01 | 32.96 | 26.19 | 184 | 0.15 |
| 99 | 4.15 | 33.447 | 4.03 | 26.56 | 100 | 4.15 | 33.46 | 26.57 | 148 | 0.19 |
| 124 | 4.21 | 33.758 | 2.16 | 26.80 | 125 | 4.21 | 33.77 | 26.81 | 126 | 0.23 |
| 149 | 4.11 | 33.844 | 1.52 | 26.88 | 150 | 4.11 | 33.85 | 26.88 | 119 | 0.26 |
| 174 | 4.07 | 33.917 | 0.97 | 26.94 | 175 | 4.07 | 33.92 | 26.94 | 114 | 0.29 |
| 199 | 4.04 | 33.966 | 0.69 | 26.98 | 200 | 4.04 | 33.97 | 26.98 | 110 | 0.31 |
| 224 | 4.01 | 33.992 | 0.55 | 27.01 | 225 | 4.01 | 33.99 | 27.01 | 108 | 0.34 |
| 248 | 3.98 | 34.021 | 0.52 | 27.03 | 250 | 3.98 | 34.02 | 27.03 | 106 | 0.37 |
| 298 | 3.90 | 34.060 | 0.46 | 27.07 | 300 | 3.90 | 34.06 | 27.07 | 102 | 0.42 |
| 395 | 3.78 | 34.129 | 0.48 | 27.14 | 400 | 3.77 | 34.13 | 27.14 | 96 | 0.52 |
| 500 | 3.61 | 34.204 | 0.48 | 27.21 | 500 | 3.61 | 34.20 | 27.21 | 90 | 0.62 |
| 600 | 3.37 | 34.272 | 0.34 | 27.29 | 600 | 3.37 | 34.27 | 27.29 | 84 | 0.70 |
| 815 | 3.06 | 34.350 | 0.39 | 27.38 | 700 | 3.19 | 34.32 | 27.35 | 79 | 0.78 |
| | | | | | 800 | 3.07 | 34.35 | 27.38 | 76 | 0.86 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HMCS OSHAWA; April 5, 1958; 0442 GCT; 54°48'N, 153°33'W; sounding, 2350 fm; wind, 030°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | | 83 |
| 0 | (4.17)a) | (32.864)a) | - | (26.10) | 0 | 4.17 | 32.86 | 26.10 | 192 | 0.00 |
| 5 | 4.07 | 32.865 | 7.31 | 26.11 | 10 | 3.99 | 32.87 | 26.11 | 191 | 0.02 |
| 20 | 3.89 | 32.866 | 7.28 | 26.12 | 20 | 3.89 | 32.87 | 26.12 | 190 | 0.04 |
| 30 | 3.86 | 32.866 | 7.35 | 26.13 | 30 | 3.86 | 32.87 | 26.13 | 190 | 0.06 |
| 50 | 3.79 | 32.867 | 7.24 | 26.13 | 50 | 3.79 | 32.87 | 26.13 | 189 | 0.10 |
| 75 | 3.80 | 32.869 | 7.25 | 26.14 | 75 | 3.80 | 32.87 | 26.14 | 189 | 0.14 |
| 100 | 3.98 | 33.315 | 4.68 | 26.47 | 100 | 3.98 | 33.31 | 26.47 | 158 | 0.19 |
| 125 | 4.12 | 33.656 | 2.64 | 26.73 | 125 | 4.12 | 33.66 | 26.73 | 134 | 0.22 |
| 150 | 4.11 | 33.833 | 1.51 | 26.87 | 150 | 4.11 | 33.83 | 26.87 | 120 | 0.26 |
| 175 | 4.05 | 33.904 | 0.99 | 26.93 | 175 | 4.05 | 33.90 | 26.93 | 115 | 0.28 |
| 200 | 4.01 | 33.945 | 0.71 | 26.97 | 200 | 4.01 | 33.94 | 26.97 | 111 | 0.31 |
| 225 | 4.01 | 33.985 | 0.52 | 27.00 | 225 | 4.01 | 33.98 | 27.00 | 109 | 0.34 |
| 250 | (3.99)b) | 34.014 | 0.48 | (27.03) | 250 | 3.99 | 34.01 | 27.03 | 106 | 0.37 |
| 300 | 3.91 | 34.077 | 0.44 | 27.08 | 300 | 3.91 | 34.08 | 27.08 | 101 | 0.42 |
| 389 | 3.77 | 34.145 | 0.41 | 27.15 | 400 | 3.75 | 34.15 | 27.16 | 95 | 0.52 |
| 494 | 3.59 | 34.204 | 0.40 | 27.22 | 500 | 3.58 | 34.21 | 27.22 | 90 | 0.61 |
| 593 | 3.42 | 34.264 | 0.40 | 27.28 | 600 | 3.41 | 34.27 | 27.28 | 84 | 0.70 |
| 809 | 3.01 | 34.354 | 0.41 | 27.39 | 700 | 3.22 | 34.32 | 27.34 | 79 | 0.78 |
| 989 | 2.76 | 34.417 | 0.49 | 27.46 | 800 | 3.03 | 34.35 | 27.39 | 75 | 0.86 |
| 1100 | 2.61 | 34.438 | 0.58 | 27.49 | 1000 | 2.74 | 34.42 | 27.47 | 68 | 1.01 |
| 1285 | 2.37 | 34.491 | 0.78 | 27.56 | 1200 | 2.48 | 34.46 | 27.53 | 64 | 1.14 |
| 1482 | 2.17 | 34.529 | 0.91 | 27.60 | 1500 | 2.15 | 34.53 | 27.61 | 56 | 1.32 |
| 1500 | (2.15)a) | (34.532)a) | - | (27.61) | | | | | | |
| HMCS OSHAWA; April 5, 1958; 1015 GCT; 54°34'N, 153°00'W; sounding, 2270 fm; wind, 020°, 5 kt; weather, cloudy; sea, slight. | | | | | | | | | | 84 |
| 0 | (3.94)a) | (32.862)a) | - | (26.12) | 0 | 3.94 | 32.86 | 26.12 | 190 | 0.00 |
| 5 | 3.91 | 32.868 | 7.37 | 26.12 | 10 | 3.89 | 32.87 | 26.13 | 189 | 0.02 |
| 20 | 3.86 | 32.881 | 7.26 | 26.14 | 20 | 3.86 | 32.88 | 26.14 | 188 | 0.04 |
| 30 | 3.85 | 32.885 | 7.26 | 26.14 | 30 | 3.85 | 32.89 | 26.14 | 188 | 0.06 |
| 50 | 3.79 | 32.886 | 7.21 | 26.15 | 50 | 3.79 | 32.89 | 26.15 | 188 | 0.10 |
| 75 | 3.78 | 32.892 | 7.27 | 26.16 | 75 | 3.78 | 32.89 | 26.16 | 187 | 0.14 |
| 100 | 3.83 | 33.020 | 6.51 | 26.25 | 100 | 3.83 | 33.02 | 26.25 | 178 | 0.19 |
| 125 | 4.31 | 33.634 | 2.96 | 26.69 | 125 | 4.31 | 33.63 | 26.69 | 137 | 0.23 |
| 150 | 4.51 | 33.856 | 1.78 | 26.85 | 150 | 4.51 | 33.86 | 26.85 | 123 | 0.26 |
| 175 | 4.29 | 33.913 | 1.27 | 26.91 | 175 | 4.29 | 33.91 | 26.91 | 116 | 0.29 |
| 200 | 4.15 | 33.941 | 0.99 | 26.95 | 200 | 4.15 | 33.94 | 26.95 | 113 | 0.32 |
| 225 | 4.03 | 33.960 | 0.75 | 26.98 | 225 | 4.03 | 33.96 | 26.98 | 111 | 0.35 |
| 250 | 4.02 | 33.994 | 0.54 | 27.01 | 250 | 4.02 | 33.99 | 27.01 | 108 | 0.38 |
| 300 | 3.93 | 34.062 | 0.74 | 27.07 | 300 | 3.93 | 34.06 | 27.07 | 103 | 0.43 |
| 384 | 3.79 | 34.130 | 0.46 | 27.14 | 400 | 3.76 | 34.14 | 27.15 | 96 | 0.53 |
| 492 | 3.60 | 34.206 | 0.45 | 27.22 | 500 | 3.58 | 34.21 | 27.22 | 90 | 0.62 |
| 591 | 3.39 | 34.262 | 0.46 | 27.28 | 600 | 3.37 | 34.27 | 27.29 | 84 | 0.71 |
| 803 | 2.97 | 34.354 | 0.49 | 27.39 | 700 | 3.17 | 34.31 | 27.34 | 79 | 0.79 |
| 985 | 2.72 | 34.415 | 0.54 | 27.47 | 800 | 2.98 | 34.35 | 27.39 | 75 | 0.87 |
| 1094 | 2.55 | 34.441 | 0.65 | 27.50 | 1000 | 2.70 | 34.42 | 27.47 | 68 | 1.01 |
| 1280 | 2.35 | 34.479 | 0.75 | 27.55 | 1200 | 2.42 | 34.46 | 27.53 | 63 | 1.15 |
| 1478 | 2.19 | 34.523 | 0.95 | 27.60 | 1500 | 2.18 | 34.53 | 27.60 | 57 | 1.33 |
| 1500 | (2.18)a) | (34.528)a) | - | (27.60) | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 85 | HMCS OSHAWA; April 5, 1958; 1644 GCT; 54°02'N, 152°39'W; sounding, missing; wind, 200°, 15 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | (3.87)a) | (32.896)a) | - | (26.15) | 0 | 3.87 | 32.90 | 26.15 | 187 | 0.00 |
| 5 | 3.86 | 32.895 | 7.28 | 26.15 | 10 | 3.85 | 32.89 | 26.15 | 187 | 0.02 |
| 20 | 3.83 | 32.894 | 7.25 | 26.15 | 20 | 3.83 | 32.89 | 26.15 | 187 | 0.04 |
| 30 | 3.81 | 32.894 | 7.10 | 26.15 | 30 | 3.81 | 32.89 | 26.15 | 187 | 0.06 |
| 50 | 3.75 | 32.906 | 6.96 | 26.17 | 50 | 3.75 | 32.91 | 26.17 | 186 | 0.09 |
| 75 | 3.75 | 32.893 | 7.21 | 26.16 | 75 | 3.75 | 32.89 | 26.16 | 187 | 0.14 |
| 99 | 3.83 | 33.143 | 5.72 | 26.35 | 100 | 3.84 | 33.16 | 26.36 | 168 | 0.19 |
| 124 | 4.00 | 33.616 | 2.98 | 26.71 | 125 | 4.00 | 33.63 | 26.72 | 134 | 0.22 |
| 148 | 4.01 | 33.780 | 1.81 | 26.84 | 150 | 4.01 | 33.79 | 26.85 | 122 | 0.26 |
| 173 | 4.05 | 33.883 | 1.10 | 26.92 | 175 | 4.05 | 33.89 | 26.92 | 116 | 0.29 |
| 198 | 4.04 | 33.941 | 0.85 | 26.96 | 200 | 4.04 | 33.94 | 26.97 | 112 | 0.32 |
| 223 | 4.01 | 33.977 | 0.68 | 26.99 | 225 | 4.01 | 33.98 | 27.00 | 109 | 0.34 |
| 248 | 3.98 | 34.015 | 0.53 | 27.03 | 250 | 3.98 | 34.02 | 27.03 | 106 | 0.37 |
| 297 | 3.89 | 34.083 | 0.50 | 27.09 | 300 | 3.88 | 34.09 | 27.09 | 100 | 0.42 |
| 384 | 3.75 | 34.156 | 0.48 | 27.16 | 400 | 3.72 | 34.17 | 27.18 | 93 | 0.52 |
| 492 | 3.49 | 34.233 | 0.46 | 27.25 | 500 | 3.47 | 34.24 | 27.25 | 86 | 0.61 |
| 590 | 3.32 | 34.284 | 0.44 | 27.31 | 600 | 3.30 | 34.29 | 27.31 | 82 | 0.70 |
| 802 | 2.99 | 34.362 | 0.49 | 27.40 | 700 | 3.14 | 34.33 | 27.36 | 78 | 0.78 |
| 984 | 2.71 | 34.414 | 0.52 | 27.47 | 800 | 2.99 | 34.36 | 27.40 | 74 | 0.85 |
| 1090 | 2.55 | 34.441 | 0.58 | 27.50 | 1000 | 2.69 | 34.42 | 27.47 | 68 | 1.00 |
| 1279 | 2.38 | 34.486 | 0.72 | 27.55 | 1200 | 2.43 | 34.47 | 27.53 | 63 | 1.13 |
| 1476 | 2.19 | 34.529 | 0.93 | 27.60 | 1500 | 2.17 | 34.53 | 27.61 | 56 | 1.31 |
| 1500 | (2.17)a) | (34.534)a) | - | (27.61) | | | | | | |
| 86 | HMCS OSHAWA; April 5, 1958; 2328 GCT; 53°47'N, 151°56'W; sounding, missing; wind, 180°, 20 kt; weather, overcast; sea, moderate. | | | | | | | | | |
| 0 | (4.03)a) | (32.846)a) | - | (26.09) | 0 | 4.03 | 32.85 | 26.09 | 193 | 0.00 |
| 5 | 4.05 | 32.841 | 7.31 | 26.09 | 10 | 4.06 | 32.84 | 26.08 | 194 | 0.02 |
| 20 | 4.06 | 32.835 | 7.20 | 26.08 | 20 | 4.06 | 32.83 | 26.08 | 194 | 0.04 |
| 30 | 4.03 | 32.838 | 7.27 | 26.09 | 30 | 4.03 | 32.84 | 26.09 | 193 | 0.06 |
| 49 | 3.97 | 32.836 | 7.19 | 26.09 | 50 | 3.97 | 32.84 | 26.09 | 193 | 0.10 |
| 74 | 3.94 | 32.840 | 7.16 | 26.10 | 75 | 3.94 | 32.84 | 26.10 | 193 | 0.15 |
| 98 | 3.93 | 32.855 | 7.03 | 26.11 | 100 | 3.93 | 32.89 | 26.14 | 189 | 0.19 |
| 122 | 4.03 | 33.709 | 2.22 | 26.78 | 125 | 4.04 | 33.77 | 26.82 | 124 | 0.23 |
| 147 | 4.09 | 33.853 | 1.05 | 26.89 | 150 | 4.09 | 33.86 | 26.90 | 118 | 0.26 |
| 171 | 4.05 | 33.915 | 0.85 | 26.94 | 175 | 4.05 | 33.92 | 26.95 | 113 | 0.29 |
| 196 | 4.03 | 33.970 | 0.56 | 26.99 | 200 | 4.02 | 33.98 | 26.99 | 109 | 0.32 |
| 220 | 3.99 | 34.011 | 0.40 | 27.02 | 225 | 3.98 | 34.02 | 27.03 | 106 | 0.35 |
| 245 | 3.95 | 34.043 | 0.38 | 27.05 | 250 | 3.94 | 34.05 | 27.06 | 103 | 0.37 |
| 294 | 3.86 | 34.080 | 0.38 | 27.09 | 300 | 3.85 | 34.08 | 27.10 | 100 | 0.43 |
| 380 | 3.75 | 34.148 | 0.37 | 27.16 | 400 | 3.71 | 34.16 | 27.17 | 94 | 0.52 |
| 486 | 3.51 | 34.224 | 0.44 | 27.24 | 500 | 3.48 | 34.23 | 27.25 | 87 | 0.62 |
| 584 | 3.35 | 34.280 | 0.50 | 27.30 | 600 | 3.32 | 34.29 | 27.31 | 82 | 0.70 |
| 794 | 2.98 | 34.364 | 0.47 | 27.40 | 700 | 3.15 | 34.33 | 27.36 | 77 | 0.78 |
| 974 | 2.67 | 34.422 | 0.53 | 27.48 | 800 | 2.97 | 34.37 | 27.40 | 74 | 0.86 |
| 1079 | 2.55 | 34.446 | 0.54 | 27.50 | 1000 | 2.64 | 34.43 | 27.48 | 67 | 1.00 |
| 1266 | 2.33 | 34.497 | 0.74 | 27.56 | 1200 | 2.41 | 34.48 | 27.54 | 62 | 1.13 |
| 1460 | 2.15 | 34.539 | 0.95 | 27.61 | 1500 | 2.12 | 34.55 | 27.62 | 55 | 1.31 |
| 1500 | (2.12)a) | (34.546)a) | - | (27.62) | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

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HMCS OSHAWA; April 6, 1958; 1328 GCT; 52°40'N, 150°25'W; sounding, missing; wind, 140°, 20 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (4.34)a) | (32.807)a) | - | (26.03) | 0 | 4.34 | 32.81 | 26.03 | 198 | 0.00 |
| 5 | 4.34 | 32.807 | 6.90 | 26.03 | 10 | 4.34 | 32.81 | 26.03 | 199 | 0.02 |
| 20 | 4.34 | 32.807 | 7.30 | 26.03 | 20 | 4.34 | 32.81 | 26.03 | 199 | 0.04 |
| 30 | 4.33 | 32.807 | 7.26 | 26.03 | 30 | 4.33 | 32.81 | 26.03 | 199 | 0.06 |
| 49 | 4.30 | 32.816 | 7.25 | 26.04 | 50 | 4.30 | 32.82 | 26.04 | 198 | 0.10 |
| 74 | 4.23 | 32.850 | 7.04 | 26.08 | 75 | 4.22 | 32.86 | 26.09 | 194 | 0.15 |
| 99 | 4.03 | 33.424 | 3.98 | 26.55 | 100 | 4.02 | 33.44 | 26.57 | 148 | 0.19 |
| 123 | 3.94 | 33.713 | 2.40 | 26.79 | 125 | 3.93 | 33.73 | 26.81 | 126 | 0.23 |
| 148 | 3.87 | 33.856 | 1.44 | 26.91 | 150 | 3.87 | 33.86 | 26.92 | 116 | 0.26 |
| 173 | 3.93 | 33.902 | 1.16 | 26.94 | 175 | 3.93 | 33.91 | 26.95 | 113 | 0.29 |
| 197 | 3.88 | 33.960 | 0.73 | 26.99 | 200 | 3.88 | 33.96 | 27.00 | 108 | 0.31 |
| 222 | 3.87 | 33.978 | 0.63 | 27.01 | 225 | 3.87 | 33.98 | 27.01 | 107 | 0.34 |
| 247 | 3.86 | 34.013 | 0.53 | 27.04 | 250 | 3.86 | 34.02 | 27.04 | 105 | 0.37 |
| 296 | 3.81 | 34.062 | 0.49 | 27.08 | 300 | 3.81 | 34.07 | 27.09 | 101 | 0.42 |
| 385 | 3.67 | 34.143 | 0.46 | 27.16 | 400 | 3.64 | 34.15 | 27.17 | 94 | 0.52 |
| 490 | 3.48 | 34.211 | 0.40 | 27.23 | 500 | 3.46 | 34.22 | 27.24 | 88 | 0.61 |
| 589 | 3.29 | 34.270 | 0.41 | 27.30 | 600 | 3.27 | 34.28 | 27.30 | 82 | 0.70 |
| 802 | 2.90 | 34.366 | 0.50 | 27.41 | 700 | 3.08 | 34.33 | 27.36 | 77 | 0.78 |
| 981 | 2.65 | 34.420 | 0.56 | 27.48 | 800 | 2.90 | 34.37 | 27.41 | 73 | 0.85 |
| 1090 | 2.55 | 34.440 | 0.66 | 27.50 | 1000 | 2.63 | 34.42 | 27.48 | 67 | 0.99 |
| 1275 | 2.38 | 34.486 | 0.75 | 27.55 | 1200 | 2.45 | 34.47 | 27.53 | 63 | 1.12 |
| 1471 | 2.25 | 34.520 | 0.92 | 27.59 | 1500 | 2.24 | 34.52 | 27.59 | 58 | 1.31 |
| 1500 | (2.24)a) | (34.524)a) | - | (27.59) | | | | | | |

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HMCS OSHAWA; April 6, 1958; 2257 GCT; 51°30'N, 148°57'W; sounding, missing; wind, 270°, 10 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (5.48)a) | (32.737)a) | - | (25.85) | 0 | 5.48 | 32.74 | 25.85 | 216 | 0.00 |
| 5 | 5.45 | 32.738 | 7.29 | 25.86 | 10 | 5.42 | 32.74 | 25.86 | 215 | 0.02 |
| 20 | 5.37 | 32.736 | 7.32 | 25.86 | 20 | 5.37 | 32.74 | 25.86 | 215 | 0.04 |
| 30 | 5.33 | 32.731 | 7.29 | 25.86 | 30 | 5.33 | 32.73 | 25.86 | 215 | 0.06 |
| 50 | 5.27 | 32.730 | 7.28 | 25.87 | 50 | 5.27 | 32.73 | 25.87 | 214 | 0.11 |
| 75 | 5.27 | 32.734 | 7.24 | 25.87 | 75 | 5.27 | 32.73 | 25.87 | 214 | 0.16 |
| 100 | 5.09 | 32.771 | 7.12 | 25.92 | 100 | 5.09 | 32.77 | 25.92 | 210 | 0.22 |
| 125 | 4.45 | 33.185 | 5.56 | 26.32 | 125 | 4.45 | 33.19 | 26.32 | 172 | 0.26 |
| 150 | 3.92 | 33.540 | 4.05 | 26.66 | 150 | 3.92 | 33.54 | 26.66 | 140 | 0.30 |
| 175 | 3.81 | 33.752 | 2.82 | 26.84 | 175 | 3.81 | 33.75 | 26.84 | 124 | 0.34 |
| 200 | 3.87 | 33.843 | 1.97 | 26.90 | 200 | 3.87 | 33.84 | 26.90 | 118 | 0.37 |
| 225 | 3.87 | 33.883 | 1.68 | 26.93 | 225 | 3.87 | 33.88 | 26.93 | 115 | 0.40 |
| 250 | 3.85 | 33.914 | 1.44 | 26.96 | 250 | 3.85 | 33.91 | 26.96 | 112 | 0.42 |
| 300 | 3.81 | 33.997 | 0.97 | 27.03 | 300 | 3.81 | 34.00 | 27.03 | 106 | 0.48 |
| 374 | 3.77 | 34.072 | 0.76 | 27.09 | 400 | 3.74 | 34.10 | 27.12 | 99 | 0.58 |
| 479 | 3.61 | 34.163 | 0.55 | 27.18 | 500 | 3.57 | 34.18 | 27.20 | 92 | 0.68 |
| 575 | 3.40 | 34.230 | 0.54 | 27.26 | 600 | 3.35 | 34.25 | 27.27 | 85 | 0.77 |
| 781 | 3.07 | 34.336 | 0.52 | 27.37 | 700 | 3.18 | 34.30 | 27.33 | 80 | 0.85 |
| 959 | 2.81 | 34.398 | 0.50 | 27.44 | 800 | 3.04 | 34.34 | 27.38 | 76 | 0.93 |
| 1061 | 2.67 | 34.425 | 0.52 | 27.48 | 1000 | 2.75 | 34.41 | 27.46 | 69 | 1.08 |
| 1246 | 2.45 | 34.473 | 0.58 | 27.53 | 1200 | 2.50 | 34.46 | 27.52 | 64 | 1.21 |
| 1438 | 2.29 | 34.514 | 0.78 | 27.58 | 1500 | 2.25 | 34.53 | 27.59 | 58 | 1.40 |
| 1500 | (2.25)a) | (34.525)a) | - | (27.59) | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 89 | HMCS OSHAWA; April 7, 1958; 0852 GCT; 50°19'N, 147°27'W; sounding, missing; wind, 280°, 8 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | (5.82)a) | (32.715)a) | - | (25.79) | 0 | 5.82 | 32.72 | 25.79 | 221 | 0.00 |
| 5 | 5.83 | 32.722 | 7.09 | 25.80 | 10 | 5.83 | 32.73 | 25.80 | 221 | 0.02 |
| 19 | 5.84 | 32.728 | 7.08 | 25.80 | 20 | 5.84 | 32.73 | 25.80 | 221 | 0.04 |
| 28 | 5.84 | 32.722 | 7.12 | 25.80 | 30 | 5.84 | 32.72 | 25.80 | 221 | 0.07 |
| 46 | 5.83 | 32.737 | 7.08 | 25.81 | 50 | 5.83 | 32.74 | 25.81 | 220 | 0.11 |
| 69 | 5.80 | 32.748 | 7.06 | 25.82 | 75 | 5.80 | 32.75 | 25.82 | 219 | 0.17 |
| 93 | 5.80 | 32.748 | 7.08 | 25.82 | 100 | 5.74 | 32.78 | 25.86 | 216 | 0.22 |
| 116 | 5.52 | 32.918 | 6.26 | 25.99 | 125 | 5.23 | 33.07 | 26.14 | 190 | 0.27 |
| 139 | 4.57 | 33.385 | 5.33 | 26.47 | 150 | 4.25 | 33.50 | 26.59 | 147 | 0.32 |
| 162 | 4.01 | 33.533 | 4.58 | 26.64 | 175 | 3.82 | 33.62 | 26.73 | 133 | 0.35 |
| 185 | 3.73 | 33.699 | 3.47 | 26.80 | 200 | 3.68 | 33.76 | 26.86 | 122 | 0.38 |
| 208 | 3.70 | 33.781 | 2.90 | 26.87 | 225 | 3.72 | 33.82 | 26.90 | 118 | 0.41 |
| 231 | 3.73 | 33.831 | 2.39 | 26.91 | 250 | 3.74 | 33.87 | 26.94 | 115 | 0.44 |
| 278 | 3.71 | 33.926 | 1.70 | 26.98 | 300 | 3.71 | 33.96 | 27.01 | 108 | 0.50 |
| 376 | 3.73 | 34.000 | 1.19 | 27.04 | 400 | 3.72 | 34.03 | 27.06 | 104 | 0.60 |
| 473 | 3.67 | 34.118 | 0.75 | 27.14 | 500 | 3.63 | 34.14 | 27.16 | 95 | 0.70 |
| 567 | 3.49 | 34.189 | 0.64 | 27.21 | 600 | 3.43 | 34.21 | 27.24 | 88 | 0.80 |
| 771 | 3.13 | 34.318 | 0.54 | 27.35 | 700 | 3.25 | 34.28 | 27.31 | 82 | 0.88 |
| 946 | 2.87 | 34.379 | 0.44 | 27.42 | 800 | 3.08 | 34.33 | 27.37 | 77 | 0.97 |
| 1048 | 2.73 | 34.414 | 0.62 | 27.46 | 1000 | 2.79 | 34.40 | 27.44 | 71 | 1.12 |
| 1229 | 2.50 | 34.459 | 0.71 | 27.52 | 1200 | 2.54 | 34.45 | 27.51 | 65 | 1.25 |
| 1417 | 2.28 | 34.508 | 0.99 | 27.58 | 1500 | 2.19 | 34.53 | 27.60 | 57 | 1.44 |
| 1500 | (2.19)a) | (34.530)a) | - | (27.60) | | | | | | |
| 90 | HMCS OSHAWA; April 7, 1958; 1802 GCT; 49°10'N, 146°00'W; sounding, missing; wind, 220°, 10 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | (5.82)a) | (32.834)a) | - | (25.89) | 0 | 5.82 | 32.83 | 25.89 | 212 | 0.00 |
| 5 | 5.77 | 32.829 | 7.27 | 25.89 | 10 | 5.73 | 32.83 | 25.89 | 212 | 0.02 |
| 20 | 5.71 | 32.823 | 7.24 | 25.89 | 20 | 5.71 | 32.82 | 25.89 | 212 | 0.04 |
| 30 | 5.75 | 32.827 | 7.27 | 25.89 | 30 | 5.75 | 32.83 | 25.89 | 212 | 0.06 |
| 50 | 5.69 | 32.820 | 7.28 | 25.89 | 50 | 5.69 | 32.82 | 25.89 | 212 | 0.11 |
| 75 | 5.71 | 32.828 | 7.21 | 25.90 | 75 | 5.71 | 32.83 | 25.90 | 212 | 0.16 |
| 100 | 5.65 | 32.832 | 7.15 | 25.91 | 100 | 5.65 | 32.83 | 25.91 | 212 | 0.21 |
| 125 | 5.33 | 33.597 | 5.57 | 26.55 | 125 | 5.33 | 33.60 | 26.55 | 151 | 0.26 |
| 150 | 5.01 | 33.690 | 5.20 | 26.66 | 150 | 5.01 | 33.69 | 26.66 | 141 | 0.30 |
| 175 | 4.64 | 33.739 | 4.69 | 26.74 | 175 | 4.64 | 33.74 | 26.74 | 133 | 0.33 |
| 200 | 4.29 | 33.767 | 4.23 | 26.80 | 200 | 4.29 | 33.77 | 26.80 | 128 | 0.36 |
| 225 | 4.19 | 33.812 | 3.70 | 26.84 | 225 | 4.19 | 33.81 | 26.84 | 123 | 0.40 |
| 250 | 4.07 | 33.846 | 3.16 | 26.88 | 250 | 4.07 | 33.85 | 26.88 | 120 | 0.43 |
| 300 | 3.93 | 33.915 | 2.37 | 26.95 | 300 | 3.93 | 33.92 | 26.95 | 114 | 0.48 |
| 385 | 3.83 | 34.020 | 1.56 | 27.05 | 400 | 3.81 | 34.04 | 27.06 | 104 | 0.59 |
| 494 | 3.67 | 34.112 | 0.92 | 27.14 | 500 | 3.66 | 34.12 | 27.14 | 97 | 0.70 |
| 593 | 3.57 | 34.194 | 0.90 | 27.21 | 600 | 3.56 | 34.20 | 27.22 | 91 | 0.79 |
| 805 | 3.13 | 34.315 | 0.60 | 27.35 | 700 | 3.39 | 34.26 | 27.28 | 85 | 0.88 |
| 988 | 2.83 | 34.386 | 0.68 | 27.43 | 800 | 3.14 | 34.31 | 27.35 | 79 | 0.96 |
| 1092 | 2.69 | 34.426 | 0.64 | 27.48 | 1000 | 2.81 | 34.39 | 27.44 | 71 | 1.12 |
| 1284 | 2.47 | 34.470 | 0.71 | 27.53 | 1200 | 2.56 | 34.46 | 27.51 | 65 | 1.25 |
| 1481 | 2.30 | 34.510 | 0.81 | 27.58 | 1500 | 2.29 | 34.51 | 27.58 | 59 | 1.44 |
| 1500 | (2.29)a) | (34.514)a) | - | (27.58) | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

91

HMCS OSHAWA; April 8, 1958; 0508 GCT; 49°06'N, 143°20'W; sounding, missing; wind, 220°, 8 kt; weather, overcast; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (6.51)a) | (32.765)a) | - | (25.75) | 0 | 6.51 | 32.77 | 25.75 | 226 | 0.00 |
| 5 | 6.46 | 32.763 | 7.12 | 25.75 | 10 | 6.42 | 32.76 | 25.76 | 225 | 0.02 |
| 20 | 6.35 | 32.760 | 7.15 | 25.76 | 20 | 6.35 | 32.76 | 25.76 | 224 | 0.04 |
| 30 | 6.31 | 32.761 | 7.22 | 25.77 | 30 | 6.31 | 32.76 | 25.77 | 224 | 0.07 |
| 50 | 6.29 | 32.756 | 7.18 | 25.77 | 50 | 6.29 | 32.76 | 25.77 | 224 | 0.11 |
| 74 | 6.29 | 32.762 | 7.13 | 25.77 | 75 | 6.29 | 32.76 | 25.77 | 224 | 0.17 |
| 99 | 6.30 | 32.767 | 7.15 | 25.78 | 100 | 6.30 | 32.77 | 25.78 | 224 | 0.23 |
| 124 | 6.13 | 32.954 | 7.25 | 25.94 | 125 | 6.11 | 32.97 | 25.96 | 207 | 0.28 |
| 149 | 5.27 | 33.556 | 5.64 | 26.52 | 150 | 5.24 | 33.57 | 26.54 | 152 | 0.32 |
| 174 | 4.83 | 33.644 | 5.26 | 26.64 | 175 | 4.81 | 33.65 | 26.65 | 142 | 0.36 |
| 199 | 4.45 | 33.711 | 4.78 | 26.74 | 200 | 4.44 | 33.71 | 26.74 | 133 | 0.40 |
| 224 | 4.25 | 33.751 | 4.17 | 26.79 | 225 | 4.24 | 33.75 | 26.79 | 128 | 0.43 |
| 248 | 4.05 | 33.798 | 3.49 | 26.85 | 250 | 4.04 | 33.80 | 26.85 | 123 | 0.46 |
| 298 | 3.91 | 33.866 | 2.64 | 26.92 | 300 | 3.91 | 33.87 | 26.92 | 117 | 0.52 |
| 361 | 3.86 | 33.972 | 1.75 | 27.01 | 400 | 3.83 | 34.03 | 27.05 | 105 | 0.63 |
| 462 | 3.78 | 34.095 | 1.13 | 27.11 | 500 | 3.74 | 34.13 | 27.14 | 97 | 0.74 |
| 554 | 3.68 | 34.158 | 0.85 | 27.17 | 600 | 3.61 | 34.19 | 27.20 | 92 | 0.83 |
| 753 | 3.29 | 34.279 | 0.60 | 27.31 | 700 | 3.42 | 34.25 | 27.27 | 86 | 0.92 |
| 923 | 3.00 | 34.352 | 0.58 | 27.39 | 800 | 3.21 | 34.30 | 27.33 | 81 | 1.01 |
| 1022 | 2.81 | 34.397 | 0.58 | 27.44 | 1000 | 2.85 | 34.39 | 27.43 | 72 | 1.16 |
| 1200 | 2.59 | 34.450 | 0.59 | 27.50 | 1200 | 2.59 | 34.45 | 27.50 | 66 | 1.30 |
| 1385 | 2.39 | 34.493 | 0.63 | 27.56 | 1500 | 2.28 | 34.51 | 27.58 | 59 | 1.49 |
| 1500 | (2.28)a) | (34.514)a) | - | (27.58) | | | | | | |

92

HMCS OSHAWA; April 8, 1958; 1546 GCT; 49°00'N, 140°43'W; sounding, missing; wind, 150°, 10 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (7.40)a) | (32.750)a) | - | (25.62) | 0 | 7.40 | 32.75 | 25.62 | 238 | 0.00 |
| 5 | 7.43 | 32.746 | 7.20 | 25.61 | 10 | 7.45 | 32.74 | 25.60 | 239 | 0.02 |
| 20 | 7.46 | 32.736 | 7.06 | 25.60 | 20 | 7.46 | 32.74 | 25.60 | 240 | 0.05 |
| 30 | 7.44 | 32.730 | 7.03 | 25.59 | 30 | 7.44 | 32.73 | 25.59 | 240 | 0.07 |
| 50 | 7.35 | 32.729 | 7.03 | 25.61 | 50 | 7.35 | 32.73 | 25.61 | 240 | 0.12 |
| 75 | 6.99 | 32.748 | 6.96 | 25.67 | 75 | 6.99 | 32.75 | 25.67 | 234 | 0.18 |
| 100 | 6.80 | 32.799 | 6.93 | 25.74 | 100 | 6.80 | 32.80 | 25.74 | 228 | 0.24 |
| 125 | 5.97 | 33.401 | 6.01 | 26.32 | 125 | 5.97 | 33.40 | 26.32 | 173 | 0.29 |
| 150 | 5.38 | 33.570 | 5.63 | 26.52 | 150 | 5.38 | 33.57 | 26.52 | 154 | 0.33 |
| 170 | 5.28 | 33.710 | 5.39 | 26.64 | 175 | 5.25 | 33.73 | 26.66 | 140 | 0.37 |
| 194 | 5.13 | 33.770 | 4.97 | 26.71 | 200 | 5.07 | 33.78 | 26.72 | 135 | 0.40 |
| 218 | 4.85 | 33.804 | 4.33 | 26.77 | 225 | 4.79 | 33.82 | 26.78 | 130 | 0.44 |
| 242 | 4.67 | 33.850 | 3.81 | 26.82 | 250 | 4.62 | 33.86 | 26.84 | 124 | 0.47 |
| 291 | 4.41 | 33.885 | 2.98 | 26.88 | 300 | 4.37 | 33.89 | 26.89 | 120 | 0.53 |
| 386 | 4.15 | 33.993 | 1.97 | 26.99 | 400 | 4.12 | 34.01 | 27.01 | 110 | 0.64 |
| 490 | 3.92 | 34.094 | 1.20 | 27.10 | 500 | 3.90 | 34.10 | 27.11 | 101 | 0.75 |
| 588 | 3.67 | 34.177 | 0.75 | 27.19 | 600 | 3.64 | 34.19 | 27.20 | 93 | 0.85 |
| 801 | 3.25 | 34.292 | 0.56 | 27.32 | 700 | 3.43 | 34.25 | 27.27 | 86 | 0.94 |
| 980 | 2.94 | 34.368 | 0.55 | 27.41 | 800 | 3.25 | 34.29 | 27.32 | 82 | 1.02 |
| 1089 | 2.79 | 34.407 | 0.53 | 27.45 | 1000 | 2.91 | 34.38 | 27.42 | 74 | 1.18 |
| 1274 | 2.53 | 34.455 | 0.55 | 27.51 | 1200 | 2.63 | 34.44 | 27.49 | 67 | 1.32 |
| 1470 | 2.35 | 34.497 | - | 27.56 | 1500 | 2.33 | 34.50 | 27.57 | 60 | 1.52 |
| 1500 | (2.33)a) | (34.503)a) | - | (27.57) | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 93 | HMCS OSHAWA; April 9, 1958; 0303 GCT; 48°55'N, 138°06'W; sounding, missing; wind, 140°, 35 kt; weather, overcast; sea, rough. | | | | | | | | | |
| 0 | (7.70)a) | (32.618)a) | - | (25.47) | 0 | 7.70 | 32.62 | 25.47 | 252 | 0.00 |
| 5 | 7.69 | 32.610 | 6.90 | 25.47 | 10 | 7.68 | 32.60 | 25.46 | 253 | 0.02 |
| 20 | 7.67 | 32.602 | 6.94 | 25.46 | 20 | 7.67 | 32.60 | 25.46 | 253 | 0.05 |
| 30 | 7.67 | 32.610 | 6.93 | 25.47 | 30 | 7.67 | 32.61 | 25.47 | 253 | 0.08 |
| 50 | 7.62 | 32.627 | 6.99 | 25.49 | 50 | 7.62 | 32.63 | 25.49 | 251 | 0.13 |
| 75 | 7.49 | 32.636 | 6.82 | 25.51 | 75 | 7.49 | 32.64 | 25.51 | 249 | 0.19 |
| 100 | 7.04 | 32.647 | 6.82 | 25.58 | 100 | 7.04 | 32.65 | 25.58 | 242 | 0.25 |
| 118 | 6.80 | 32.819 | 6.62 | 25.75 | 125 | 6.62 | 32.96 | 25.88 | 214 | 0.31 |
| 141 | 6.01 | 33.416 | 5.98 | 26.32 | 150 | 5.82 | 33.53 | 26.44 | 162 | 0.36 |
| 165 | 5.65 | 33.578 | 5.79 | 26.49 | 175 | 5.49 | 33.63 | 26.55 | 151 | 0.40 |
| 188 | 5.28 | 33.677 | 5.51 | 26.62 | 200 | 5.18 | 33.72 | 26.66 | 141 | 0.43 |
| 212 | 5.15 | 33.760 | 4.91 | 26.70 | 225 | 5.05 | 33.80 | 26.74 | 134 | 0.47 |
| 235 | 4.95 | 33.821 | 4.17 | 26.77 | 250 | 4.84 | 33.85 | 26.80 | 128 | 0.50 |
| 282 | 4.66 | 33.872 | 3.07 | 26.84 | 300 | 4.57 | 33.89 | 26.87 | 122 | 0.56 |
| 377 | 4.27 | 33.988 | 2.22 | 26.98 | 400 | 4.20 | 34.01 | 27.00 | 110 | 0.68 |
| 484 | 3.99 | 34.086 | 1.12 | 27.08 | 500 | 3.95 | 34.10 | 27.10 | 102 | 0.79 |
| 581 | 3.75 | 34.154 | 0.99 | 27.16 | 600 | 3.71 | 34.17 | 27.18 | 95 | 0.89 |
| 789 | 3.30 | 34.277 | 0.66 | 27.30 | 700 | 3.48 | 34.23 | 27.25 | 89 | 0.98 |
| 968 | 2.99 | 34.361 | 0.54 | 27.40 | 800 | 3.28 | 34.28 | 27.31 | 83 | 1.07 |
| 1076 | 2.83 | 34.400 | 0.60 | 27.44 | 1000 | 2.94 | 34.37 | 27.41 | 74 | 1.22 |
| 1258 | 2.59 | 34.447 | 0.94 | 27.50 | 1200 | 2.66 | 34.43 | 27.49 | 68 | 1.37 |
| 1452 | 2.39 | 34.502 | 0.75 | 27.56 | 1500 | 2.35 | 34.52 | 27.58 | 60 | 1.56 |
| 1500 | (2.35)a) | (34.516)a) | - | (27.58) | | | | | | |
| 94 | HMCS OSHAWA; April 9, 1958; 1357 GCT; 48°52'N, 135°27'W; sounding, missing; wind, 250°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | (7.68)a) | (32.544)a) | - | (25.41) | 0 | 7.68 | 32.54 | 25.41 | 257 | 0.00 |
| 5 | 7.67 | 32.542 | 7.11 | 25.41 | 10 | 7.66 | 32.54 | 25.42 | 257 | 0.03 |
| 20 | 7.66 | 32.540 | 6.92 | 25.41 | 20 | 7.66 | 32.54 | 25.41 | 258 | 0.05 |
| 30 | 7.68 | 32.541 | 6.88 | 25.41 | 30 | 7.68 | 32.54 | 25.41 | 258 | 0.08 |
| 50 | (7.57)b) | 32.559 | 6.82 | (25.44) | 50 | 7.57 | 32.56 | 25.44 | 255 | 0.13 |
| 74 | 7.19 | (32.595)b) | - | (25.52) | 75 | 7.18 | 32.60 | 25.53 | 248 | 0.19 |
| 99 | 6.90 | 32.650 | 6.76 | 25.61 | 100 | 6.87 | 32.66 | 25.62 | 239 | 0.25 |
| 124 | 5.96 | 33.054 | 6.22 | 26.04 | 125 | 5.93 | 33.07 | 26.06 | 198 | 0.31 |
| 149 | 5.54 | 33.309 | 6.17 | 26.30 | 150 | 5.53 | 33.32 | 26.30 | 174 | 0.36 |
| 174 | 5.38 | 33.534 | 5.59 | 26.49 | 175 | 5.38 | 33.54 | 26.50 | 156 | 0.40 |
| 199 | 5.48 | 33.702 | 5.03 | 26.61 | 200 | 5.48 | 33.71 | 26.62 | 145 | 0.44 |
| 224 | 5.46 | 33.830 | 4.36 | 26.72 | 225 | 5.45 | 33.83 | 26.72 | 136 | 0.47 |
| 248 | 5.22 | 33.865 | 3.74 | 26.77 | 250 | 5.20 | 33.87 | 26.78 | 131 | 0.50 |
| 298 | 4.78 | 33.883 | 3.16 | 26.84 | 300 | 4.77 | 33.88 | 26.84 | 125 | 0.57 |
| 390 | 4.38 | 33.964 | 2.08 | 26.95 | 400 | 4.34 | 33.97 | 26.96 | 114 | 0.69 |
| 500 | 4.00 | 34.070 | 1.01 | 27.07 | 500 | 4.00 | 34.07 | 27.07 | 104 | 0.80 |
| 600 | 3.77 | 34.152 | 0.77 | 27.16 | 600 | 3.77 | 34.15 | 27.16 | 97 | 0.90 |
| 797 | 3.34 | 34.274 | 0.54 | 27.30 | 700 | 3.55 | 34.22 | 27.23 | 90 | 1.00 |
| 978 | 3.02 | 34.363 | 0.47 | 27.40 | 800 | 3.33 | 34.28 | 27.30 | 84 | 1.08 |
| 1082 | 2.84 | 34.401 | 0.45 | 27.44 | 1000 | 2.98 | 34.37 | 27.41 | 75 | 1.24 |
| 1271 | 2.61 | 34.452 | 0.52 | 27.50 | 1200 | 2.68 | 34.44 | 27.49 | 68 | 1.39 |
| 1468 | 2.40 | 34.497 | 0.58 | 27.56 | 1500 | 2.37 | 34.50 | 27.57 | 61 | 1.58 |
| 1500 | (2.37)a) | (34.504)a) | - | (27.57) | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

95

HMCS OSHAWA; April 10, 1958; 0100 GCT; 48°47'N, 132°48'W; sounding, missing; wind, 230°, 8 kt; weather, cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (8.02)a) | (32.511)a) | - | (25.34) | 0 | 8.02 | 32.51 | 25.34 | 264 | 0.00 |
| 5 | 7.86 | 32.516 | 6.88 | 25.37 | 10 | 7.73 | 32.52 | 25.39 | 260 | 0.03 |
| 20 | 7.59 | 32.526 | 6.69 | 25.41 | 20 | 7.59 | 32.53 | 25.41 | 258 | 0.05 |
| 29 | 7.58 | 32.528 | 6.57 | 25.42 | 30 | 7.58 | 32.53 | 25.42 | 257 | 0.08 |
| 49 | 7.40 | 32.539 | 6.80 | 25.45 | 50 | 7.39 | 32.54 | 25.45 | 254 | 0.13 |
| 74 | 7.09 | 32.576 | 6.23 | 25.52 | 75 | 7.06 | 32.59 | 25.53 | 247 | 0.19 |
| 98 | 6.16 | 32.975 | 5.84 | 25.96 | 100 | 6.10 | 33.00 | 25.99 | 204 | 0.25 |
| 123 | 5.62 | 33.238 | 5.02 | 26.23 | 125 | 5.60 | 33.26 | 26.25 | 179 | 0.30 |
| 147 | 5.52 | 33.548 | 4.12 | 26.49 | 150 | 5.52 | 33.58 | 26.51 | 155 | 0.34 |
| 172 | 5.60 | 33.748 | 3.56 | 26.64 | 175 | 5.60 | 33.77 | 26.65 | 142 | 0.38 |
| 196 | 5.48 | 33.869 | 3.16 | 26.75 | 200 | 5.46 | 33.88 | 26.76 | 132 | 0.41 |
| 220 | 5.32 | 33.890 | 2.70 | 26.78 | 225 | 5.29 | 33.89 | 26.79 | 129 | 0.45 |
| 245 | 5.14 | 33.906 | 2.35 | 26.81 | 250 | 5.09 | 33.91 | 26.82 | 126 | 0.48 |
| 294 | 4.56 | 33.922 | 2.13 | 26.89 | 300 | 4.51 | 33.93 | 26.90 | 119 | 0.54 |
| 396 | 4.17 | 34.025 | 1.20 | 27.02 | 400 | 4.16 | 34.03 | 27.02 | 108 | 0.65 |
| 450 | 4.15 | 34.078 | 0.86 | 27.06 | 500 | 4.08 | 34.13 | 27.11 | 101 | 0.76 |
| 559 | 3.93 | 34.189 | 0.55 | 27.17 | 600 | 3.84 | 34.22 | 27.21 | 92 | 0.86 |
| 762 | 3.41 | 34.292 | 0.55 | 27.30 | 700 | 3.58 | 34.27 | 27.27 | 86 | 0.95 |
| 932 | 3.07 | 34.361 | 0.44 | 27.39 | 800 | 3.33 | 34.31 | 27.33 | 82 | 1.03 |
| 1045 | 2.92 | 34.398 | 0.46 | 27.43 | 1000 | 2.97 | 34.38 | 27.42 | 74 | 1.19 |
| 1211 | 2.66 | 34.449 | 0.44 | 27.50 | 1200 | 2.68 | 34.45 | 27.49 | 67 | 1.33 |
| 1398 | 2.42 | 34.490 | 0.63 | 27.55 | 1500 | 2.31 | 34.51 | 27.57 | 60 | 1.52 |
| 1500 | (2.31)a) | (34.505)a) | - | (27.57) | | | | | | |

96

HMCS OSHAWA; April 10, 1958; 1325 GCT; 48°42'N, 130°06'W; sounding, missing; wind, 260°, 10 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (8.43)a) | (32.438)a) | - | (25.22) | 0 | 8.43 | 32.44 | 25.22 | 276 | 0.00 |
| 5 | 8.46 | 32.432 | 6.74 | 25.21 | 10 | 8.48 | 32.43 | 25.21 | 277 | 0.03 |
| 20 | 8.49 | 32.422 | 6.82 | 25.20 | 20 | 8.49 | 32.42 | 25.20 | 278 | 0.06 |
| 30 | 8.47 | 32.423 | 6.83 | 25.21 | 30 | 8.47 | 32.42 | 25.21 | 278 | 0.08 |
| 50 | 8.22 | 32.463 | 6.72 | 25.27 | 50 | 8.22 | 32.46 | 25.27 | 271 | 0.14 |
| 75 | 7.26 | 32.889 | 5.66 | 25.74 | 75 | 7.26 | 32.89 | 25.74 | 227 | 0.20 |
| 100 | 7.14 | 33.507 | 4.07 | 26.25 | 100 | 7.14 | 33.51 | 26.25 | 180 | 0.25 |
| 125 | 7.24 | 33.694 | 3.45 | 26.38 | 125 | 7.24 | 33.69 | 26.38 | 168 | 0.30 |
| 150 | 7.05 | 33.830 | 2.95 | 26.51 | 150 | 7.05 | 33.83 | 26.51 | 155 | 0.34 |
| 175 | 6.86 | 33.888 | 2.69 | 26.58 | 175 | 6.86 | 33.89 | 26.58 | 149 | 0.38 |
| 200 | 6.76 | 33.924 | 2.45 | 26.63 | 200 | 6.76 | 33.92 | 26.63 | 145 | 0.41 |
| 225 | 6.58 | 33.948 | 1.61 | 26.67 | 225 | 6.58 | 33.95 | 26.67 | 141 | 0.45 |
| 250 | 6.36 | 33.965 | 2.03 | 26.71 | 250 | 6.36 | 33.97 | 26.71 | 138 | 0.48 |
| 300 | 5.88 | 33.994 | 1.65 | 26.79 | 300 | 5.88 | 33.99 | 26.79 | 130 | 0.55 |
| 392 | 5.25 | 34.058 | 1.11 | 26.92 | 400 | 5.21 | 34.06 | 26.93 | 118 | 0.68 |
| 493 | 4.84 | 34.104 | 0.84 | 27.01 | 500 | 4.81 | 34.11 | 27.01 | 111 | 0.79 |
| 592 | 4.47 | 34.171 | 0.55 | 27.10 | 600 | 4.44 | 34.18 | 27.11 | 102 | 0.90 |
| 811 | 3.88 | 34.314 | 0.35 | 27.28 | 700 | 4.14 | 34.24 | 27.19 | 95 | 1.00 |
| 986 | 3.50 | 34.393 | 0.37 | 27.38 | 800 | 3.90 | 34.31 | 27.27 | 88 | 1.09 |
| 1101 | 3.19 | 34.437 | 0.45 | 27.44 | 1000 | 3.46 | 34.40 | 27.38 | 78 | 1.26 |
| 1282 | 2.84 | 34.474 | 0.62 | 27.50 | 1200 | 2.98 | 34.46 | 27.48 | 69 | 1.41 |
| 1480 | 2.50 | 34.512 | 0.83 | 27.56 | 1500 | 2.47 | 34.52 | 27.57 | 61 | 1.61 |
| 1500 | (2.47)a) | (34.516)a) | - | (27.57) | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 97 | HMCS OSHAWA; April 10, 1958; 2303 GCT; 48°40'N, 127°32'W; sounding, missing; wind, 220°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | (9.60)a) | (32.405)a) | - | (25.02) | 0 | 9.60 | 32.41 | 25.02 | 295 | 0.00 |
| 5 | 9.32 | 32.404 | 6.65 | 25.06 | 10 | 9.10 | 32.40 | 25.09 | 288 | 0.03 |
| 20 | 8.84 | 32.400 | 6.46 | 25.13 | 20 | 8.84 | 32.40 | 25.13 | 284 | 0.06 |
| 30 | 8.82 | 32.397 | 5.94 | 25.13 | 30 | 8.82 | 32.40 | 25.13 | 285 | 0.09 |
| 50 | 8.77 | 32.396 | 6.45 | 25.14 | 50 | 8.77 | 32.40 | 25.14 | 284 | 0.14 |
| 75 | 7.94 | 32.513 | 6.38 | 25.35 | 75 | 7.94 | 32.51 | 25.35 | 264 | 0.21 |
| 99 | 7.58 | 33.070 | 5.16 | 25.84 | 100 | 7.57 | 33.09 | 25.86 | 216 | 0.27 |
| 124 | 7.40 | 33.470 | 4.05 | 26.18 | 125 | 7.40 | 33.48 | 26.19 | 185 | 0.32 |
| 149 | 7.34 | 33.748 | 3.33 | 26.41 | 150 | 7.34 | 33.76 | 26.41 | 165 | 0.37 |
| 174 | 7.32 | 33.878 | 2.74 | 26.51 | 175 | 7.31 | 33.88 | 26.52 | 155 | 0.41 |
| 199 | 7.00 | 33.930 | 2.59 | 26.60 | 200 | 6.99 | 33.93 | 26.60 | 148 | 0.45 |
| 224 | 6.81 | 33.966 | 2.22 | 26.65 | 225 | 6.80 | 33.97 | 26.65 | 143 | 0.48 |
| 248 | 6.53 | 33.957 | 2.30 | 26.68 | 250 | 6.51 | 33.96 | 26.68 | 140 | 0.52 |
| 298 | 6.16 | 33.979 | 2.13 | 26.75 | 300 | 6.14 | 33.98 | 26.75 | 134 | 0.59 |
| 386 | 5.35 | 34.024 | 1.44 | 26.88 | 400 | 5.25 | 34.03 | 26.90 | 121 | 0.72 |
| 493 | 4.85 | 34.100 | 0.88 | 27.00 | 500 | 4.82 | 34.11 | 27.01 | 111 | 0.83 |
| 591 | 4.51 | 34.185 | 0.62 | 27.11 | 600 | 4.48 | 34.19 | 27.11 | 102 | 0.94 |
| 804 | 3.98 | 34.313 | 0.47 | 27.26 | 700 | 4.20 | 34.26 | 27.20 | 94 | 1.04 |
| 986 | 3.50 | 34.379 | 0.40 | 27.36 | 800 | 3.99 | 34.31 | 27.26 | 89 | 1.13 |
| 1093 | 3.27 | 34.421 | 0.57 | 27.42 | 1000 | 3.47 | 34.38 | 27.37 | 79 | 1.30 |
| 1280 | 2.86 | 34.474 | 0.57 | 27.50 | 1200 | 3.04 | 34.45 | 27.47 | 70 | 1.45 |
| 1476 | 2.49 | 34.507 | 0.72 | 27.56 | 1500 | 2.45 | 34.51 | 27.56 | 61 | 1.66 |
| 1500 | (2.45)a) | (34.509)a) | - | (27.56) | | | | | | |
| 98 | HMCS OSHAWA; April 11, 1958; 0309 GCT; 48°39'N, 126°51'W; sounding, 1100 fm; wind, direction missing, 3 kt; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | (9.33)a) | (32.411)a) | - | (25.06) | 0 | 9.33 | 32.41 | 25.06 | 291 | 0.00 |
| 5 | 9.26 | 32.411 | 6.59 | 25.07 | 10 | 9.20 | 32.41 | 25.08 | 289 | 0.03 |
| 20 | 9.12 | 32.411 | 6.71 | 25.10 | 20 | 9.12 | 32.41 | 25.10 | 288 | 0.06 |
| 30 | 9.08 | 32.412 | 6.61 | 25.10 | 30 | 9.08 | 32.41 | 25.10 | 287 | 0.09 |
| 50 | 9.06 | 32.411 | 6.60 | 25.11 | 50 | 9.06 | 32.41 | 25.11 | 287 | 0.14 |
| 75 | 8.38 | 32.554 | 6.34 | 25.32 | 75 | 8.38 | 32.55 | 25.32 | 267 | 0.22 |
| 100 | 7.44 | 33.062 | 5.49 | 25.86 | 100 | 7.44 | 33.06 | 25.86 | 217 | 0.28 |
| 125 | 7.20 | 33.378 | 4.66 | 26.14 | 125 | 7.20 | 33.38 | 26.14 | 190 | 0.33 |
| 150 | 7.12 | 33.647 | 3.80 | 26.36 | 150 | 7.12 | 33.65 | 26.36 | 170 | 0.37 |
| 175 | 7.26 | 33.832 | 2.98 | 26.48 | 175 | 7.26 | 33.83 | 26.48 | 158 | 0.41 |
| 200 | 6.79 | 33.869 | 2.70 | 26.58 | 200 | 6.79 | 33.87 | 26.58 | 150 | 0.45 |
| 225 | 6.54 | 33.904 | 2.64 | 26.64 | 225 | 6.54 | 33.90 | 26.64 | 144 | 0.49 |
| 250 | 6.32 | 33.918 | 2.62 | 26.68 | 250 | 6.32 | 33.92 | 26.68 | 140 | 0.52 |
| 300 | 5.84 | 33.955 | 2.11 | 26.77 | 300 | 5.84 | 33.95 | 26.77 | 132 | 0.59 |
| 392 | 5.10 | 33.984 | 1.57 | 26.88 | 400 | 5.05 | 33.99 | 26.89 | 122 | 0.72 |
| 490 | 4.75 | 34.067 | 1.00 | 26.99 | 500 | 4.72 | 34.08 | 27.00 | 112 | 0.84 |
| 603 | 4.40 | 34.174 | 0.58 | 27.11 | 600 | 4.41 | 34.17 | 27.11 | 102 | 0.95 |
| 784 | 3.96 | 34.297 | 0.40 | 27.25 | 700 | 4.15 | 34.25 | 27.19 | 95 | 1.05 |
| 890 | 3.64 | 34.344 | 0.35 | 27.32 | 800 | 3.91 | 34.31 | 27.26 | 88 | 1.14 |
| 980 | 3.42 | 34.385 | 0.37 | 27.38 | 1000 | 3.37 | 34.39 | 27.39 | 77 | 1.31 |
| 1077 | 3.18 | 34.420 | 0.40 | 27.43 | 1200 | 2.94 | 34.46 | 27.48 | 69 | 1.46 |
| 1273 | 2.83 | 34.476 | 0.57 | 27.50 | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

99

HMCS OSHAWA; April 11, 1958; 0544 GCT; 48°35'N, 126°21'W; sounding, 575 fm; wind, 160°, 5 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.90 | 32.484 | 6.32 | 24.86 | 0 | 10.90 | 32.48 | 24.86 | 310 | 0.00 |
| 5 | (10.66)a) | 32.507 | 6.55 | (24.92) | 10 | 10.47 | 32.52 | 24.96 | 301 | 0.03 |
| 20 | 10.26 | 32.517 | 6.43 | 24.99 | 20 | 10.26 | 32.52 | 24.99 | 298 | 0.06 |
| 30 | 10.27 | 32.516 | 5.95 | 24.99 | 30 | 10.27 | 32.52 | 24.99 | 298 | 0.09 |
| 50 | 10.26 | 32.592 | 5.73 | 25.05 | 50 | 10.26 | 32.59 | 25.05 | 293 | 0.15 |
| 75 | 10.18 | 32.834 | 5.34 | 25.25 | 75 | 10.18 | 32.83 | 25.25 | 274 | 0.22 |
| 100 | 8.47 | 33.286 | 4.70 | 25.88 | 100 | 8.47 | 33.29 | 25.88 | 215 | 0.28 |
| 125 | 8.17 | 33.452 | 4.24 | 26.06 | 125 | 8.17 | 33.45 | 26.06 | 198 | 0.34 |
| 150 | 8.04 | 33.667 | 3.26 | 26.24 | 150 | 8.04 | 33.67 | 26.24 | 181 | 0.38 |
| 175 | 7.68 | 33.770 | 3.06 | 26.38 | 175 | 7.68 | 33.77 | 26.38 | 169 | 0.43 |
| 200 | 7.49 | 33.876 | 2.79 | 26.49 | 200 | 7.49 | 33.88 | 26.49 | 158 | 0.47 |
| 225 | 7.31 | 33.900 | 2.53 | 26.53 | 225 | 7.31 | 33.90 | 26.53 | 155 | 0.51 |
| 250 | 6.96 | 33.932 | 2.30 | 26.60 | 250 | 6.96 | 33.93 | 26.60 | 148 | 0.55 |
| 297 | 6.03 | 33.932 | 2.50 | 26.73 | 300 | 5.98 | 33.93 | 26.73 | 136 | 0.62 |
| 379 | 5.35 | 33.968 | 1.90 | 26.84 | 400 | 5.21 | 33.98 | 26.86 | 124 | 0.75 |
| 474 | 4.80 | 34.010 | 1.44 | 26.94 | 500 | 4.71 | 34.03 | 26.96 | 115 | 0.87 |
| 575 | 4.58 | 34.131 | 0.86 | 27.06 | 600 | 4.51 | 34.16 | 27.08 | 105 | 0.98 |
| 758 | 4.00 | 34.283 | 0.44 | 27.24 | 700 | 4.21 | 34.24 | 27.19 | 96 | 1.08 |
| 948 | 3.43 | 34.392 | 0.48 | 27.38 | 800 | 3.87 | 34.31 | 27.27 | 88 | 1.17 |
| 1000 | (3.28)b) | (34.413)b) | - | (27.41) | 1000 | 3.28 | 34.41 | 27.41 | 75 | 1.34 |

100

HMCS OSHAWA; April 11, 1958; 0817 GCT; 48°39'N, 126°10'W; sounding, 102 fm; wind, 200°, 8 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | (10.58)b) | (32.455)b) | - | (24.89) | 0 | 10.58 | 32.45 | 24.89 | 307 | 0.00 |
| 5 | 10.44 | 32.486 | 6.63 | 24.94 | 10 | 10.33 | 32.51 | 24.98 | 299 | 0.03 |
| 20 | 10.21 | 32.543 | 6.60 | 25.02 | 20 | 10.21 | 32.54 | 25.02 | 295 | 0.06 |
| 30 | 10.22 | 32.550 | 6.50 | 25.03 | 30 | 10.22 | 32.55 | 25.03 | 295 | 0.09 |
| 50 | 10.18 | 32.580 | 5.95 | 25.06 | 50 | 10.18 | 32.58 | 25.06 | 292 | 0.15 |
| 75 | 10.22 | 32.729 | 5.94 | 25.17 | 75 | 10.22 | 32.73 | 25.17 | 282 | 0.22 |
| 100 | 9.72 | 33.133 | 4.84 | 25.56 | 100 | 9.72 | 33.13 | 25.56 | 245 | 0.29 |
| 125 | 9.01 | 33.315 | 4.23 | 25.82 | 125 | 9.01 | 33.31 | 25.82 | 221 | 0.35 |
| 150 | 8.68 | 33.388 | 4.04 | 25.93 | 150 | 8.68 | 33.39 | 25.93 | 211 | 0.40 |
| 175 | 7.86 | 33.659 | 3.18 | 26.26 | 175 | 7.86 | 33.66 | 26.26 | 179 | 0.45 |

a) Value interpolated by three-point parabolic method.
b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HMCS OSHAWA; April 24, 1958; 2332 GCT;[a] 48°20'N, 135°10'W; sounding, 2140 fm; wind, 350°, 10 kt; weather, intermittent slight rain; sea, moderate. | | | | | | | | | 1 |
| 0 | 8.40 | 32.51 | 25.28 | 0 | 8.40 | 32.51 | 25.28 | 270 | 0.00 |
| 10 | 8.31 | 32.50 | 25.29 | 10 | 8.31 | 32.50 | 25.29 | 270 | 0.03 |
| 20 | 8.28 | 32.50 | 25.29 | 20 | 8.28 | 32.50 | 25.29 | 269 | 0.05 |
| 30 | 8.24 | 32.50 | 25.30 | 30 | 8.24 | 32.50 | 25.30 | 269 | 0.08 |
| 50 | 8.19 | 32.50 | 25.30 | 50 | 8.19 | 32.50 | 25.30 | 268 | 0.14 |
| 74 | 7.97 | 32.51 | 25.34 | 75 | 7.95 | 32.51 | 25.35 | 264 | 0.20 |
| 99 | 6.99 | 32.72 | 25.65 | 100 | 6.95 | 32.73 | 25.66 | 235 | 0.26 |
| 124 | 6.19 | 33.29 | 26.20 | 150 | 6.12 | 33.55 | 26.42 | 164 | 0.36 |
| 149 | 6.12 | 33.54 | 26.41 | 200 | 5.86 | 33.89 | 26.71 | 136 | 0.44 |
| 174 | 6.09 | 33.79 | 26.61 | 250 | 5.41 | 33.92 | 26.79 | 130 | 0.51 |
| 198 | 5.88 | 33.88 | 26.71 | 300 | 5.05 | 33.95 | 26.86 | 123 | 0.57 |
| 248 | 5.43 | 33.92 | 26.79 | 400 | 4.48 | 34.00 | 26.96 | 114 | 0.69 |
| 298 | 5.06 | 33.95 | 26.86 | 500 | 4.07 | 34.09 | 27.08 | 104 | 0.80 |
| 346 | 4.77 | 33.97 | 26.91 | 600 | 3.90 | 34.20 | 27.18 | 95 | 0.90 |
| 496 | 4.08 | 34.09 | 27.07 | 700 | 3.72 | 34.27 | 27.26 | 88 | 0.99 |
| 595 | 3.91 | 34.19 | 27.17 | 800 | 3.54 | 34.32 | 27.31 | 83 | 1.08 |
| 794 | 3.55 | 34.32 | 27.31 | | | | | | |
| 993 | 3.18 | 34.41 | 27.42 | | | | | | |
| HMCS OSHAWA; April 25, 1958; 0212 GCT; 48°20'N, 135°25'W; sounding, 2117 fm; wind, 350°, 12 kt; weather, overcast; sea, moderate. | | | | | | | | | 2 |
| 0 | 8.50 | 32.50 | 25.26 | 0 | 8.50 | 32.50 | 25.26 | 272 | 0.00 |
| 10 | 8.40 | 32.49 | 25.27 | 10 | 8.40 | 32.49 | 25.27 | 272 | 0.03 |
| 20 | 8.36 | 32.49 | 25.27 | 20 | 8.36 | 32.49 | 25.27 | 271 | 0.06 |
| 30 | 8.31 | 32.49 | 25.28 | 30 | 8.31 | 32.49 | 25.28 | 271 | 0.08 |
| 50 | 7.80 | 32.49 | 25.35 | 50 | 7.80 | 32.49 | 25.35 | 264 | 0.14 |
| 75 | 7.81 | (32.61)b) | 25.45 | 75 | 7.81 | 32.61 | 25.45 | 255 | 0.20 |
| 100 | 6.71 | 32.88 | 25.81 | 100 | 6.71 | 32.88 | 25.81 | 221 | 0.26 |
| 125 | 6.12 | 33.18 | 26.12 | 150 | 6.02 | 33.49 | 26.38 | 167 | 0.36 |
| 150 | 6.02 | 33.49 | 26.38 | 200 | 5.82 | 33.84 | 26.68 | 140 | 0.44 |
| 175 | 6.10 | 33.76 | 26.58 | 250 | 5.48 | 33.92 | 26.79 | 130 | 0.50 |
| 199 | 5.83 | 33.84 | 26.68 | 300 | 5.07 | 33.94 | 26.85 | 124 | 0.57 |
| 249 | 5.49 | 33.92 | 26.79 | 400 | 4.54 | 34.02 | 26.98 | 113 | 0.69 |
| 299 | 5.08 | 33.94 | 26.85 | 500 | 4.25 | 34.14 | 27.09 | 102 | 0.80 |
| 347 | 4.79 | 33.97 | 26.91 | 600 | 4.02 | 34.20 | 27.17 | 96 | 0.90 |
| 500 | 4.25 | 34.14 | 27.09 | 700 | 3.77 | 34.27 | 27.25 | 89 | 0.99 |
| 600 | 4.02 | 34.20 | 27.17 | 800 | 3.50 | 34.33 | 27.33 | 82 | 1.08 |
| 800 | 3.50 | 34.33 | 27.33 | 1000 | 3.10 | 34.42 | 27.43 | 72 | 1.23 |
| 1000 | 3.10 | 34.42 | 27.43 | 1200 | 2.75 | 34.48 | 27.51 | 65 | 1.37 |
| 1159 | 2.82 | 34.47 | 27.50 | 1500 | 2.33 | 34.55 | 27.60 | 57 | 1.56 |
| 1500 | 2.33 | 34.55 | 27.60 | | | | | | |

a) Although not indicated in the tabulation, two casts were made at each station. The time reported is the time of the messenger release of the first cast.

b) Value interpolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 3 | HMCS OSHAWA; April 25, 1958; 0426 GCT; 48°20'N, 135°40'W; sounding, 2090 fm; wind, 350°, 15 kt; weather, cloudy; sea, moderate. | | | | | | | | |
| 0 | 8.20 | 32.49 | 25.30 | 0 | 8.20 | 32.49 | 25.30 | 268 | 0.00 |
| 10 | 8.37 | 32.48 | 25.27 | 10 | 8.37 | 32.48 | 25.27 | 271 | 0.03 |
| 20 | 8.16 | 32.50 | 25.31 | 20 | 8.16 | 32.50 | 25.31 | 267 | 0.05 |
| 30 | 8.16 | 32.50 | 25.31 | 30 | 8.16 | 32.50 | 25.31 | 268 | 0.08 |
| 50 | 7.94 | 32.54 | 25.37 | 50 | 7.94 | 32.54 | 25.37 | 262 | 0.13 |
| 75 | 7.69 | 32.55 | 25.42 | 75 | 7.69 | 32.55 | 25.42 | 258 | 0.20 |
| 100 | 6.67 | 32.88 | 25.82 | 100 | 6.67 | 32.88 | 25.82 | 220 | 0.26 |
| 125 | 6.20 | 33.38 | 26.27 | 150 | 6.16 | 33.59 | 26.44 | 161 | 0.36 |
| 150 | 6.16 | 33.59 | 26.44 | 200 | 5.86 | 33.81 | 26.65 | 142 | 0.43 |
| 175 | 6.20 | 33.72 | 26.54 | 250 | 5.41 | 33.90 | 26.77 | 131 | 0.50 |
| 200 | 5.86 | 33.81 | 26.65 | 300 | 4.99 | 33.94 | 26.85 | 124 | 0.57 |
| 250 | 5.41 | 33.90 | 26.77 | 400 | 4.19 | 33.99 | 26.98 | 112 | 0.68 |
| 300 | 4.99 | 33.94 | 26.85 | 500 | 3.99 | 34.11 | 27.10 | 101 | 0.79 |
| 347 | 4.54 | 33.95 | 26.92 | 600 | 3.86 | 34.19 | 27.18 | 95 | 0.89 |
| 500 | 3.99 | 34.11 | 27.10 | 700 | 3.70 | 34.26 | 27.25 | 88 | 0.98 |
| 600 | 3.86 | 34.19 | 27.18 | 800 | 3.51 | 34.33 | 27.32 | 82 | 1.07 |
| 800 | 3.51 | 34.33 | 27.32 | 1000 | 3.18 | 34.41 | 27.42 | 74 | 1.23 |
| 1000 | 3.18 | 34.41 | 27.42 | 1200 | 2.76 | 34.48 | 27.51 | 66 | 1.37 |
| 1156 | 2.84 | 34.46 | 27.49 | 1500 | 2.34 | 34.55 | 27.60 | 57 | 1.56 |
| 1500 | 2.34 | 34.55 | 27.60 | | | | | | |
| 4 | HMCS OSHAWA; April 25, 1958; 0705 GCT; 48°20'N, 135°55'W; sounding, 2126 fm; wind, 350°, 8 kt; weather, overcast; sea, slight. | | | | | | | | |
| 0 | 8.00 | 32.56 | 25.38 | 0 | 8.00 | 32.56 | 25.38 | 260 | 0.00 |
| 10 | 8.03 | 32.53 | 25.35 | 10 | 8.03 | 32.53 | 25.35 | 263 | 0.03 |
| 20 | 8.02 | 32.53 | 25.35 | 20 | 8.02 | 32.53 | 25.35 | 263 | 0.05 |
| 29 | 7.98 | 32.53 | 25.36 | 30 | 7.97 | 32.53 | 25.36 | 263 | 0.08 |
| 50 | 7.69 | 32.53 | 25.41 | 50 | 7.69 | 32.53 | 25.41 | 259 | 0.13 |
| 69 | 7.50 | 32.58 | 25.47 | 75 | 7.36 | 32.64 | 25.54 | 247 | 0.20 |
| 99 | 6.45 | 33.08 | 26.00 | 100 | 6.43 | 33.10 | 26.02 | 201 | 0.25 |
| 124 | 6.10 | 33.43 | 26.32 | 150 | 6.12 | 33.70 | 26.53 | 153 | 0.34 |
| 148 | 6.12 | 33.68 | 26.52 | 200 | 6.01 | 33.90 | 26.70 | 138 | 0.41 |
| 173 | 6.17 | 33.83 | 26.63 | 250 | 5.58 | 33.94 | 26.79 | 130 | 0.48 |
| 197 | 6.03 | 33.89 | 26.69 | 300 | 5.09 | 33.97 | 26.87 | 122 | 0.54 |
| 246 | 5.62 | 33.94 | 26.78 | 400 | 4.54 | 34.01 | 26.96 | 114 | 0.66 |
| 295 | 5.13 | 33.97 | 26.87 | 500 | 4.16 | 34.11 | 27.09 | 103 | 0.77 |
| 352 | 4.78 | 33.98 | 26.91 | 600 | 3.76 | 34.18 | 27.18 | 95 | 0.87 |
| 488 | 4.21 | 34.10 | 27.07 | 700 | 3.55 | 34.25 | 27.26 | 88 | 0.97 |
| 584 | 3.81 | 34.17 | 27.16 | 800 | 3.48 | 34.32 | 27.32 | 83 | 1.05 |
| 776 | 3.52 | 34.31 | 27.30 | 1000 | 3.11 | 34.41 | 27.42 | 73 | 1.21 |
| 968 | 3.16 | 34.39 | 27.41 | 1200 | 2.82 | 34.47 | 27.50 | 66 | 1.35 |
| 1124 | 2.93 | 34.45 | 27.47 | | | | | | |
| 1456 | 2.44 | 34.53 | 27.58 | | | | | | |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

5

HMCS OSHAWA; April 25, 1958; 0847 GCT; 48°20'N, 136°11'W; sounding, missing; wind, 350°, 8 kt; weather, cloudy; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.80 | 32.55 | 25.40 | 0 | 7.80 | 32.55 | 25.40 | 258 | 0.00 |
| 10 | 7.91 | 32.55 | 25.39 | 10 | 7.91 | 32.55 | 25.39 | 260 | 0.03 |
| 20 | 7.89 | 32.55 | 25.39 | 20 | 7.89 | 32.55 | 25.39 | 260 | 0.05 |
| 30 | 7.89 | 32.55 | 25.39 | 30 | 7.89 | 32.55 | 25.39 | 260 | 0.08 |
| 50 | 7.83 | 32.55 | 25.40 | 50 | 7.83 | 32.55 | 25.40 | 259 | 0.13 |
| 75 | 7.59 | 32.56 | 25.44 | 75 | 7.59 | 32.56 | 25.44 | 256 | 0.20 |
| 100 | 6.46 | 32.96 | 25.91 | 100 | 6.46 | 32.96 | 25.91 | 212 | 0.25 |
| 124 | 6.06 | 33.39 | 26.29 | 150 | 6.21 | 33.65 | 26.48 | 158 | 0.35 |
| 149 | 6.21 | 33.64 | 26.48 | 200 | 6.12 | 33.89 | 26.68 | 140 | 0.42 |
| 174 | 6.18 | 33.83 | 26.63 | 250 | 5.54 | 33.96 | 26.81 | 128 | 0.49 |
| 199 | 6.13 | 33.89 | 26.68 | 300 | 5.26 | 33.97 | 26.85 | 124 | 0.55 |
| 249 | 5.55 | 33.95 | 26.80 | 400 | 4.80 | 34.04 | 26.96 | 115 | 0.67 |
| 299 | 5.27 | 33.97 | 26.85 | 500 | 4.29 | 34.12 | 27.08 | 104 | 0.78 |
| 351 | 5.04 | 34.00 | 26.90 | 600 | 4.05 | 34.19 | 27.16 | 97 | 0.88 |
| 487 | 4.33 | 34.11 | 27.07 | 700 | 3.82 | 34.25 | 27.23 | 90 | 0.98 |
| 585 | 4.09 | 34.18 | 27.15 | 800 | 3.58 | 34.31 | 27.30 | 85 | 1.07 |
| 780 | 3.63 | 34.30 | 27.29 | 1000 | 3.15 | 34.40 | 27.41 | 75 | 1.23 |
| 975 | 3.20 | 34.39 | 27.40 | 1200 | 2.83 | 34.47 | 27.50 | 67 | 1.37 |
| 1132 | 2.94 | 34.44 | 27.47 | | | | | | |
| 1474 | 2.42 | 34.53 | 27.59 | | | | | | |

6

HMCS OSHAWA; April 25, 1958; 1115 GCT; 48°20'N, 136°25'W; sounding, 1820 fm; wind, 350°, 8 kt; weather, overcast; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 32.57 | 25.46 | 0 | 7.50 | 32.57 | 25.46 | 253 | 0.00 |
| 9 | 7.95 | 32.56 | 25.39 | 10 | 7.97 | 32.56 | 25.39 | 260 | 0.03 |
| 19 | 7.95 | 32.56 | 25.39 | 20 | 7.95 | 32.56 | 25.39 | 260 | 0.05 |
| 28 | 7.92 | 32.56 | 25.39 | 30 | 7.91 | 32.56 | 25.40 | 259 | 0.08 |
| 47 | 7.89 | 32.56 | 25.40 | 50 | 7.87 | 32.56 | 25.40 | 259 | 0.13 |
| 71 | 7.69 | 32.56 | 25.43 | 75 | 7.62 | 32.58 | 25.45 | 255 | 0.20 |
| 95 | 7.07 | 32.67 | 25.60 | 100 | 6.90 | 32.73 | 25.67 | 234 | 0.26 |
| 118 | 6.20 | 33.07 | 26.02 | 150 | 6.22 | 33.64 | 26.47 | 159 | 0.36 |
| 142 | 6.18 | 33.53 | 26.39 | 200 | 6.19 | 33.90 | 26.68 | 139 | 0.43 |
| 166 | 6.36 | 33.78 | 26.56 | 250 | 5.79 | 33.94 | 26.77 | 132 | 0.50 |
| 189 | 6.26 | 33.87 | 26.65 | 300 | 5.45 | 33.97 | 26.83 | 126 | 0.56 |
| 236 | 5.90 | 33.93 | 26.74 | 400 | 5.03 | 34.01 | 26.91 | 119 | 0.69 |
| 284 | 5.52 | 33.97 | 26.82 | 500 | 4.51 | 34.10 | 27.04 | 108 | 0.80 |
| 316 | 5.41 | 33.97 | 26.83 | 600 | 4.18 | 34.17 | 27.13 | 100 | 0.91 |
| 465 | 4.64 | 34.07 | 27.00 | 700 | 3.87 | 34.24 | 27.22 | 92 | 1.00 |
| 558 | 4.32 | 34.14 | 27.09 | 800 | 3.58 | 34.29 | 27.29 | 86 | 1.09 |
| 742 | 3.75 | 34.26 | 27.25 | 1000 | 3.10 | 34.38 | 27.40 | 75 | 1.26 |
| 934 | 3.20 | 34.35 | 27.37 | 1200 | 2.87 | 34.47 | 27.50 | 67 | 1.40 |
| 1080 | 3.03 | 34.42 | 27.44 | | | | | | |
| 1425 | 2.50 | 34.52 | 27.57 | | | | | | |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 7 | HMCS OSHAWA; April 25, 1958; 1348 GCT; 48°20'N, 136°40'W; sounding, 2120 fm; wind, 330°, 10 kt; weather, overcast; sea, slight. | | | | | | | | |
| 0 | 7.90 | 32.56 | 25.40 | 0 | 7.90 | 32.56 | 25.40 | 259 | 0.00 |
| 10 | 7.94 | 32.54 | 25.38 | 10 | 7.94 | 32.54 | 25.38 | 261 | 0.03 |
| 20 | 7.93 | 32.54 | 25.38 | 20 | 7.93 | 32.54 | 25.38 | 261 | 0.05 |
| 30 | 7.93 | 32.54 | 25.38 | 30 | 7.93 | 32.54 | 25.38 | 261 | 0.08 |
| 50 | 7.93 | 32.55 | 25.38 | 50 | 7.93 | 32.55 | 25.38 | 261 | 0.13 |
| 75 | 7.68 | 32.55 | 25.42 | 75 | 7.68 | 32.55 | 25.42 | 258 | 0.20 |
| 100 | 7.28 | 32.64 | 25.55 | 100 | 7.28 | 32.64 | 25.55 | 246 | 0.26 |
| 125 | 6.12 | 33.13 | 26.09 | 150 | 6.18 | 33.56 | 26.41 | 164 | 0.36 |
| 150 | 6.18 | 33.56 | 26.41 | 200 | 6.20 | 33.89 | 26.67 | 141 | 0.44 |
| 175 | 6.37 | 33.79 | 26.57 | 250 | 5.78 | 33.94 | 26.76 | 132 | 0.51 |
| 200 | 6.20 | 33.89 | 26.67 | 300 | 5.44 | 33.97 | 26.83 | 126 | 0.57 |
| 250 | 5.78 | 33.94 | 26.76 | 400 | 4.81 | 34.04 | 26.96 | 115 | 0.70 |
| 300 | 5.44 | 33.97 | 26.83 | 500 | 4.45 | 34.11 | 27.05 | 107 | 0.81 |
| 339 | 5.16 | 34.00 | 26.88 | 600 | 4.16 | 34.18 | 27.14 | 99 | 0.91 |
| 497 | 4.46 | 34.11 | 27.05 | 700 | 3.85 | 34.24 | 27.22 | 92 | 1.01 |
| 596 | 4.17 | 34.17 | 27.13 | 800 | 3.52 | 34.28 | 27.29 | 86 | 1.10 |
| 795 | 3.53 | 34.28 | 27.28 | 1000 | 3.22 | 34.39 | 27.40 | 76 | 1.26 |
| 994 | 3.23 | 34.39 | 27.40 | 1200 | 2.83 | 34.47 | 27.50 | 67 | 1.41 |
| 1151 | 2.92 | 34.45 | 27.48 | | | | | | |
| 1492 | 2.37 | 34.54 | 27.59 | | | | | | |
| 8 | HMCS OSHAWA; April 25, 1958; 1605 GCT; 48°20'N, 136°55'W; sounding, missing; wind, 340°, 10 kt; weather, overcast; sea, slight. | | | | | | | | |
| 0 | 7.90 | 32.54 | 25.38 | 0 | 7.90 | 32.54 | 25.38 | 260 | 0.00 |
| 10 | 7.93 | 32.54 | 25.37 | 10 | 7.93 | 32.54 | 25.37 | 261 | 0.03 |
| 20 | 7.92 | 32.53 | 25.37 | 20 | 7.92 | 32.53 | 25.37 | 262 | 0.05 |
| 30 | 7.92 | 32.53 | 25.37 | 30 | 7.92 | 32.53 | 25.37 | 262 | 0.08 |
| 50 | 7.75 | 32.53 | 25.40 | 50 | 7.75 | 32.53 | 25.40 | 260 | 0.13 |
| 75 | 7.55 | 32.58 | 25.46 | 75 | 7.55 | 32.58 | 25.46 | 254 | 0.20 |
| 100 | 6.49 | 32.97 | 25.91 | 100 | 6.49 | 32.97 | 25.91 | 211 | 0.25 |
| 125 | 6.22 | 33.48 | 26.35 | 150 | 6.35 | 33.73 | 26.53 | 153 | 0.35 |
| 150 | 6.35 | 33.73 | 26.53 | 200 | 6.17 | 33.89 | 26.67 | 140 | 0.42 |
| 175 | 6.29 | 33.85 | 26.63 | 250 | 5.82 | 33.95 | 26.76 | 132 | 0.49 |
| 200 | 6.17 | 33.89 | 26.67 | 300 | 5.46 | 33.98 | 26.83 | 126 | 0.55 |
| 250 | 5.82 | 33.95 | 26.76 | 400 | 4.70 | 34.07 | 26.99 | 112 | 0.67 |
| 300 | 5.46 | 33.98 | 26.83 | 500 | 4.32 | 34.12 | 27.08 | 104 | 0.78 |
| 336 | 5.14 | 34.02 | 26.90 | 600 | 3.99 | 34.18 | 27.16 | 97 | 0.88 |
| 495 | 4.34 | 34.12 | 27.07 | 700 | 3.71 | 34.24 | 27.24 | 90 | 0.98 |
| 594 | 4.01 | 34.18 | 27.16 | 800 | 3.48 | 34.30 | 27.30 | 84 | 1.07 |
| 793 | 3.49 | 34.30 | 27.30 | 1000 | 3.22 | 34.41 | 27.41 | 75 | 1.23 |
| 992 | 3.23 | 34.40 | 27.41 | 1200 | 2.79 | 34.47 | 27.50 | 66 | 1.37 |
| 1148 | 2.89 | 34.45 | 27.48 | | | | | | |
| 1491 | 2.42 | 34.53 | 27.59 | | | | | | |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HMCS OSHAWA; April 25, 1958; 1835 GCT; 48°18'N, 137°07'W; sounding, 2128 fm; wind, 020°, 8 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 7.80 | 32.54 | 25.39 | 0 | 7.80 | 32.54 | 25.39 | 259 | 0.00 |
| 10 | 8.00 | 32.54 | 25.37 | 10 | 8.00 | 32.54 | 25.37 | 262 | 0.03 |
| 20 | 7.97 | 32.54 | 25.37 | 20 | 7.97 | 32.54 | 25.37 | 262 | 0.05 |
| 30 | 7.96 | 32.54 | 25.37 | 30 | 7.96 | 32.54 | 25.37 | 262 | 0.08 |
| 50 | 7.87 | 32.54 | 25.39 | 50 | 7.87 | 32.54 | 25.39 | 261 | 0.13 |
| 74 | 7.70 | 32.54 | 25.41 | 75 | 7.68 | 32.54 | 25.41 | 258 | 0.20 |
| 99 | 6.95 | 32.77 | 25.70 | 100 | 6.92 | 32.79 | 25.71 | 230 | 0.26 |
| 124 | 6.29 | 33.28 | 26.18 | 150 | 6.19 | 33.59 | 26.44 | 162 | 0.36 |
| 149 | 6.19 | 33.58 | 26.43 | 200 | 6.14 | 33.88 | 26.67 | 140 | 0.43 |
| 173 | 6.30 | 33.79 | 26.58 | 250 | 5.66 | 33.94 | 26.78 | 131 | 0.50 |
| 198 | 6.15 | 33.88 | 26.67 | 300 | 5.24 | 33.97 | 26.85 | 124 | 0.57 |
| 247 | 5.69 | 33.94 | 26.77 | 400 | 4.63 | 34.01 | 26.95 | 115 | 0.69 |
| 297 | 5.26 | 33.97 | 26.85 | 500 | 4.28 | 34.10 | 27.07 | 105 | 0.80 |
| 400 | 4.63 | 34.01 | 26.95 | 600 | 3.86 | 34.17 | 27.16 | 96 | 0.90 |
| 500 | 4.28 | 34.10 | 27.07 | 700 | 3.61 | 34.24 | 27.24 | 89 | 0.99 |
| 601 | 3.86 | 34.17 | 27.16 | 800 | 3.53 | 34.32 | 27.31 | 83 | 1.08 |
| 802 | 3.53 | 34.32 | 27.31 | 1000 | 3.17 | 34.41 | 27.42 | 74 | 1.24 |
| 1042 | 3.09 | 34.42 | 27.44 | 1200 | 2.81 | 34.48 | 27.51 | 66 | 1.38 |
| 1406 | 2.46 | 34.52 | 27.57 | 1500 | 2.34 | 34.54 | 27.60 | 58 | 1.57 |
| 1864 | 2.00 | 34.59 | 27.67 | 2000 | 1.92 | 34.61 | 27.69 | 50 | 1.84 |
| 2212 | 1.83 | 34.64 | 27.71 | | | | | | |
| HMCS OSHAWA; April 26, 1958; 1908 GCT; 48°18'N, 135°16'W; sounding, missing; wind, 020°, 8 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 8.40 | 32.51 | 25.28 | 0 | 8.40 | 32.51 | 25.28 | 270 | 0.00 |
| 10 | 8.33 | 32.50 | 25.28 | 10 | 8.33 | 32.50 | 25.28 | 270 | 0.03 |
| 20 | 8.30 | 32.49 | 25.28 | 20 | 8.30 | 32.49 | 25.28 | 270 | 0.05 |
| 30 | 8.27 | 32.49 | 25.29 | 30 | 8.27 | 32.49 | 25.29 | 270 | 0.08 |
| 50 | 8.20 | 32.49 | 25.30 | 50 | 8.20 | 32.49 | 25.30 | 269 | 0.14 |
| 75 | 8.05 | 32.50 | 25.33 | 75 | 8.05 | 32.50 | 25.33 | 267 | 0.20 |
| 100 | 6.59 | 32.98 | 25.90 | 100 | 6.59 | 32.98 | 25.90 | 212 | 0.26 |
| 125 | 6.15 | 33.33 | 26.24 | 150 | 6.15 | 33.61 | 26.46 | 160 | 0.36 |
| 150 | 6.15 | 33.61 | 26.46 | 200 | 5.91 | 33.88 | 26.70 | 138 | 0.43 |
| 175 | 6.10 | 33.77 | 26.59 | 250 | 5.42 | 33.92 | 26.79 | 129 | 0.50 |
| 200 | 5.91 | 33.88 | 26.70 | 300 | 5.00 | 33.96 | 26.87 | 122 | 0.56 |
| 250 | 5.42 | 33.92 | 26.79 | 400 | 4.38 | 34.02 | 26.99 | 111 | 0.68 |
| 300 | (5.00)a) | 33.96 | 26.87 | 500 | 4.02 | 34.10 | 27.09 | 102 | 0.79 |
| 377 | 4.50 | 34.01 | 26.97 | 600 | 3.91 | 34.19 | 27.18 | 95 | 0.89 |
| 473 | 4.09 | 34.08 | 27.06 | 700 | 3.79 | 34.27 | 27.25 | 89 | 0.98 |
| 568 | 3.95 | 34.17 | 27.15 | 800 | 3.66 | 34.33 | 27.31 | 84 | 1.07 |
| 761 | 3.73 | 34.30 | 27.28 | 1000 | 3.16 | 34.41 | 27.42 | 74 | 1.23 |
| 994 | 3.17 | 34.41 | 27.42 | 1200 | 2.77 | 34.47 | 27.51 | 66 | 1.37 |
| 1336 | 2.55 | 34.51 | 27.55 | 1500 | 2.33 | 34.54 | 27.60 | 58 | 1.56 |
| 1780 | 2.05 | 34.59 | 27.66 | 2000 | 1.91 | 34.62 | 27.70 | 49 | 1.83 |
| 2116 | 1.86 | 34.63 | 27.71 | | | | | | |

a) Value interpolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

1

HMCS OSHAWA; May 17, 1958; 0252 GCT;[a] 48°05'N, 126°24'W; wind, 330°, 15 kt; weather, partly cloudy; sea, rough.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (11.56)b) | (32.300)b) | (24.60) | 0 | 11.56 | 32.30 | 24.60 | 335 | 0.00 |
| 5 | 11.66 | 32.313 | 24.59 | 10 | 11.67 | 32.33 | 24.60 | 335 | 0.03 |
| 24 | 11.22 | 32.392 | 24.73 | 20 | 11.42 | 32.37 | 24.68 | 328 | 0.07 |
| 47 | 8.96 | 32.549 | 25.23 | 30 | 10.81 | 32.43 | 24.83 | 314 | 0.10 |
| 71 | 7.96 | 32.532 | 25.37 | 50 | 8.76 | 32.56 | 25.27 | 272 | 0.16 |
| 94 | 7.70 | 33.218 | 25.94 | 75 | 7.87 | 32.60 | 25.43 | 256 | 0.22 |
| 118 | 7.48 | 33.508 | 26.20 | 100 | 7.64 | 33.33 | 26.04 | 200 | 0.28 |
| 142 | 7.61 | 33.746 | 26.37 | 125 | 7.48 | 33.58 | 26.26 | 179 | 0.33 |
| 165 | 7.31 | 33.884 | 26.52 | 150 | 7.55 | 33.80 | 26.42 | 164 | 0.37 |
| 189 | 7.06 | 33.910 | 26.57 | 175 | 7.20 | 33.91 | 26.55 | 152 | 0.41 |
| 212 | 6.83 | 33.958 | 26.64 | 200 | 6.95 | 33.93 | 26.60 | 147 | 0.45 |
| 236 | 6.53 | 34.031 | 26.74 | 250 | 6.35 | 34.05 | 26.78 | 131 | 0.52 |
| 283 | 5.89 | 34.026 | 26.82 | | | | | | |

2

HMCS OSHAWA; May 17, 1958; 1424 GCT; 48°10'N, 126°32'W; wind, 030°, 5 kt; weather, partly cloudy; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (11.48)b) | (31.761)b) | (24.19) | 0 | 11.48 | 31.76 | 24.19 | 374 | 0.00 |
| 5 | 11.67 | 31.678 | 24.10 | 10 | 11.75 | 31.63 | 24.04 | 388 | 0.04 |
| 25 | 11.38 | 31.677 | 24.15 | 20 | 11.61 | 31.63 | 24.07 | 386 | 0.08 |
| 50 | 8.68 | 32.420 | 25.17 | 30 | 11.05 | 31.76 | 24.27 | 367 | 0.12 |
| 75 | 8.32 | 32.435 | 25.24 | 50 | 8.68 | 32.42 | 25.17 | 281 | 0.18 |
| 100 | 7.34 | 32.661 | 25.55 | 75 | 8.32 | 32.44 | 25.24 | 275 | 0.25 |
| 124 | 6.65 | 33.545 | 26.34 | 100 | 7.34 | 32.66 | 25.55 | 245 | 0.32 |
| 149 | 6.70 | 33.720 | 26.47 | 125 | 6.64 | 33.57 | 26.36 | 169 | 0.37 |
| 174 | 6.70 | 33.839 | 26.57 | 150 | 6.70 | 33.73 | 26.48 | 158 | 0.41 |
| 199 | 6.31 | 33.882 | 26.65 | 175 | 6.69 | 33.84 | 26.57 | 150 | 0.45 |
| 224 | 6.08 | 33.910 | 26.70 | 200 | 6.30 | 33.88 | 26.65 | 142 | 0.48 |
| 249 | 5.90 | 33.917 | 26.73 | 250 | 5.89 | 33.92 | 26.73 | 135 | 0.55 |
| 297 | 5.68 | 33.961 | 26.79 | 300 | 5.67 | 33.97 | 26.80 | 130 | 0.62 |
| 300 | (5.67)b) | (33.965)b) | (26.80) | | | | | | |

3

HMCS OSHAWA; May 18, 1958; 0225 GCT; 48°10'N, 126°32.5'W; wind, 010°, 5 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (13.56)b) | (31.745)b) | (23.79) | 0 | 13.56 | 31.75 | 23.79 | 412 | 0.00 |
| 5 | 12.84 | 31.681 | 23.88 | 10 | 12.18 | 31.64 | 23.97 | 395 | 0.04 |
| 25 | (10.51)c) | 31.677 | (24.30) | 20 | 11.01 | 31.64 | 24.18 | 375 | 0.08 |
| 50 | 8.79 | 32.240 | 25.01 | 30 | 10.06 | 31.74 | 24.42 | 352 | 0.12 |
| 75 | 8.40 | 32.435 | 25.23 | 50 | 8.79 | 32.24 | 25.01 | 296 | 0.18 |
| 100 | 7.86 | 32.478 | 25.34 | 75 | 8.40 | 32.44 | 25.23 | 276 | 0.25 |
| 125 | (7.27)c) | 33.162 | (25.96) | 100 | 7.86 | 32.48 | 25.34 | 266 | 0.32 |
| 150 | 6.62 | 33.422 | 26.25 | 125 | 7.27 | 33.16 | 25.96 | 207 | 0.38 |
| 175 | 6.75 | 33.627 | 26.39 | 150 | 6.62 | 33.42 | 26.25 | 180 | 0.43 |
| 200 | 6.65 | 33.708 | 26.47 | 175 | 6.75 | 33.63 | 26.39 | 167 | 0.47 |
| 225 | 6.53 | 33.812 | 26.57 | 200 | 6.65 | 33.71 | 26.47 | 160 | 0.51 |
| 250 | 6.30 | 33.880 | 26.65 | 250 | 6.30 | 33.88 | 26.65 | 143 | 0.59 |
| 300 | 5.90 | 33.921 | 26.73 | 300 | 5.90 | 33.92 | 26.73 | 136 | 0.66 |
| 400 | 5.29 | 34.182 | 27.02 | 400 | 5.29 | 34.18 | 27.02 | 110 | 0.78 |
| 500 | 4.69 | 34.120 | 27.03 | 500 | 4.69 | 34.12 | 27.03 | 108 | 0.90 |
| 601 | 4.31 | 34.202 | 27.14 | 600 | 4.31 | 34.20 | 27.14 | 99 | 1.00 |
| 803 | 3.85 | 34.308 | 27.27 | 700 | 4.03 | 34.26 | 27.22 | 92 | 1.10 |
| 1004 | 3.39 | 34.401 | 27.39 | 800 | 3.85 | 34.31 | 27.27 | 88 | 1.19 |
| | | | | 1000 | 3.40 | 34.40 | 27.39 | 77 | 1.35 |

a) Although not indicated in the tabulation, two casts were made at each station. The time reported is the time of the messenger release of the first cast.

b) Value extrapolated graphically by three-point parabolic method.

c) Value interpolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 4 | HMCS OSHAWA; May 18, 1958; 1425 GCT; 48°13'N, 126°35.5'W; wind, 090°, 5 kt; weather, cloudy; sea, slight. | | | | | | | | |
| 0 | (12.19)a) | (31.696)a) | (24.01) | 0 | 12.19 | 31.70 | 24.01 | 390 | 0.00 |
| 5 | 12.24 | 31.707 | 24.01 | 10 | 12.21 | 31.73 | 24.04 | 389 | 0.04 |
| 25 | 11.66 | 31.893 | 24.26 | 20 | 11.92 | 31.83 | 24.16 | 377 | 0.08 |
| 50 | 9.14 | 32.448 | 25.12 | 30 | 11.32 | 31.98 | 24.39 | 355 | 0.11 |
| 75 | 8.72 | 32.533 | 25.25 | 50 | 9.14 | 32.45 | 25.12 | 286 | 0.18 |
| 100 | 6.81 | 33.065 | 25.94 | 75 | 8.72 | 32.53 | 25.25 | 274 | 0.25 |
| 125 | 6.59 | 33.408 | 26.24 | 100 | 6.81 | 33.06 | 25.94 | 208 | 0.31 |
| 150 | 6.80 | 33.710 | 26.45 | 125 | 6.59 | 33.41 | 26.24 | 180 | 0.36 |
| 175 | 6.74 | 33.844 | 26.57 | 150 | 6.80 | 33.71 | 26.45 | 161 | 0.40 |
| 200 | 6.50 | 33.889 | 26.63 | 175 | 6.74 | 33.84 | 26.57 | 150 | 0.44 |
| 225 | 6.31 | 33.924 | 26.69 | 200 | 6.50 | 33.89 | 26.63 | 144 | 0.48 |
| 250 | 6.19 | 33.962 | 26.73 | 250 | 6.19 | 33.96 | 26.73 | 136 | 0.55 |
| 300 | 5.83 | (34.047)a) | (26.84) | 300 | 5.83 | 34.05 | 26.84 | 125 | 0.61 |
| 5 | HMCS OSHAWA; May 19, 1958; 0223 GCT; 48°14'N, 126°37.5'W; wind, 190°, 10 kt; weather, overcast; sea, slight. | | | | | | | | |
| 0 | (12.39)a) | (31.744)a) | (24.01) | 0 | 12.39 | 31.74 | 24.01 | 391 | 0.00 |
| 5 | 12.25 | 31.778 | 24.07 | 10 | 12.06 | 31.82 | 24.13 | 380 | 0.04 |
| 25 | 11.25 | 31.992 | 24.41 | 20 | 11.56 | 31.93 | 24.31 | 363 | 0.08 |
| 50 | 9.04 | 32.436 | 25.13 | 30 | 10.89 | 32.07 | 24.53 | 342 | 0.11 |
| 75 | 8.36 | 32.441 | 25.24 | 50 | 9.04 | 32.44 | 25.13 | 285 | 0.17 |
| 100 | 6.85 | 33.086 | 25.95 | 75 | 8.36 | 32.44 | 25.24 | 275 | 0.24 |
| 125 | 6.79 | 33.470 | 26.26 | 100 | 6.85 | 33.09 | 25.95 | 207 | 0.31 |
| 150 | 6.95 | 33.762 | 26.47 | 125 | 6.79 | 33.47 | 26.26 | 178 | 0.35 |
| 175 | 6.97 | 33.881 | 26.56 | 150 | 6.95 | 33.76 | 26.47 | 159 | 0.40 |
| 200 | 6.68 | 33.916 | 26.63 | 175 | 6.97 | 33.88 | 26.56 | 151 | 0.44 |
| 225 | 6.53 | 33.969 | 26.69 | 200 | 6.68 | 33.92 | 26.63 | 145 | 0.47 |
| 250 | 6.25 | 33.990 | 26.74 | 250 | 6.25 | 33.99 | 26.74 | 134 | 0.54 |
| 300 | 5.85 | 34.015 | 26.82 | 300 | 5.85 | 34.02 | 26.82 | 128 | 0.61 |
| 400 | 5.23 | 34.105 | 26.96 | 400 | 5.23 | 34.11 | 26.96 | 115 | 0.73 |
| 500 | 4.63 | 34.142 | 27.06 | 500 | 4.63 | 34.14 | 27.06 | 106 | 0.84 |
| 6 | HMCS OSHAWA; May 19, 1958; 1426 GCT; 48°12.5'N, 126°31.5'W; wind, 150°, 15 kt; weather, cloudy; sea, moderate. | | | | | | | | |
| 0 | (12.84)a) | (31.398)a) | (23.66) | 0 | 12.84 | 31.40 | 23.66 | 424 | 0.00 |
| 5 | 12.12 | 31.673 | 24.01 | 10 | 11.46 | 31.91 | 24.31 | 362 | 0.04 |
| 24 | 9.96 | 32.367 | 24.93 | 20 | 10.34 | 32.27 | 24.79 | 317 | 0.07 |
| 49 | 8.51 | 32.430 | 25.20 | 30 | 9.47 | 32.47 | 25.09 | 289 | 0.10 |
| 73 | 8.09 | 32.494 | 25.32 | 50 | 8.47 | 32.43 | 25.21 | 277 | 0.16 |
| 98 | 6.99 | 33.199 | 26.02 | 75 | 8.03 | 32.53 | 25.35 | 264 | 0.23 |
| 122 | 6.68 | 33.448 | 26.26 | 100 | 6.94 | 33.24 | 26.06 | 197 | 0.29 |
| 147 | 6.71 | 33.692 | 26.45 | 125 | 6.66 | 33.48 | 26.29 | 176 | 0.33 |
| 171 | 6.71 | 33.818 | 26.55 | 150 | 6.71 | 33.71 | 26.47 | 159 | 0.38 |
| 195 | 6.34 | 33.867 | 26.64 | 175 | 6.67 | 33.83 | 26.56 | 150 | 0.42 |
| 220 | 6.06 | 33.898 | 26.70 | 200 | 6.28 | 33.87 | 26.65 | 142 | 0.45 |
| 244 | 5.87 | (33.925)b) | (26.74) | 250 | 5.83 | 33.93 | 26.75 | 133 | 0.52 |
| 293 | 5.71 | 33.973 | 26.80 | 300 | 5.71 | 33.98 | 26.80 | 129 | 0.59 |
| 300 | (5.71)a) | (33.979)a) | (26.80) | | | | | | |

a) Value extrapolated graphically by three-point parabolic method.
b) Value interpolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

7

HMCS OSHAWA; May 20, 1958; 0225 GCT; 48°11'N, 126°33'W; wind, 150°, 10 kt; weather, cloudy; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (12.95)a) | (31.564)a) | (23.77) | 0 | 12.95 | 31.56 | 23.77 | 414 | 0.00 |
| 5 | 12.46 | 31.740 | 24.00 | 10 | 11.99 | 31.90 | 24.21 | 372 | 0.04 |
| 25 | 10.68 | 32.246 | 24.71 | 20 | 11.10 | 32.15 | 24.56 | 339 | 0.08 |
| 50 | 8.87 | 32.432 | 25.15 | 30 | 10.28 | 32.32 | 24.84 | 313 | 0.11 |
| 75 | 7.91 | 32.768 | 25.56 | 50 | 8.87 | 32.43 | 25.15 | 283 | 0.17 |
| 100 | 7.45 | 33.268 | 26.02 | 75 | 7.91 | 32.77 | 25.56 | 245 | 0.23 |
| 125 | 6.86 | 33.442 | 26.23 | 100 | 7.45 | 33.27 | 26.02 | 202 | 0.29 |
| 150 | 6.66 | 33.651 | 26.42 | 125 | 6.86 | 33.44 | 26.23 | 181 | 0.34 |
| 175 | 6.56 | 33.817 | 26.57 | 150 | 6.66 | 33.65 | 26.42 | 163 | 0.38 |
| 200 | 6.35 | 33.871 | 26.64 | 175 | 6.56 | 33.82 | 26.57 | 150 | 0.42 |
| 225 | 6.11 | 33.895 | 26.69 | 200 | 6.35 | 33.87 | 26.64 | 144 | 0.46 |
| 251 | 5.89 | 33.920 | 26.74 | 250 | 5.90 | 33.92 | 26.73 | 135 | 0.53 |
| 302 | 5.65 | 33.981 | 26.81 | 300 | 5.65 | 33.98 | 26.81 | 128 | 0.60 |
| 400 | 5.23 | 34.083 | 26.94 | 400 | 5.23 | 34.08 | 26.94 | 117 | 0.72 |
| 501 | 4.73 | 34.140 | 27.05 | 500 | 4.74 | 34.14 | 27.05 | 108 | 0.83 |
| 602 | 4.31 | 34.202 | 27.14 | 600 | 4.32 | 34.20 | 27.14 | 99 | 0.94 |
| 804 | 3.84 | 34.315 | 27.28 | 700 | 4.02 | 34.26 | 27.22 | 92 | 1.03 |
| 1007 | 3.39 | 34.405 | 27.40 | 800 | 3.84 | 34.31 | 27.28 | 87 | 1.12 |
| | | | | 1000 | 3.41 | 34.40 | 27.39 | 77 | 1.29 |

8

HMCS OSHAWA; May 20, 1958; 1425 GCT; 48°11.5'N, 126°32.5'W; wind, 320°, 5 kt; weather, cloudy; sea, missing.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (12.97)a) | (31.540)a) | (23.75) | 0 | 12.97 | 31.54 | 23.75 | 416 | 0.00 |
| 5 | 12.40 | 31.718 | 23.99 | 10 | 11.87 | 31.88 | 24.21 | 372 | 0.04 |
| 25 | 10.47 | 32.234 | 24.74 | 20 | 10.90 | 32.13 | 24.59 | 336 | 0.08 |
| 50 | 8.82 | 32.436 | 25.16 | 30 | 10.07 | 32.31 | 24.87 | 310 | 0.11 |
| 75 | 8.22 | 32.550 | 25.34 | 50 | 8.82 | 32.44 | 25.16 | 282 | 0.17 |
| 100 | 7.21 | 33.278 | 26.06 | 75 | 8.22 | 32.55 | 25.34 | 265 | 0.24 |
| 125 | 6.91 | 33.539 | 26.30 | 100 | 7.21 | 33.28 | 26.06 | 198 | 0.29 |
| 150 | 6.63 | 33.709 | 26.47 | 125 | 6.91 | 33.54 | 26.30 | 175 | 0.34 |
| 175 | 6.52 | 33.822 | 26.58 | 150 | 6.63 | 33.71 | 26.47 | 159 | 0.38 |
| 200 | 6.35 | 33.876 | 26.64 | 175 | 6.52 | 33.82 | 26.58 | 149 | 0.42 |
| 225 | 6.14 | 33.890 | 26.68 | 200 | 6.35 | 33.88 | 26.64 | 143 | 0.46 |
| 250 | 5.92 | 33.913 | 26.73 | 250 | 5.92 | 33.91 | 26.73 | 136 | 0.53 |
| 300 | 5.61 | 33.955 | 26.80 | 300 | 5.61 | 33.95 | 26.80 | 130 | 0.60 |

9

HMCS OSHAWA; May 21, 1958; 0225 GCT; 48°11'N, 126°32.5'W; wind, 340°, 20 kt; weather, partly cloudy; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (13.27)a) | (31.487)a) | (23.64) | 0 | 13.27 | 31.49 | 23.64 | 426 | 0.00 |
| 5 | 12.60 | 31.713 | 23.95 | 10 | 11.98 | 31.91 | 24.22 | 371 | 0.04 |
| 25 | 10.41 | 32.323 | 24.82 | 20 | 10.88 | 32.21 | 24.65 | 330 | 0.08 |
| 50 | 8.82 | 32.428 | 25.16 | 30 | 9.99 | 32.40 | 24.95 | 302 | 0.11 |
| 74 | 8.06 | 32.563 | 25.38 | 50 | 8.82 | 32.43 | 25.16 | 283 | 0.17 |
| 99 | 7.07 | 33.226 | 26.03 | 75 | 8.02 | 32.58 | 25.39 | 260 | 0.23 |
| 124 | 6.80 | 33.517 | 26.30 | 100 | 7.05 | 33.24 | 26.05 | 198 | 0.29 |
| 149 | 6.79 | 33.741 | 26.48 | 125 | 6.79 | 33.53 | 26.31 | 174 | 0.34 |
| 173 | 6.64 | 33.878 | 26.61 | 150 | 6.79 | 33.75 | 26.48 | 158 | 0.38 |
| 198 | 6.35 | 33.893 | 26.66 | 175 | 6.62 | 33.88 | 26.61 | 146 | 0.42 |
| 223 | 6.01 | 33.910 | 26.71 | 200 | 6.32 | 33.89 | 26.66 | 142 | 0.46 |
| 247 | 5.83 | 33.933 | 26.75 | 250 | 5.81 | 33.94 | 26.76 | 133 | 0.52 |
| 297 | 5.47 | 33.960 | 26.82 | 300 | 5.45 | 33.96 | 26.82 | 127 | 0.59 |
| 300 | (5.45)a) | (33.961)a) | (26.82) | | | | | | |

a) Value extrapolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 10 | HMCS OSHAWA; May 21, 1958; 1431 GCT; 48°10.5'N, 126°32'W; wind, 310°, 20 kt; weather, partly cloudy; sea, moderate. | | | | | | | | |
| 0 | (12.71)a) | (31.440)a) | (23.72) | 0 | 12.71 | 31.44 | 23.72 | 419 | 0.00 |
| 5 | 12.50 | 31.642 | 23.91 | 10 | 12.26 | 31.82 | 24.10 | 383 | 0.04 |
| 25 | 11.33 | 32.228 | 24.58 | 20 | 11.67 | 32.12 | 24.43 | 351 | 0.08 |
| 50 | 9.12 | 32.458 | 25.13 | 30 | 10.95 | 32.32 | 24.72 | 324 | 0.11 |
| 75 | 8.33 | 32.495 | 25.28 | 50 | 9.12 | 32.46 | 25.13 | 285 | 0.17 |
| 100 | 6.89 | 33.140 | 25.99 | 75 | 8.33 | 32.50 | 25.28 | 271 | 0.24 |
| 125 | 6.92 | 33.518 | 26.28 | 100 | 6.89 | 33.14 | 25.99 | 204 | 0.30 |
| 150 | 6.68 | 33.744 | 26.49 | 125 | 6.92 | 33.52 | 26.28 | 176 | 0.35 |
| 175 | 6.49 | 33.826 | 26.58 | 150 | 6.68 | 33.74 | 26.49 | 157 | 0.39 |
| 200 | 6.40 | 33.904 | 26.66 | 175 | 6.49 | 33.83 | 26.58 | 148 | 0.43 |
| 225 | 6.01 | 33.902 | 26.71 | 200 | 6.40 | 33.90 | 26.66 | 142 | 0.47 |
| 250 | 5.86 | 33.922 | 26.74 | 250 | 5.86 | 33.92 | 26.74 | 134 | 0.54 |
| 300 | 5.53 | 33.954 | 26.81 | 300 | 5.53 | 33.95 | 26.81 | 129 | 0.60 |
| 11 | HMCS OSHAWA; May 22, 1958; 0242 GCT; 48°10'N, 126°31.5'W; wind, 330°, 20 kt; weather, partly cloudy; sea, moderate. | | | | | | | | |
| 0 | (12.94)a) | (31.420)a) | (23.66) | 0 | 12.94 | 31.42 | 23.66 | 425 | 0.00 |
| 5 | 12.71 | 31.632 | 23.87 | 10 | 12.44 | 31.82 | 24.06 | 386 | 0.04 |
| 25 | 11.46 | 32.246 | 24.57 | 20 | 11.82 | 32.13 | 24.42 | 353 | 0.08 |
| 50 | 9.20 | 32.491 | 25.15 | 30 | 11.07 | 32.34 | 24.72 | 324 | 0.11 |
| 75 | 8.08 | 32.611 | 25.41 | 50 | 9.20 | 32.49 | 25.15 | 284 | 0.17 |
| 100 | 6.86 | 33.218 | 26.06 | 75 | 8.08 | 32.61 | 25.41 | 259 | 0.24 |
| 125 | 6.89 | 33.538 | 26.30 | 100 | 6.86 | 33.22 | 26.06 | 198 | 0.30 |
| 150 | 6.87 | 33.754 | 26.48 | 125 | 6.89 | 33.54 | 26.30 | 174 | 0.34 |
| 175 | 6.66 | 33.871 | 26.60 | 150 | 6.87 | 33.75 | 26.48 | 158 | 0.39 |
| 200 | 6.40 | 33.908 | 26.66 | 175 | 6.66 | 33.87 | 26.60 | 147 | 0.43 |
| 225 | 6.22 | 33.924 | 26.70 | 200 | 6.40 | 33.91 | 26.66 | 142 | 0.46 |
| 250 | 5.86 | 33.927 | 26.74 | 250 | 5.86 | 33.93 | 26.74 | 134 | 0.53 |
| 300 | 5.46 | 33.966 | 26.82 | 300 | 5.46 | 33.97 | 26.82 | 127 | 0.60 |
| 390 | 5.14 | 34.075 | 26.95 | 400 | 5.10 | 34.08 | 26.96 | 115 | 0.72 |
| 489 | 4.74 | 34.131 | 27.04 | 500 | 4.70 | 34.14 | 27.05 | 107 | 0.83 |
| 589 | 4.37 | 34.187 | 27.12 | 600 | 4.33 | 34.19 | 27.13 | 100 | 0.94 |
| 688 | 4.09 | 34.246 | 27.20 | 700 | 4.06 | 34.25 | 27.21 | 93 | 1.03 |
| 887 | 3.63 | 34.357 | 27.33 | 800 | 3.81 | 34.31 | 27.28 | 87 | 1.12 |
| 900 | (3.60)a) | (34.364)a) | (27.34) | | | | | | |
| 12 | HMCS OSHAWA; May 22, 1958; 1426 GCT; 48°09'N, 126°30.5'W; wind, 330°, 5 kt; weather, partly cloudy; sea, slight. | | | | | | | | |
| 0 | (12.66)a) | (31.460)a) | (23.74) | 0 | 12.66 | 31.46 | 23.74 | 416 | 0.00 |
| 5 | 12.55 | 31.648 | 23.91 | 10 | 12.39 | 31.82 | 24.07 | 385 | 0.04 |
| 25 | 11.57 | 32.208 | 24.52 | 20 | 11.90 | 32.10 | 24.38 | 356 | 0.08 |
| 50 | 9.13 | 32.473 | 25.14 | 30 | 11.19 | 32.30 | 24.66 | 329 | 0.11 |
| 75 | 8.30 | 32.589 | 25.36 | 50 | 9.13 | 32.47 | 25.14 | 284 | 0.17 |
| 100 | 6.75 | 33.292 | 26.13 | 75 | 8.30 | 32.59 | 25.36 | 264 | 0.24 |
| 125 | 6.89 | 33.565 | 26.33 | 100 | 6.75 | 33.29 | 26.13 | 191 | 0.30 |
| 150 | 7.04 | 33.803 | 26.49 | 125 | 6.89 | 33.56 | 26.33 | 172 | 0.34 |
| 175 | 6.74 | 33.854 | 26.57 | 150 | 7.04 | 33.80 | 26.49 | 157 | 0.39 |
| 200 | 6.57 | 33.896 | 26.63 | 175 | 6.74 | 33.85 | 26.57 | 150 | 0.42 |
| 225 | 6.36 | 33.926 | 26.68 | 200 | 6.57 | 33.90 | 26.63 | 145 | 0.46 |
| 250 | 6.12 | 33.931 | 26.72 | 250 | 6.12 | 33.93 | 26.72 | 137 | 0.53 |
| 300 | 5.65 | 33.962 | 26.80 | 300 | 5.65 | 33.96 | 26.80 | 130 | 0.60 |

a) Value extrapolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

13

HMCS OSHAWA; May 23, 1958; 0220 GCT; 48°10.5'N, 126°33'W; wind, 320°, 12 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (14.41)a) | (31.435)a) | (23.38) | 0 | 14.41 | 31.44 | 23.38 | 452 | 0.00 |
| 5 | 13.56 | 31.656 | 23.72 | 10 | 12.78 | 31.85 | 24.02 | 390 | 0.04 |
| 25 | 10.84 | 32.276 | 24.71 | 20 | 11.42 | 32.16 | 24.51 | 343 | 0.08 |
| 50 | 8.95 | 32.460 | 25.16 | 30 | 10.33 | 32.37 | 24.86 | 310 | 0.11 |
| 75 | 7.95 | 32.605 | 25.42 | 50 | 8.95 | 32.46 | 25.16 | 282 | 0.17 |
| 100 | 6.88 | 33.148 | 26.00 | 75 | 7.95 | 32.61 | 25.42 | 257 | 0.24 |
| 125 | 6.83 | 33.389 | 26.20 | 100 | 6.88 | 33.15 | 26.00 | 203 | 0.30 |
| 150 | 6.86 | 33.781 | 26.50 | 125 | 6.83 | 33.39 | 26.20 | 185 | 0.35 |
| 175 | 6.69 | 33.850 | 26.58 | 150 | 6.86 | 33.78 | 26.50 | 156 | 0.39 |
| 200 | 6.25 | 33.884 | 26.66 | 175 | 6.69 | 33.85 | 26.58 | 149 | 0.43 |
| 225 | 6.03 | 33.895 | 26.70 | 200 | 6.25 | 33.88 | 26.66 | 142 | 0.46 |
| 250 | 5.83 | 33.925 | 26.75 | 250 | 5.83 | 33.92 | 26.75 | 134 | 0.53 |
| 300 | 5.44 | 33.962 | 26.82 | 300 | 5.44 | 33.96 | 26.82 | 127 | 0.60 |
| 335 | 5.34 | 34.015 | 26.88 | | | | | | |

14

HMCS OSHAWA; May 23, 1958; 1423 GCT; 48°11'N, 126°32.5'W; wind, 140°, 5 kt; weather, overcast; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (13.16)a) | (31.481)a) | (23.66) | 0 | 13.16 | 31.48 | 23.66 | 424 | 0.00 |
| 5 | 12.94 | 31.648 | 23.83 | 10 | 12.68 | 31.80 | 24.00 | 392 | 0.04 |
| 25 | 11.65 | 32.167 | 24.48 | 20 | 12.03 | 32.06 | 24.32 | 361 | 0.08 |
| 50 | 9.16 | 32.478 | 25.14 | 30 | 11.23 | 32.26 | 24.62 | 333 | 0.11 |
| 75 | 8.00 | 32.606 | 25.42 | 50 | 9.16 | 32.48 | 25.14 | 284 | 0.18 |
| 100 | 7.00 | 33.177 | 26.01 | 75 | 8.00 | 32.61 | 25.42 | 258 | 0.24 |
| 125 | 6.87 | 33.527 | 26.30 | 100 | 7.00 | 33.18 | 26.01 | 202 | 0.30 |
| 150 | 6.88 | 33.592 | 26.35 | 125 | 6.87 | 33.53 | 26.30 | 175 | 0.35 |
| 175 | 6.56 | 33.833 | 26.58 | 150 | 6.88 | 33.59 | 26.35 | 171 | 0.39 |
| 200 | 6.17 | 33.882 | 26.67 | 175 | 6.56 | 33.83 | 26.58 | 149 | 0.43 |
| 225 | 5.95 | 33.914 | 26.72 | 200 | 6.17 | 33.88 | 26.67 | 141 | 0.47 |
| 250 | 5.74 | 33.919 | 26.75 | 250 | 5.74 | 33.92 | 26.75 | 133 | 0.54 |
| 300 | 5.40 | 33.963 | 26.83 | 300 | 5.40 | 33.96 | 26.83 | 126 | 0.60 |
| 350 | 5.27 | 34.004 | 26.88 | | | | | | |

15

HMCS OSHAWA; May 24, 1958; 0218 GCT; 48°11'N, 126°32'W; wind, 170°, 5 kt; weather, cloudy; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (14.36)a) | (31.606)a) | (23.52) | 0 | 14.36 | 31.61 | 23.52 | 438 | 0.00 |
| 5 | 13.29 | 31.837 | 23.91 | 10 | 12.33 | 32.03 | 24.25 | 368 | 0.04 |
| 25 | 10.15 | 32.428 | 24.94 | 20 | 10.76 | 32.33 | 24.76 | 320 | 0.08 |
| 49 | 8.82 | 32.437 | 25.16 | 30 | 9.65 | 32.49 | 25.08 | 290 | 0.11 |
| 74 | 7.74 | 32.726 | 25.55 | 50 | 8.77 | 32.44 | 25.18 | 281 | 0.16 |
| 98 | 7.00 | 33.327 | 26.12 | 75 | 7.70 | 32.74 | 25.57 | 244 | 0.23 |
| 123 | 6.85 | 33.572 | 26.34 | 100 | 6.96 | 33.36 | 26.16 | 188 | 0.28 |
| 147 | 6.86 | 33.749 | 26.47 | 125 | 6.85 | 33.59 | 26.35 | 170 | 0.33 |
| 172 | 6.58 | 33.830 | 26.58 | 150 | 6.84 | 33.76 | 26.49 | 157 | 0.37 |
| 197 | 6.31 | 33.888 | 26.66 | 175 | 6.55 | 33.84 | 26.59 | 148 | 0.41 |
| 221 | 6.00 | 33.898 | 26.70 | 200 | 6.27 | 33.89 | 26.66 | 141 | 0.44 |
| 246 | 5.83 | 33.938 | 26.76 | 250 | 5.80 | 33.94 | 26.76 | 132 | 0.51 |
| 295 | 5.53 | 33.969 | 26.82 | 300 | 5.51 | 33.97 | 26.82 | 127 | 0.58 |
| 393 | 5.31 | 34.059 | 26.92 | 400 | 5.28 | 34.06 | 26.92 | 119 | 0.70 |
| 494 | 4.82 | 34.035 | 26.95 | 500 | 4.79 | 34.04 | 26.96 | 116 | 0.82 |
| 595 | 4.40 | 34.128 | 27.07 | 600 | 4.38 | 34.13 | 27.08 | 105 | 0.93 |
| 797 | 3.88 | 34.310 | 27.27 | 700 | 4.08 | 34.22 | 27.18 | 96 | 1.03 |
| 1000 | 3.40 | 34.404 | 27.39 | 800 | 3.87 | 34.31 | 27.27 | 88 | 1.13 |
| | | | | 1000 | 3.40 | 34.40 | 27.39 | 77 | 1.29 |

a) Value extrapolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **16** | HMCS OSHAWA; May 24, 1958; 1419 GCT; 48°11.5'N, 126°31'W; wind, 320°, 8 kt; weather, light fog; sea, slight. | | | | | | | | |
| 0 | (13.61)a) | (31.667)a) | (23.72) | 0 | 13.61 | 31.67 | 23.72 | 419 | 0.00 |
| 5 | 13.01 | 31.853 | 23.98 | 10 | 12.44 | 32.02 | 24.21 | 372 | 0.04 |
| 25 | 10.95 | 32.363 | 24.75 | 20 | 11.41 | 32.27 | 24.60 | 335 | 0.08 |
| 49 | 9.21 | 32.478 | 25.13 | 30 | 10.52 | 32.43 | 24.88 | 308 | 0.11 |
| 74 | 8.55 | 32.564 | 25.30 | 50 | 9.16 | 32.48 | 25.15 | 284 | 0.17 |
| 98 | 7.21 | 33.139 | 25.95 | 75 | 8.51 | 32.58 | 25.32 | 267 | 0.24 |
| 123 | 6.85 | 33.542 | 26.31 | 100 | 7.14 | 33.18 | 25.99 | 204 | 0.30 |
| 147 | 6.86 | 33.775 | 26.50 | 125 | 6.84 | 33.57 | 26.33 | 172 | 0.34 |
| 172 | 6.73 | 33.862 | 26.58 | 150 | 6.85 | 33.79 | 26.51 | 155 | 0.38 |
| 196 | 6.47 | 33.898 | 26.64 | 175 | 6.70 | 33.87 | 26.59 | 148 | 0.42 |
| 221 | 6.33 | 33.911 | 26.67 | 200 | 6.44 | 33.90 | 26.65 | 143 | 0.46 |
| 244 | 5.87 | 33.946 | 26.76 | 250 | 5.79 | 33.95 | 26.77 | 131 | 0.53 |
| 295 | 5.61 | 33.964 | 26.80 | 300 | 5.58 | 33.97 | 26.81 | 128 | 0.59 |
| 344 | 5.36 | 34.025 | 26.88 | | | | | | |
| **17** | HMCS OSHAWA; May 25, 1958; 0224 GCT; 48°09'N, 126°28'W; wind, 310°, 10 kt; weather, cloudy; sea, moderate. | | | | | | | | |
| 0 | (13.72)a) | (31.472)a) | (23.55) | 0 | 13.72 | 31.47 | 23.55 | 435 | 0.00 |
| 5 | 13.12 | 31.674 | 23.82 | 10 | 12.56 | 31.85 | 24.07 | 386 | 0.04 |
| 25 | 11.08 | 32.267 | 24.66 | 20 | 11.54 | 32.15 | 24.49 | 346 | 0.08 |
| 50 | 9.30 | 32.524 | 25.16 | 30 | 10.66 | 32.36 | 24.80 | 316 | 0.11 |
| 75 | 8.18 | 32.666 | 25.44 | 50 | 9.30 | 32.52 | 25.16 | 283 | 0.17 |
| 100 | 7.18 | 33.346 | 26.11 | 75 | 8.18 | 32.67 | 25.44 | 256 | 0.24 |
| 125 | 7.30 | 33.676 | 26.36 | 100 | 7.18 | 33.35 | 26.11 | 192 | 0.30 |
| 150 | 7.43 | 33.840 | 26.47 | 125 | 7.30 | 33.68 | 26.36 | 170 | 0.34 |
| 175 | 7.22 | 33.903 | 26.55 | 150 | 7.43 | 33.84 | 26.47 | 160 | 0.38 |
| 200 | 6.90 | 33.917 | 26.60 | 175 | 7.22 | 33.90 | 26.55 | 152 | 0.42 |
| 225 | 6.50 | 33.934 | 26.67 | 200 | 6.90 | 33.92 | 26.60 | 148 | 0.46 |
| 249 | 6.15 | 33.935 | 26.71 | 250 | 6.14 | 33.94 | 26.72 | 137 | 0.53 |
| 300 | 5.74 | 33.971 | 26.79 | 300 | 5.74 | 33.97 | 26.79 | 130 | 0.60 |
| 350 | 5.37 | 34.016 | 26.87 | | | | | | |
| **18** | HMCS OSHAWA; May 25, 1958; 1424 GCT; 48°11'N, 126°31'W; wind, 130°, 8 kt; weather, overcast; sea, slight. | | | | | | | | |
| 0 | (13.47)a) | (31.803)a) | (23.85) | 0 | 13.47 | 31.80 | 23.85 | 406 | 0.00 |
| 5 | 13.02 | 31.924 | 24.03 | 10 | 12.57 | 32.03 | 24.20 | 373 | 0.04 |
| 25 | 11.22 | 32.288 | 24.65 | 20 | 11.67 | 32.21 | 24.51 | 344 | 0.08 |
| 50 | 9.00 | 32.476 | 25.17 | 30 | 10.77 | 32.35 | 24.78 | 319 | 0.11 |
| 75 | 8.04 | 32.696 | 25.48 | 50 | 9.00 | 32.48 | 25.17 | 282 | 0.17 |
| 100 | 6.85 | 33.244 | 26.08 | 75 | 8.04 | 32.70 | 25.48 | 252 | 0.24 |
| 125 | 7.00 | (33.596)b) | (26.34) | 100 | 6.85 | 33.24 | 26.08 | 196 | 0.29 |
| 150 | 6.91 | 33.752 | 26.47 | 125 | 7.00 | 33.60 | 26.34 | 172 | 0.34 |
| 175 | 6.79 | 33.880 | 26.59 | 150 | 6.91 | 33.75 | 26.47 | 159 | 0.38 |
| 200 | 6.29 | 33.894 | 26.66 | 175 | 6.79 | 33.88 | 26.59 | 148 | 0.42 |
| 225 | 6.25 | 33.926 | 26.69 | 200 | 6.29 | 33.89 | 26.66 | 141 | 0.46 |
| 250 | 5.97 | 33.963 | 26.76 | 250 | 5.97 | 33.96 | 26.76 | 133 | 0.52 |
| 300 | 5.70 | 34.009 | 26.83 | 300 | 5.70 | 34.01 | 26.83 | 127 | 0.59 |
| 356 | 5.38 | 34.030 | 26.88 | | | | | | |

a) Value extrapolated graphically by three-point parabolic method.
b) Value interpolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

19

HMCS OSHAWA; May 26, 1958; 0220 GCT; 48°11.5'N, 126°34.5'W; wind, 330°, 8 kt; weather, overcast; sea, moderate.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (14.16)a) | (31.805)a) | (23.71) | 0 | 14.16 | 31.80 | 23.71 | 420 | 0.00 |
| 5 | 13.52 | 31.909 | 23.92 | 10 | 12.91 | 32.00 | 24.12 | 381 | 0.04 |
| 25 | 11.22 | 32.237 | 24.61 | 20 | 11.76 | 32.17 | 24.46 | 349 | 0.08 |
| 50 | 8.92 | 32.446 | 25.15 | 30 | 10.71 | 32.30 | 24.75 | 322 | 0.11 |
| 75 | 7.93 | 32.736 | 25.53 | 50 | 8.92 | 32.45 | 25.15 | 283 | 0.17 |
| 100 | 6.89 | 33.245 | 26.07 | 75 | 7.93 | 32.74 | 25.53 | 247 | 0.24 |
| 125 | 6.93 | 33.501 | 26.27 | 100 | 6.89 | 33.25 | 26.07 | 196 | 0.29 |
| 150 | 6.92 | 33.722 | 26.45 | 125 | 6.93 | 33.50 | 26.27 | 178 | 0.34 |
| 175 | 6.98 | 33.883 | 26.56 | 150 | 6.92 | 33.72 | 26.45 | 162 | 0.38 |
| 200 | 6.58 | 33.881 | 26.62 | 175 | 6.98 | 33.88 | 26.56 | 151 | 0.42 |
| 225 | 6.37 | 33.968 | 26.71 | 200 | 6.58 | 33.88 | 26.62 | 146 | 0.46 |
| 242 | 6.26 | 33.960 | 26.72 | 250 | 6.20 | 33.96 | 26.73 | 136 | 0.53 |
| 290 | 5.89 | 33.988 | 26.79 | 300 | 5.82 | 33.99 | 26.80 | 129 | 0.60 |
| 386 | 5.27 | 34.054 | 26.92 | 400 | 5.20 | 34.07 | 26.93 | 118 | 0.72 |
| 483 | 4.84 | 34.144 | 27.04 | 500 | 4.77 | 34.16 | 27.05 | 107 | 0.84 |
| 580 | 4.42 | 34.196 | 27.12 | 600 | 4.35 | 34.21 | 27.14 | 99 | 0.94 |
| 676 | 4.15 | 34.275 | 27.22 | 700 | 4.09 | 34.29 | 27.24 | 91 | 1.04 |
| 870 | 3.66 | 34.354 | 27.33 | 800 | 3.83 | 34.34 | 27.30 | 85 | 1.12 |

20

HMCS OSHAWA; May 26, 1958; 1435 GCT; 48°11'N, 126°31'W; wind, 170°, 5 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (12.75)a) | (31.803)a) | (23.99) | 0 | 12.75 | 31.80 | 23.99 | 393 | 0.00 |
| 5 | 13.33 | 31.927 | 23.97 | 10 | 13.70 | 32.04 | 23.98 | 394 | 0.04 |
| 25 | 13.52 | 32.291 | 24.22 | 20 | 13.79 | 32.22 | 24.11 | 382 | 0.08 |
| 50 | 8.94 | 32.450 | 25.15 | 30 | 13.03 | 32.35 | 24.36 | 359 | 0.12 |
| 75 | 8.29 | 32.668 | 25.42 | 50 | 8.94 | 32.45 | 25.15 | 283 | 0.18 |
| 100 | 7.09 | 33.106 | 25.94 | 75 | 8.29 | 32.67 | 25.42 | 258 | 0.25 |
| 125 | 6.79 | 33.480 | 26.27 | 100 | 7.09 | 33.11 | 25.94 | 209 | 0.31 |
| 150 | 7.01 | 33.770 | 26.47 | 125 | 6.79 | 33.48 | 26.27 | 178 | 0.36 |
| 175 | 6.99 | 33.860 | 26.54 | 150 | 7.01 | 33.77 | 26.47 | 159 | 0.40 |
| 200 | 6.53 | 33.884 | 26.62 | 175 | 6.99 | 33.86 | 26.54 | 152 | 0.44 |
| 225 | 6.36 | 33.921 | 26.68 | 200 | 6.53 | 33.88 | 26.62 | 145 | 0.48 |
| 250 | 6.09 | 33.944 | 26.73 | 250 | 6.09 | 33.94 | 26.73 | 136 | 0.54 |
| 300 | 5.84 | 34.000 | 26.80 | 300 | 5.84 | 34.00 | 26.80 | 129 | 0.61 |
| 350 | 5.42 | 34.008 | 26.86 | | | | | | |

21

HMCS OSHAWA; May 27, 1958; 0212 GCT; 48°11.5'N, 126°31.5'W; wind, 250°, 8 kt; weather, overcast; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | (13.57)a) | (31.763)a) | (23.80) | 0 | 13.57 | 31.76 | 23.80 | 411 | 0.00 |
| 5 | 13.50 | 31.851 | 23.88 | 10 | 13.35 | 31.94 | 23.97 | 395 | 0.04 |
| 25 | 12.43 | 32.164 | 24.33 | 20 | 12.82 | 32.09 | 24.20 | 373 | 0.08 |
| 50 | 9.28 | 32.468 | 25.12 | 30 | 11.96 | 32.23 | 24.47 | 348 | 0.12 |
| 75 | 8.15 | 32.690 | 25.46 | 50 | 9.28 | 32.47 | 25.12 | 286 | 0.18 |
| 100 | 6.86 | 33.144 | 26.00 | 75 | 8.15 | 32.69 | 25.46 | 254 | 0.25 |
| 125 | 6.95 | 33.449 | 26.23 | 100 | 6.86 | 33.14 | 26.00 | 203 | 0.30 |
| 150 | 6.99 | (33.686)b) | (26.41) | 125 | 6.95 | 33.45 | 26.23 | 182 | 0.35 |
| 175 | 6.85 | 33.856 | 26.56 | 150 | 6.99 | 33.69 | 26.41 | 165 | 0.40 |
| 199 | 6.60 | 33.902 | 26.63 | 175 | 6.85 | 33.86 | 26.56 | 151 | 0.44 |
| 225 | 6.25 | 33.925 | 26.69 | 200 | 6.59 | 33.90 | 26.63 | 144 | 0.47 |
| 250 | 6.04 | 33.947 | 26.74 | 250 | 6.04 | 33.95 | 26.74 | 135 | 0.54 |
| 300 | 5.60 | 33.974 | 26.81 | 300 | 5.60 | 33.97 | 26.81 | 128 | 0.61 |
| 350 | 5.38 | 34.010 | 26.87 | | | | | | |

a) Value extrapolated graphically by three-point parabolic method.
b) Value interpolated graphically by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HMCS OSHAWA; May 27, 1958; 1415 GCT; 48°11'N, 126°33'W; wind, 210°, 5 kt; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | (13.92)a) | (31.475)a) | (23.51) | 0 | 13.92 | 31.47 | 23.51 | 439 | 0.00 |
| 5 | 13.55 | 31.662 | 23.72 | 10 | 13.16 | 31.83 | 23.93 | 399 | 0.04 |
| 25 | 11.83 | 32.210 | 24.48 | 20 | 12.30 | 32.10 | 24.31 | 363 | 0.08 |
| 50 | 9.14 | 32.443 | 25.12 | 30 | 11.34 | 32.30 | 24.63 | 332 | 0.12 |
| 75 | 8.01 | 32.695 | 25.49 | 50 | 9.14 | 32.44 | 25.12 | 286 | 0.18 |
| 100 | 6.81 | 33.250 | 26.09 | 75 | 8.01 | 32.69 | 25.49 | 252 | 0.24 |
| 125 | 6.94 | 33.473 | 26.25 | 100 | 6.81 | 33.25 | 26.09 | 194 | 0.30 |
| 150 | 7.19 | 33.736 | 26.42 | 125 | 6.94 | 33.47 | 26.25 | 180 | 0.35 |
| 175 | 7.01 | 33.850 | 26.53 | 150 | 7.19 | 33.74 | 26.42 | 164 | 0.39 |
| 200 | 6.64 | 33.880 | 26.61 | 175 | 7.01 | 33.85 | 26.53 | 154 | 0.43 |
| 225 | 6.21 | 33.890 | 26.67 | 200 | 6.64 | 33.88 | 26.61 | 147 | 0.47 |
| 250 | 6.04 | 33.937 | 26.73 | 250 | 6.04 | 33.94 | 26.73 | 136 | 0.54 |
| 300 | 5.62 | 33.959 | 26.80 | 300 | 5.62 | 33.96 | 26.80 | 129 | 0.61 |
| 350 | 5.41 | 34.014 | 26.87 | | | | | | |

a) Value extrapolated graphically by three-point parabolic method.

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |
| HMCS OSHAWA; June 23, 1958; 1750 GCT; 48°17.5'N, 123°25.5'W; sounding, 64 fm; wind, 250°, 10 kt; weather, cloudy; sea, smooth. | | | | | | | | | | |
| 0 | 11.3 | 30.024 | 22.88 | 5.64 | 7.89 | 8.02 | - | - | - | 33 |
| 10 | - | 30.119 | - | 5.32 | 7.87 | 8.01 | 2.11 | 2.06 | 0.124 | 34.5 |
| 15 | - | 30.593 | - | 4.88 | - | - | - | - | - | 35.5 |
| 20 | - | 30.796 | - | 4.57 | - | - | - | - | - | 37 |
| 25 | - | 30.946 | - | 4.42 | - | - | - | - | - | 37.5 |
| 30 | 10.28 | 31.057 | 23.86 | 4.50 | 7.84 | 7.98 | - | - | - | 37.5 |
| 50 | 9.30 | 31.754 | 24.55 | 3.96 | - | - | - | - | - | 40 |
| 75 | 8.42 | 32.476 | 25.26 | 3.66 | 7.73 | 7.88 | 2.21 | 2.17 | 0.120 | 48 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | | | | 13.6 | - | 4.0 | - | | - | |
| 10 | | | | 14.6 | 0.23 | 0.85 | - | | - | |
| 15 | | | | 14.6 | 0.34 | 1.1 | - | | - | |
| 20 | | | | 19.2 | 0.33 | 2.3 | - | | - | |
| 25 | | | | 15.7 | - | - | - | | - | |
| 30 | | | | 22 | 0.15 | 1.0 | 2.50 | | - | |
| 50 | | | | 25 | - | - | - | | 1.84 | |
| 75 | | | | 22.5 | - | - | 2.71 | | 2.12 | |

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| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |
| 2 | HMCS OSHAWA; June 24, 1958; 1622 GCT; 49°14.5'N, 123°48.5'W; sounding, 206 fm; wind, 160°, 3 kt; weather, intermittent moderate rain; sea, calm. | | | | | | | | | |
| 0 | 15.6 | 25.066 | 18.25 | 6.88 | - | - | - | - | - | 14.5 |
| 5 | 15.0 a) | 26.727 | 19.68 | 7.13 | 8.10 | 8.19 | 1.92 | 1.86 | 0.142 | 21.5 |
| 10 | 11.4 a) | 27.977 | 21.28 | 5.95 | 7.92 | 8.05 | - | - | - | 36 |
| 20 | 10.4 a) | 28.828 | 22.11 | 5.26 | - | - | - | - | - | 42 |
| 30 | 9.59 | 29.246 | 22.56 | 4.97 | 7.77 | 7.90 | - | - | - | 46 |
| 49 | 9.3 a) | 29.310 | 22.66 | 4.88 | - | - | - | - | - | 48.5 |
| 59 | 8.60 | 29.585 | 22.97 | 4.86 | - | - | - | - | - | 49 |
| 83 | 8.71 | 29.878 | 23.18 | 4.78 | - | - | - | - | - | 48.5 |
| 93 | 8.78 | 30.009 | 23.27 | 4.82 | - | - | - | - | - | 48 |
| 108 | 8.84 | 30.176 | 23.40 | 4.86 | - | - | - | - | - | - |
| 133 | 8.98 | 30.338 | 23.90 | 4.73 | - | - | - | - | - | 45 |
| 182 | - | 30.547 | - | 4.66 | 7.74 | 7.88 | 2.15 | 2.11 | 0.124 | 53 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | - | - | - | 2.5 | 0.13 | 5.7 | 1.73 | - | 0.92 | - |
| 5 | - | - | - | 4.2 | 0.21 | 2.65 | 1.62 | - | 0.98 | - |
| 10 | 0.22 | 0.06 | 0.28 | 12.3 | 0.39 | 1.5 | 2.45 | 0.17 | 1.54 | 0.74 |
| 20 | - | - | - | 18.2 | 0.08 | - | 2.55 | 0.09 | 2.01 | 0.45 |
| 30 | - | - | - | 26 | 0.02 | 4.2 | - | - | - | - |
| 49 | - | - | - | 20 | - | - | 3.59 | 0.33 | 2.38 | 0.88 |
| 59 | - | - | - | 23.5 | - | - | - | - | - | - |
| 83 | - | - | - | 18.8 | - | - | - | - | 2.45 | - |
| 93 | - | - | - | 20.5 | - | - | - | - | - | - |
| 108 | - | - | - | - | - | - | - | - | - | - |
| 133 | - | - | - | 23.5 | - | - | - | - | 2.20 | - |
| 182 | 0.11 | 0.09 | 0.20 | 20.5 | - | - | 2.93 | 0.06 | 2.52 | 0.35 |

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |
| 3 | HMCS OSHAWA; June 24, 1958; 2048 GCT; 49°38.5'N, 124°42.5'W; sounding, 69 fm; wind, light airs; weather, drizzle; sea, calm. | | | | | | | | | |
| 0 | 18.5 | 25.272 | 17.77 | 6.72 | | | | | | |
| 10 | 10.90 | 28.655 | 21.89 | 6.14 | | | | | | |
| 20 | 9.99 | 28.970 | 22.28 | 5.16 | | | | | | |
| 30 | 9.85 | 29.100 | 22.40 | 5.08 | | | | | | |
| 50 | 9.63 | 29.303 | 22.60 | 4.91 | | | | | | |
| 75 | 8.99 | 29.578 | 22.92 | 4.59 | | | | | | |
| 100 | 8.74 | 29.802 | 23.14 | 4.51 | | | | | | |

a) From bathythermograph observation.

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

HMCS OSHAWA; June 25, 1958; 1635 GCT; 50°30'N, 125°02'W; sounding, 343 fm; wind, light airs; weather, intermittent moderate rain; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.4 | 7.7 a) | 5.24 | 8.50 | 8.44 | 8.53 | 0.57 | 0.55 | 0.130 | 27 |
| 5 | 11.3 b) | 23.046 | 17.49 | 6.17 | - | - | - | - | - | 44 |
| 10 | 9.8 b) | 28.420 | 21.88 | 5.05 | 7.69 | 7.75 | 1.94 | 1.92 | 0.120 | 51.5 |
| 20 | 9.32 | 28.307 | 21.86 | 4.48 | - | - | - | - | - | 53.5 |
| 30 | 9.1 b) | 28.775 | 22.24 | 4.32 | - | - | - | - | - | 56 |
| 50 | 8.44 | 29.131 | 22.64 | 3.36 | - | - | - | - | - | 56.5 |
| 75 | 8.1 c) | 29.639 | 23.09 | 8.09d) | - | - | - | - | - | 60.5 |
| 100 | 8.44 | 30.065 | 23.36 | 4.37 | - | - | - | - | - | 60 |
| 125 | 8.44 | 30.165 | 23.45 | 4.13 | - | - | - | - | - | - |
| 150 | 8.48 | 30.287 | 23.54 | 3.99 | - | - | - | - | - | - |
| 200 | 8.38 | 30.432 | 23.66 | 3.85 | - | - | - | - | - | 68 |
| 300 | - | 30.532 | - | 5.50 | 7.55 | 7.69 | 2.14 | 2.12 | 0.124 | 71 |
| 400 | 8.11 | 30.565 | 23.80 | - | - | - | - | - | - | 74 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | - | - | - | <0.3 | <0.01 | 2.2 | 1.06 | 0.48 | 0.13 | 0.45 |
| 5 | 0.43 | 0.16 | 0.59 | 7.2 | 0.14 | 1.45 | 2.40 | 0.41 | 1.49 | 0.50 |
| 10 | - | - | - | 7.7 | 0.15 | 1.05 | - | - | 2.14 | - |
| 20 | - | - | - | 11.0 | 0.045 | - | - | - | 2.16 | - |
| 30 | - | - | - | 19.1 | 0.12 | 1.1 | - | - | 2.16 | - |
| 50 | - | - | - | 15.1 | - | - | - | - | 2.46 | - |
| 75 | 0.18 | 0.025 | 0.18 | 21.5 | - | - | 3.20 | 0.05 | 2.35 | 0.80 |
| 100 | - | - | - | 21.5 | - | - | - | - | - | - |
| 125 | - | - | - | - | - | - | - | - | - | - |
| 150 | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | 25 | - | - | - | - | - | - |
| 300 | - | - | - | 13.3 | - | - | 3.76 | 0.03 | 2.97 | 0.76 |
| 400 | - | - | - | - | - | - | - | - | - | - |

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

HMCS OSHAWA; June 25, 1958; 2345 GCT; 50°29.5'N, 126°18'W; sounding, 189 fm; wind, 280°, 8 kt; weather, overcast; sea, calm.

| | | | | |
|---|---|---|---|---|
| 0 | 13.8 | 30.165 | 23.52 | 7.21 |
| 10 | 10.15 | 30.409 | 23.37 | 6.20 |
| 20 | 9.93 | 30.549 | 23.52 | 5.70 |
| 30 | 9.72 | 30.755 | 23.72 | 5.53 |
| 50 | 9.74 | 30.831 | 23.77 | 5.48 |
| 75 | 9.51 | 31.009 | 23.94 | 5.38 |
| 100 | 9.34 | 31.242 | 24.16 | 5.25 |
| 150 | 9.33 | 31.366 | 24.25 | 5.17 |
| 200 | 9.23 | 31.455 | 24.34 | 5.13 |
| 250 | 9.23 | 31.508 | 24.38 | 5.08 |



a) From bathythermograph observation.
b) Station 4 is located in Bute Inlet where a layer of fresh water exists at the surface in summer (Tabata and Pickard, 1957).
c) This minimum was obtained by BT observation (and 7.8°C obtained at 72 m).
d) Value accepted; obtained from two determinations.

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| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

6 HMCS OSHAWA; June 26, 1958; 1643 GCT; 50°59'N, 127°49.5'W; sounding, 74 fm; wind, 290°, 20 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.6 | 31.493 | 24.14 | 6.82 | 8.02 | 8.15 | 2.17 | 2.10 | 0.121 | 11.7 |
| 5 | 10.4 a) | 31.483 | 24.17 | 7.08 | 8.00 | 8.13 | - | - | - | 11.9 |
| 10 | 10.1 a) | 31.599 | 24.30 | 6.41 | 7.96 | 8.09 | - | - | - | 15 |
| 20 | 9.7 a) | 32.021 | 24.70 | 5.84 | - | - | - | - | - | 20 |
| 30 | 9.3 a) | 32.257 | 24.94 | 5.40 | - | - | - | - | - | 24.5 |
| 50 | 9.04 | 32.366 | 25.07 | 5.11 | - | - | - | - | - | 26.5 |
| 75 | 8.57 | 32.512 | 25.26 | 5.11 | - | - | - | - | - | 26.5 |
| 100 | 7.8 a) | 33.012 | 25.76 | 4.19 | 7.76 | 7.90 | 2.25 | 2.21 | 0.121 | 36.5 |
| 125 | 6.79 | 33.626 | 26.39 | 2.93 | - | - | - | - | - | - |

| OBSERVED | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | - | | | 6.0 | 0.23 | 2.55 | 1.94 | 0.60 | 0.97 | 0.37 |
| 5 | 0.15 | | | 6.0 | 0.22 | - | 1.67 | 0.45 | 0.93 | 0.29 |
| 10 | - | | | 6.2 | 0.23 | 1.15 | - | - | 1.08 | - |
| 20 | - | | | 8.1 | 0.23 | - | - | - | - | - |
| 30 | - | | | - | - | 0.6 | 2.34 | 0.29 | 1.26 | 0.79 |
| 50 | - | | | - | 0.18 | - | - | - | - | - |
| 75 | - | | | - | - | - | - | - | - | - |
| 100 | 0.05 | | | 15.6 | - | 0.6 | 2.58 | 0.16 | 1.93 | 0.49 |
| 125 | - | | | - | - | - | - | - | 2.29 | - |

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

7 HMCS OSHAWA; June 27, 1958; 0010 GCT; 51°10'N, 129°31'W; sounding, 230 fm; wind, 290°, 23 kt; weather, missing; sea, slight.

| | | | | |
|---|---|---|---|---|
| 0 | 14.9 | 31.556 | 23.36 | 6.53 |
| 10 | 14.40 | 31.517 | 23.44 | 6.60 |
| 20 | 14.2 a) | 31.523 | 23.49 | 6.55 |
| 30 | 13.97 | 31.529 | 23.54 | 6.59 |
| 49 | 9.58 | 32.332 | 24.96 | 5.97 |
| 74 | 8.24 | 32.746 | 25.50 | 5.20 |
| 98 | 7.79 | 33.269 | 25.97 | 3.95 |
| 172 | 5.95 | 33.886 | 26.70 | 2.31 |
| 197 | 5.89 | 33.927 | 26.74 | 2.14 |
| 246 | 5.80 | 33.881 | 26.72 | 1.93 |
| 296 | 5.50 | 33.991 | 26.84 | 1.44 |

a) From bathythermograph observation.

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

8

HMCS OSHAWA; June 27, 1958; 0343 GCT; 51°30.5'N, 130°18'W; sounding, 180 fm; wind, 310°, 20 kt; weather, partly cloudy; sea, moderate.

| | | | |
|---|---|---|---|
| 0 | 14.1 | 31.681 | 23.62 |
| 10 | 14.33 | 31.611 | 23.52 |
| 20 | 13.60 | 31.635 | 23.70 |
| 30 | 9.43 | 31.837 | 24.60 |
| 50 | 8.59 | 32.299 | 25.09 |
| 75 | 7.70 | 32.966 | 25.74 |
| 100 | 6.86 | 33.371 | 26.18 |
| 125 | 6.67 | 33.677 | 26.44 |
| 150 | 6.52 | 33.829 | 26.58 |
| 200 | 6.05 | 33.916 | 26.72 |
| 250 | 5.76 | 33.940 | 26.76 |

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

9

HMCS OSHAWA; June 27, 1958; 1530 GCT; 52°11'N, 130°05'W; sounding, 98 fm; wind, 290°, 15 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.2 | 31.541 | 23.71 | 6.42 | 8.12 | 8.22 | 2.18 | 2.11 | 0.122 | 7.1 |
| 5 | 13.6 a) | 31.546 | 23.62 | 6.48 | 8.13 | 8.23 | – | – | – | 7.2 |
| 10 | 13.6 a) | 31.525 | 23.61 | 6.60 | – | – | – | – | – | 7.2 |
| 20 | 12.5 a) | 31.519 | 23.82 | 6.53 | – | – | – | – | – | 7.6 |
| 30 | 10.8 a) | 31.543 | 24.16 | 6.65 | 8.11 | 8.23 | – | – | – | 7.6 |
| 50 | 9.88 | 31.910 | 24.59 | 6.07 | – | – | – | – | – | 11.0 |
| 75 | 8.87 | 32.302 | 25.06 | 5.76 | – | – | – | – | – | 11.1 |
| 100 | 8.32 | 32.641 | 25.40 | 5.24 | – | – | – | – | – | 22.5 |
| 125 | 7.88 | 32.894 | 25.67 | 4.70 | – | – | – | – | – | 28.7 |
| 150 | 7.5 a) | 33.179 | 25.94 | 4.14 | 7.80 | 7.95 | 2.26(5) | 2.22 | 0.120 | 36.5 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | – | – | – | 0.5 | – | 4.35 | 1.10 | 0.21 | 0.40 | 0.49 |
| 5 | 0.05 | 0.16 | 0.21 | <0.3 | 0.13 | <0.2 | 1.03 | 0.18 | 0.50 | 0.35 |
| 10 | – | – | – | <0.3 | 0.14 | – | 1.09 | 0.17 | 0.52 | 0.40 |
| 20 | 0.11 | 0.17 | 0.28 | <0.3 | 0.13 | – | – | – | – | – |
| 30 | – | – | – | 0.9 | 0.35 | 0.25 | 1.08 | 0.18 | 0.66 | 0.24 |
| 50 | – | – | – | 5.8 | 0.13 | – | – | – | – | – |
| 75 | – | – | – | – | – | – | – | – | 1.04 | – |
| 100 | – | – | – | 13.9 | – | – | – | – | – | – |
| 125 | – | – | – | – | – | – | – | – | – | – |
| 150 | – | – | – | 13.5 | – | – | – | – | 1.81 | – |

a) From bathythermograph observation.

POG

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| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

10

HMCS OSHAWA; June 27, 1958; 2032 GCT; 52°50'N, 130°48.5'W; sounding, 40 fm; wind, 330°, 15 kt; weather, cloudy; sea, slight.

| | | | | |
|---|---|---|---|---|
| 0 | 13.6 | 30.929 | 23.16 | 6.38 |
| 10 | 13.19 | 30.900 | 23.22 | 6.60 |
| 20 | 12.91 | 30.953 | 23.30 | 6.62 |
| 30 | 12.71 | 31.042 | 23.41 | 6.61 |
| 50 | 12.50 | 31.683 | 23.94 | 6.38 |

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |

11

HMCS OSHAWA; June 28, 1958; 1712 GCT; 53°03'N, 131°08.5'W; sounding, 18 fm; wind, 260°, 5 kt; weather, cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.0 | 30.213 | 22.52 | 6.52 | 8.17 | 8.25 | 2.05 | 1.97 | 0.119 | <0.1 |
| 2 | 13.52 | 30.125 | 22.54 | 6.48 | 8.19 | 8.27 | - | - | - | 0.2 |
| 5 | 14.1 a) | 30.125 | 22.44 | 6.48 | - | - | - | - | - | 0.2 |
| 10 | 14.1 a) | 30.148 | 22.45 | 6.48 | - | - | - | - | - | 0.3 |
| 15 | 14.6 b) | 30.539 | 22.64 | 6.36 | - | - | - | - | - | 0.5 |
| 20 | 14.4 a) | 31.053 | 22.70 | 6.28 | - | - | - | - | - | 1.8 |
| 25 | 14.37 | 31.211 | 23.22 | 6.12 | - | - | - | - | - | 0.4 |
| 30 | 14.3 a) | 31.253 | 23.26 | 6.09 | 8.09 | 8.17 | 2.10 | 2.03 | 0.119 | 3.9 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | - | - | - | <0.3 | 0.04 | 1.6 | 0.83 | 0.26 | 0.40 | 0.17 |
| 2 | - | - | - | - | 0.03 | 2.75 | - | - | 0.39 | - |
| 5 | 0.047 | 0.10 | 0.147 | <0.3 | 0.035 | 1.1 | 0.93 | 0.21 | 0.40 | 0.32 |
| 10 | - | - | - | <0.3 | - | - | - | - | 0.40 | - |
| 15 | - | - | - | <0.3 | 0.035 | 1.4 | 0.89 | 0.22 | 0.49 | 0.18 |
| 20 | - | 0.085 | - | <0.3 | - | - | - | - | - | - |
| 25 | - | - | - | - | - | - | - | - | - | - |
| 30 | - | - | - | <0.3 | - | - | 1.62 | 0.18 | 0.58 | 0.86 |

a) From bathythermograph observation.
b) BT observation shows maximum of 14.6°C at 18 meters.

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |
| HMCS OSHAWA; July 1, 1958; 1610 GCT; 54°23.5'N, 132°50.5'W; sounding, 202 fm; wind, missing; weather, missing; sea, smooth. | | | | | | | | | | |
| 0 | 12.2 | 30.715 | | 7.04 | 8.18 | 8.30 | - | - | - | 8.1 |
| 5 | 11.7a) | 30.707 | | 6.70 | 8.17 | 8.29 | 2.12 | 2.03(5) | 0.122 | 8.2 |
| 10 | 11.2a) | 30.743 | | 6.69 | - | - | - | - | - | 8.3 |
| 20 | 10.5a) | 30.861 | | 7.09 | - | - | - | - | - | 9.4 |
| 30 | 10.2a) | 31.078 | | 6.73 | 8.12 | 8.25 | - | - | - | 11.4 |
| 46b) | 8.2a) | 32.200 | | 5.39 | - | - | - | - | - | 25.5 |
| 70b) | 7.3a) | 32.793 | | 4.88 | - | - | - | - | - | - |
| 95b) | 6.7a) | 33.016 | | 4.14 | - | - | - | - | - | 36 |
| 135b) | 6.2a) | 33.331 | | 3.98 | - | - | - | - | - | 47 |
| 180b) | 5.9a) | 33.627 | | 3.08 | - | - | - | - | - | 55.5 |
| 220b) | 5.8a) | 33.720 | | 3.01 | 7.66 | 7.82 | 2.30 | 2.27 | 0.120 | 58.5 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | - | - | - | 1.8 | 0.13 | 2.7 | 1.32 | 0.39 | 0.445 | 0.485 |
| 5 | 0.12 | 0.17 | 0.29 | 1.7 | 0.11 | 0.5 | 1.31 | 0.36 | 0.50 | 0.45 |
| 10 | - | - | - | 1.7 | 0.12 | 0.5 | - | - | - | - |
| 20 | - | - | - | 1.8 | - | - | - | - | 0.67 | - |
| 30 | - | - | - | 3.5 | 0.21 | 0.2 | 1.83 | 0.35 | 0.80 | 0.68 |
| 46b) | - | - | - | 10.6 | - | - | - | - | - | - |
| 70b) | - | - | - | - | - | - | - | - | - | - |
| 95b) | - | - | - | 15.7 | - | - | - | - | 1.96 | - |
| 135b) | - | - | - | 20 | - | - | - | - | - | - |
| 180b) | - | - | - | - | - | - | - | - | - | - |
| 220b) | 0.065 | 0.07 | 1.135 | 14.8 | - | - | 2.82 | 0.03 | 2.63 | 0.16 |

a) From bathythermograph observation.

b) Pretrip below 30 meters. All temperatures from BT observation. Depths below 30 meters are estimated from salinity profile and are not to be used for physical computations. However, the depths are of sufficient precision to be used for nutrient profiles.

POG

CC-58-1

13

HMCS OSHAWA; July 2, 1958; 1627 GCT; 52°06'N, 137°50'W; sounding, missing; wind, 130°, 15 kt; weather, drizzle; sea, smooth.

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |
| 0 | 13.7 | 32.467 | 24.32 | 7.67 | 8.19 | 8.27 | 2.24 | 2.15 | 0.121 | 1.0 |
| 5 | 13.7 a) | 32.436 | 24.29 | 6.53 | - | - | - | - | - | 1.0 |
| 10 | 13.7 a) | 32.420 | 24.28 | 6.72 | 8.21 | 8.29 | - | - | - | 1.0 |
| 20 | 11.5 | 32.407 | 24.68 | 7.20 | - | - | - | - | - | 0.5 |
| 30 | 10.8 a) | 32.421 | 24.84 | 7.26 | - | - | - | - | - | 1.6 |
| 50 | 8.44 | 32.461 | 25.24 | 6.66 | - | - | - | - | - | 8.5 |
| 75 | 7.6 a) | 32.571 | 25.45 | 6.66 | - | - | - | - | - | - |
| 100 | 7.07 | 32.702 | 25.63 | 6.31 | - | - | - | - | - | 19 |
| 125 | 7.31 | 33.177 | 25.96 | 4.70 | - | - | - | - | - | - |
| 150 | 7.28 | 33.515 | 26.24 | 3.68 | - | - | - | - | - | - |
| 200 | 6.71 | 33.781 | 26.52 | 3.16 | - | - | - | - | - | 46 |
| 250 | 6.32 | 33.906 | 26.66 | 2.71 | - | - | - | - | - | - |
| 300 | - | 33.943 | - | 2.65 | 7.70 | 7.88 | 2.34(5) | 2.30(5) | 0.122 | - |
| 400 | 5.30 | 33.995 | 26.87 | 2.04 | - | - | - | - | - | 71 |
| 600 | 4.49 | 34.125 | 27.06 | 0.81 | - | - | - | - | - | - |
| 800 | 3.82 | 34.258 | 27.23 | 0.52 | - | - | - | - | - | 115 |
| 900 | - | 34.309 | - | 0.58 | 7.61 | 7.77 | 2.40 | 2.37 | 0.124 | 104 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | - | - | - | 2.0 | 0.21 | 3.2 | 1.38 | 0.13 | 0.74 | 0.51 |
| 5 | 0.045 | <0.025 | 0.045 | 1.7 | 0.20 | 0.55 | - | - | - | - |
| 10 | - | - | - | 1.6 | 0.19 | <0.2 | 1.72 | 0.07 | 0.62 | 1.03 |
| 20 | - | - | - | - | - | - | - | - | - | - |
| 30 | - | - | - | 1.4 | - | - | - | - b) | 1.20 | 0.94 |
| 50 | - | - | - | 6.9 | 0.56 | - | - | - | - | - |
| 75 | - | - | - | 12.1 | 0.47 | - | - | - | - | - |
| 100 | - | - | - | 16.5 | - | - | - | - | 1.52 | - |
| 125 | - | - | - | - | - | - | - | - | - | - |
| 150 | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | 32 | - | - | - | - | 2.26 | - |
| 250 | - | - | - | - | - | - | - | - | - | - |
| 300 | 0.07 | <0.025 | 0.07 | 34.5 | - | 0.6 | 3.25 | <0.02 | 2.82 | 0.43 |
| 400 | - | - | - | 39.5 | - | - | - | - | - | - |
| 600 | - | - | - | - | - | - | - | - | 2.95 | - |
| 800 | - | - | - | - | - | - | - | - | - | - |
| 900 | 0.07 | 0.11 | 0.18 | 43 | - | - | 4.31 | 0.04 | 2.86 | 1.41 |

a) From bathythermograph observation.

b) Swarm of zooplankton made determination meaningless.

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |
| HMCS OSHAWA; July 3, 1958; 1534 GCT; 49°44'N, 132°18.5'W; sounding, missing; wind, 190°, 4 kt; weather, missing; sea, calm. | | | | | | | | | | |
| 0 | 15.7 | 32.559 | 23.96 | 6.26 | 8.20 | 8.28 | 2.25 | 2.16 | 0.122 | 1.0 |
| 5 | 15.6 a) | 32.528 | 23.97 | 6.31 | - | - | - | - | - | 1.0 |
| 10 | 15.0 a) | 32.527 | 24.09 | 6.27 | 8.22 | 8.31 | - | - | - | 1.0 |
| 20 | 14.67 | 32.522 | 24.16 | 6.27 | - | - | - | - | - | 1.0 |
| 30 | 13.8 a) | 32.507 | 24.32 | 6.81 | 8.21 | 8.30 | - | - | - | 1.0 |
| 50 | 9.39 | 32.546 | 25.16 | 7.39 | - | - | - | - | - | 5.0 |
| 75 | 8.07 | 32.559 | 25.37 | 6.96 | - | - | - | - | - | 11.5 |
| 100 | 7.14 | 32.730 | 25.62 | 6.60 | - | - | - | - | - | 19 |
| 125 | 5.92 | 33.185 | 26.15 | 5.92 | - | - | - | - | - | - |
| 150 | 5.50 | 33.511 | 26.46 | 5.32 | - | - | - | - | - | 33 |
| 200 | 5.32 | 33.883 | 26.77 | 4.47 | - | - | - | - | - | 49 |
| 250 | 5.09 | 33.939 | 26.85 | 3.64 | - | - | - | - | - | - |
| 300 | - | 33.919 | - | 3.25 | 7.70 | 7.88 | 2.35(5) | 2.33(5) | 0.123 | 67 |
| 400 | 4.31 | 34.027 | 27.00 | 1.59 | - | - | - | - | - | 83 |
| 600 | 3.94 | 34.183 | 27.17 | 0.88 | - | - | - | - | - | 105 |
| 800 | 3.48 | 34.331 | 27.32 | 0.69 | - | - | - | - | - | 115 |
| 900 | - | 34.380 | - | 0.47 | 7.57 | 7.69 | 2.47 | 2.44 | 0.127 | 126 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | 0.41 | 0.025 | 0.41 | 1.2 | 0.045 | 0.35 | 1.32 | 0.18 | 0.58 | 0.56 |
| 5 | - | - | - | 1.9 | 0.045 | <0.2 | - | - | - | - |
| 10 | - | - | - | 1.6 | 0.045 | - | 1.90 | 0.08 | 0.56 | 1.26 |
| 20 | - | - | - | - | - | - | - | - | - | - |
| 30 | - | - | - | 2.1 | 0.09 | 0.25 | 2.58 | 0.18 | 0.71 | 1.69 |
| 50 | - | - | - | 6.2 | 0.12 | - | - | - | - | - |
| 75 | - | - | - | 8.2 | 0.16 | - | - | - | - | - |
| 100 | - | - | - | 13.4 | - | - | - | - | 1.42 | - |
| 125 | - | - | - | - | - | - | - | - | - | - |
| 150 | - | - | - | - | - | - | - | - | - | - |
| 200 | - | - | - | 24 | - | - | - | - | 2.07 | - |
| 250 | - | - | - | - | - | - | - | - | - | - |
| 300 | 0.14 | - | - | 30.5 | - | 0.3 | 3.18 | <0.02 | 2.80 | 0.38 |
| 400 | - | - | - | 31 | - | - | - | - | - | - |
| 600 | - | - | - | 34.5 | - | - | - | - | 3.06 | - |
| 800 | - | - | - | - | - | - | - | - | 3.20 | - |
| 900 | 0.09 | - | - | 34.5 | - | 1.25 | 4.20 | <0.02 | 3.10 | 1.10 |

a) From bathythermograph observation.

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15

| OBSERVED | | | COMP | OBSERVED | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | $O_2$ | pH | pH | Alkalinity | | | $SiO_3$-Si |
| | | | | | | | Total | Carb. | Sp. | |
| m | °C | ‰ | g/L | ml/L | measd. | in situ | meq/L | meq/L | | µg at/L |
| HMCS OSHAWA; July 4, 1958; 1632 GCT; 48°30'N, 126°09'W; sounding, 210 fm; wind, 330°, 8 kt; weather, dry haze; sea, smooth. | | | | | | | | | | |
| 0 | 14.7 | 31.888 | 23.66 | 6.62 | 8.22 | 8.30 | 2.24 | 2.15 | 0.135 | 4.9 |
| 5 | 14.5 a) | 31.866 | 23.68 | 6.60 | - | - | - | - | - | 5.1 |
| 9 | 13.7 a) | 32.057 | 24.00 | 6.84 | 8.22 | 8.31 | - | - | - | 5.1 |
| 19 | 10.6 a) | 32.250 | 24.73 | 6.72 | - | - | - | - | - | 6.2 |
| 28 | 9.5 a) | 32.329 | 24.98 | 6.41 | 8.11 | 8.25 | 2.24 | 2.17 | 0.122 | 7.7 |
| 48 | 8.81 | 32.491 | 25.22 | 6.27 | - | - | - | - | - | 11.5 |
| 73 | 7.86 | 32.995 | 25.77 | 5.28 | - | - | - | - | - | 23.1 |
| 97 | 7.4 a) | 33.316 | 26.06 | 4.72 | - | - | - | - | - | 31.0 |
| 122 | 7.25 | 33.658 | 26.35 | 4.03 | - | - | - | - | - | - |
| 146 | 7.21 | 33.778 | 26.45 | 3.81 | - | - | - | - | - | 39.5 |
| 195 | 6.81 | 33.926 | 26.63 | 3.32 | - | - | - | - | - | 45.5 |
| 244 | 6.44 | 33.961 | 26.70 | 2.65 | - | - | - | - | - | - |
| 285 | 5.5 a) | 34.008 | 26.86 | 1.93 | 7.64 | 7.78 | 2.39 | 2.36 | 0.123 | 65.5 |

| OBSERVED | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | Reactive Iron (µg at/L) | | | Nitrogen (µg at/L) | | | Phosphorus (µg at/L) | | | |
| | | | | | | | | | Sol. | Sol. |
| m | Part. | Sol. | Total | $NO_3$-N | $NO_2$-N | $NH_3$-N | Total | Part. | Inorg. | Org. |
| 0 | - | - | - | 0.7 | 0.055 | 1.3 | 1.19 | 0.23 | 0.48 | 0.48 |
| 5 | 0.018 | 0.065 | 0.083 | 1.1 | 0.04 | 1.6 | 1.32 | 0.25 | 0.46 | 0.61 |
| 9 | - | - | - | 2.0 | - | - | - | - | 0.43(5) | - |
| 19 | - | - | - | 3.4 | 0.155 | - | 1.41 | 0.22 | 0.52 | 0.67 |
| 28 | - | - | - | 6.1 | - | - | - | - | 0.82 | - |
| 48 | - | - | - | 9.0 | - | - | - | - | 1.14 | - |
| 73 | - | - | - | - | - | - | - | - | - | - |
| 97 | - | - | - | 22 | - | - | - | - | 2.18 | - |
| 122 | - | - | - | - | - | - | - | - | - | - |
| 146 | - | - | - | - | - | - | - | - | - | - |
| 195 | - | - | - | 28 | - | - | - | - | 2.21 | - |
| 244 | - | - | - | - | - | - | - | - | - | - |
| 285 | 0.12 | <0.025 | 0.12 | 35 | 0.07 | 1.0 | 3.86 | 0.09 | 2.81 | 0.96 |

a) From bathythermograph observation.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

1

CNAV WHITETHROAT; June 27, 1958; 0818 GCT;[a] 48°18'N, 125°10'W; sounding, 58 fm; wind, missing; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.50 | 31.649 | - | 23.72 | 0 | 13.50 | 31.65 | 23.72 | 418 | 0.00 |
| 10 | 13.83 | 31.725 | 6.89 | 23.72 | 10 | 13.83 | 31.72 | 23.72 | 419 | 0.04 |
| 20 | 9.55 | 32.339 | 6.03 | 24.97 | 20 | 9.55 | 32.34 | 24.97 | 300 | 0.08 |
| 30 | 8.83 | 32.511 | 5.33 | 25.22 | 30 | 8.83 | 32.51 | 25.22 | 276 | 0.11 |
| 49 | 7.76 | 33.066 | 4.69 | 25.81 | 50 | 7.72 | 33.09 | 25.83 | 218 | 0.16 |
| 73 | 7.41 | 33.340 | 3.93 | 26.08 | 75 | 6.32 | 28.59 | 22.49 | 537 | 0.25 |
| 98 | 6.90 | 33.765 | 2.46 | 26.48 | | | | | | |

2

CNAV WHITETHROAT; June 27, 1958; 1239 GCT; 48°00'N, 125°48'W; sounding, 286 fm; wind, 180°, 25 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.10 | 31.89 | 6.00 | 23.58 | 0 | 15.10 | 31.89 | 23.58 | 432 | 0.00 |
| 8 | 15.23 | 31.83 | 6.22 | 23.51 | 10 | 14.91 | 31.85 | 23.59 | 431 | 0.04 |
| 17 | 12.70 | 32.03 | 6.74 | 24.18 | 20 | 12.12 | 32.09 | 24.33 | 361 | 0.08 |
| 26 | 11.36 | 32.22 | 6.90 | 24.57 | 30 | 10.81 | 32.29 | 24.72 | 324 | 0.12 |
| 40 | 9.58 | 32.44 | 6.79 | 25.05 | 50 | 8.88 | 32.49 | 25.19 | 279 | 0.18 |
| 60 | 8.65 | 32.44 | 6.48 | 25.19 | 75 | 8.07 | 32.72 | 25.49 | 251 | 0.24 |
| 79 | 7.93 | 32.83 | 5.04 | 25.60 | 100 | 7.36 | 33.33 | 26.08 | 195 | 0.30 |
| 99 | 7.37 | 33.32 | 4.44 | 26.07 | 150 | 7.11 | 33.81 | 26.49 | 157 | 0.39 |
| 118 | 7.36 | 33.54 | 4.13 | 26.24 | 200 | 6.79 | 33.94 | 26.63 | 144 | 0.47 |
| 136 | 7.21 | 33.71 | 3.46 | 26.40 | 250 | 6.23 | 33.93 | 26.70 | 139 | 0.54 |
| 155 | 7.07 | 33.84 | 2.96 | 26.52 | 300 | 5.86 | 33.91 | 26.73 | 136 | 0.61 |
| 176 | 6.98 | 33.90 | 2.83 | 26.58 | | | | | | |
| 232 | 6.39 | 33.93 | 2.71 | 26.68 | | | | | | |
| 300 | 5.86 | 33.99 | 1.87 | 26.73 | | | | | | |

3

CNAV WHITETHROAT; June 28, 1958; 1936 GCT; 45°57'N, 131°00'W; sounding, missing; wind, missing; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.30 | 32.64 | 5.94 | 24.11 | 0 | 15.30 | 32.64 | 24.11 | 381 | 0.00 |
| 9 | 15.10 | 32.48 | 5.99 | 24.03 | 10 | 15.08 | 32.47 | 24.03 | 390 | 0.04 |
| 24 | 14.73 | 32.47 | 6.10 | 24.11 | 20 | 14.83 | 32.44 | 24.06 | 387 | 0.08 |
| 48 | 9.96 | 32.48 | 6.97 | 25.02 | 30 | 14.02 | 32.48 | 24.26 | 368 | 0.12 |
| 72 | 8.77 | 32.48 | 6.55 | 25.20 | 50 | 9.72 | 32.49 | 25.06 | 292 | 0.18 |
| 95 | 7.93 | 32.66 | 6.23 | 25.47 | 75 | 8.64 | 32.49 | 25.23 | 276 | 0.25 |
| 119 | 7.10 | 33.09 | 5.60 | 25.92 | 100 | 7.75 | 32.73 | 25.55 | 246 | 0.32 |
| 143 | 6.89 | 33.35 | 5.26 | 26.16 | 150 | 6.85 | 33.42 | 26.22 | 183 | 0.43 |
| 166 | 6.77 | 33.55 | 5.14 | 26.33 | 200 | 6.60 | 33.79 | 26.54 | 153 | 0.51 |
| 190 | 6.65 | 33.74 | 4.88 | 26.49 | 250 | 6.15 | 33.88 | 26.67 | 141 | 0.59 |
| 213 | 6.53 | 33.83 | 4.73 | 26.58 | 300 | 5.52 | 33.91 | 26.77 | 132 | 0.66 |
| 237 | 6.30 | 33.87 | 4.32 | 26.64 | 400 | 4.79 | 33.99 | 26.92 | 118 | 0.78 |
| 285 | 5.68 | 33.90 | 3.42 | 26.74 | 500 | 4.38 | 34.09 | 27.04 | 107 | 0.90 |
| 389 | 4.85 | 33.98 | 0.71 | 26.91 | 600 | 4.15 | 34.17 | 27.13 | 99 | 1.00 |
| 486 | 4.43 | 34.08 | 0.16 | 27.03 | 700 | 3.93 | 34.27 | 27.24 | 90 | 1.10 |
| 584 | 4.19 | 34.16 | 0.16 | 27.12 | 800 | 3.71 | 34.38 | 27.34 | 81 | 1.18 |
| 778 | 3.76 | 34.36 | 0.08 | 27.33 | 1000 | 3.32 | 34.40 | 27.40 | 76 | 1.34 |
| 974 | 3.37 | 34.40 | 0.11 | 27.39 | 1200 | 2.94 | 34.45 | 27.48 | 70 | 1.49 |
| 1459 | 2.48 | 34.53 | 0.12 | 27.58 | | | | | | |

a) Although not indicated in the tabulation, two casts were made at each station, the first to a depth of 300 meters and the second to a maximum depth of 2000 meters. The time reported is the time of the messenger release of the shallow cast. The deeper cast was made about 20 to 30 minutes later.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 4 | CNAV WHITETHROAT; June 29, 1958; 1302 GCT; 44°43'N, 133°20'W; sounding, missing; wind, 280°, 25 kt; weather, overcast; sea, moderate. | | | | | | | | | |
| 0 | 15.60 | 32.59 | 6.10 | 24.01 | 0 | 15.60 | 32.59 | 24.01 | 392 | 0.00 |
| 10 | 15.04 | 32.56 | 5.98 | 24.11 | 10 | 15.04 | 32.56 | 24.11 | 382 | 0.04 |
| 24 | 15.04 | 32.56 | 5.92 | 24.11 | 20 | 14.95 | 32.56 | 24.12 | 381 | 0.08 |
| 48 | 11.93 | 32.53 | 6.68 | 24.71 | 30 | 14.63 | 32.56 | 24.19 | 374 | 0.12 |
| 73 | 9.81 | 32.56 | 6.18 | 25.10 | 50 | 11.72 | 32.54 | 24.75 | 322 | 0.18 |
| 97 | 8.09 | 32.76 | 5.32 | 25.52 | 75 | 9.65 | 32.57 | 25.14 | 285 | 0.26 |
| 122 | 7.09 | 33.24 | 5.33 | 26.04 | 100 | 7.93 | 32.80 | 25.58 | 243 | 0.33 |
| 146 | 7.01 | 33.52 | 5.32 | 26.27 | 150 | 7.01 | 33.55 | 26.30 | 175 | 0.43 |
| 170 | 7.05 | 33.71 | 5.33 | 26.42 | 200 | 6.86 | 33.81 | 26.52 | 155 | 0.52 |
| 195 | (6.91)a) | 33.80 | 5.15 | (26.51) | 250 | 6.30 | 33.90 | 26.67 | 142 | 0.59 |
| 219 | 6.61 | 33.84 | 4.65 | 26.58 | 300 | 5.69 | 33.90 | 26.74 | 134 | 0.66 |
| 243 | 6.38 | 33.89 | 4.46 | 26.65 | 400 | 4.99 | 33.93 | 26.85 | 125 | 0.79 |
| 292 | 5.77 | 33.90 | 3.77 | 26.73 | 500 | 4.27 | 34.01 | 26.99 | 112 | 0.91 |
| 358 | 5.33 | 33.91 | 3.09 | 26.80 | 600 | 3.95 | 34.11 | 27.10 | 102 | 1.02 |
| 448 | 4.55 | 33.97 | 1.95 | 26.93 | 700 | 3.74 | 34.19 | 27.19 | 94 | 1.12 |
| 538 | 4.15 | 34.05 | 0.12 | 27.04 | 800 | 3.53 | 34.27 | 27.27 | 87 | 1.21 |
| 716 | 3.72 | 34.20 | 0.02 | 27.20 | | | | | | |
| 895 | 3.33 | 34.34 | - | 27.35 | | | | | | |
| 5 | CNAV WHITETHROAT; June 30, 1958; 0329 GCT; 44°04'N, 135°35'W; sounding, missing; wind, 280°, 30 kt; weather, overcast; sea, rough. | | | | | | | | | |
| 0 | 15.10 | 32.68 | 6.09 | 24.19 | 0 | 15.10 | 32.68 | 24.19 | 374 | 0.00 |
| 10 | 14.80 | 32.63 | 6.20 | 24.21 | 10 | 14.80 | 32.63 | 24.21 | 372 | 0.04 |
| 25 | 14.41 | 32.63 | 6.36 | 24.29 | 20 | 14.53 | 32.62 | 24.26 | 368 | 0.08 |
| 50 | 10.67 | 32.65 | 6.76 | 25.03 | 30 | 13.97 | 32.63 | 24.38 | 356 | 0.11 |
| 75 | 9.57 | 32.67 | 6.54 | 25.22 | 50 | 10.67 | 32.65 | 25.03 | 295 | 0.18 |
| 100 | 8.68 | 32.98 | 6.36 | 25.61 | 75 | 9.57 | 32.67 | 25.22 | 277 | 0.25 |
| 125 | 8.11 | 33.34 | 5.90 | 25.98 | 100 | 8.68 | 32.98 | 25.61 | 240 | 0.31 |
| 150 | 7.35 | 33.58 | 5.69 | 26.28 | 150 | 7.35 | 33.58 | 26.28 | 178 | 0.42 |
| 175 | 7.25 | 33.75 | 5.31 | 26.42 | 200 | 7.23 | 33.85 | 26.51 | 157 | 0.50 |
| 200 | 7.23 | 33.85 | 4.68 | 26.51 | 250 | 6.71 | 33.90 | 26.61 | 147 | 0.58 |
| 225 | 6.89 | 33.91 | 4.02 | 26.60 | 300 | 6.13 | 33.89 | 26.68 | 141 | 0.65 |
| 250 | 6.71 | 33.90 | 2.87 | 26.61 | 400 | 5.12 | 33.93 | 26.84 | 127 | 0.79 |
| 300 | 6.13 | (33.89)a) | 1.68 | (26.68) | 500 | 4.29 | 34.00 | 26.98 | 113 | 0.91 |
| 385 | 5.26 | 33.92 | 0.91 | 26.81 | 600 | 4.01 | 34.10 | 27.09 | 103 | 1.02 |
| 481 | 4.40 | 33.98 | 0.46 | 26.95 | 700 | 3.74 | 34.19 | 27.19 | 94 | 1.12 |
| 578 | 4.08 | 34.08 | 0.39 | 27.07 | 800 | 3.51 | 34.27 | 27.27 | 87 | 1.21 |
| 774 | 3.57 | 34.25 | 0.09 | 27.25 | 1000 | 3.15 | 34.39 | 27.40 | 75 | 1.37 |
| 1154 | 2.97 | 34.45 | 0.06 | 27.47 | | | | | | |
| 6 | CNAV WHITETHROAT; June 30, 1958; 1956 GCT; 43°14'N, 138°10'W; sounding, missing; wind, 290°, 25 kt; weather, overcast; sea, rough. | | | | | | | | | |
| 0 | 15.40 | 32.74 | 5.76 | 24.17 | 0 | 15.40 | 32.74 | 24.17 | 376 | 0.00 |
| 10 | 15.47 | 32.68 | 5.94 | 24.10 | 10 | 15.47 | 32.68 | 24.10 | 382 | 0.04 |
| 24 | 15.08 | 32.70 | 6.03 | 24.20 | 20 | 15.25 | 32.68 | 24.15 | 378 | 0.08 |
| 48 | 11.25 | 32.75 | 6.36 | 25.01 | 30 | 14.50 | 32.71 | 24.34 | 361 | 0.11 |
| 73 | 9.75 | 32.76 | 6.63 | 25.27 | 50 | 11.04 | 32.76 | 25.05 | 293 | 0.18 |
| 97 | 9.27 | 32.89 | 5.94 | 25.44 | 75 | 9.67 | 32.76 | 25.28 | 271 | 0.25 |
| 122 | 8.39 | 33.28 | 5.68 | 25.89 | 100 | 9.18 | 32.92 | 25.48 | 253 | 0.32 |
| 146 | 8.00 | 33.69 | 5.31 | 26.27 | 150 | 7.95 | 33.73 | 26.31 | 175 | 0.42 |
| 170 | 7.73 | 33.80 | 5.35 | 26.39 | 200 | 7.45 | 33.89 | 26.50 | 157 | 0.51 |
| 194 | 7.50 | 33.88 | 5.25 | 26.49 | 250 | 6.84 | 33.93 | 26.62 | 146 | 0.58 |
| 218 | 7.31 | 33.91 | 5.01 | 26.54 | 300 | 6.19 | 33.92 | 26.70 | 139 | 0.66 |
| 242 | 6.95 | 33.92 | 4.66 | 26.60 | 400 | 4.95 | 33.96 | 26.88 | 123 | 0.79 |
| 291 | 6.31 | 33.92 | 4.18 | 26.69 | 500 | 4.27 | 34.02 | 27.01 | 111 | 0.91 |
| 382 | 5.13 | 33.95 | 3.14 | 26.85 | 600 | 3.95 | 34.11 | 27.11 | 102 | 1.01 |
| 480 | 4.37 | 34.01 | 1.81 | 26.98 | 700 | 3.68 | 34.19 | 27.20 | 94 | 1.11 |
| 576 | 4.03 | 34.09 | 1.47 | 27.08 | 800 | 3.47 | 34.26 | 27.27 | 87 | 1.20 |
| 768 | 3.54 | 34.24 | 0.93 | 27.25 | 1000 | 3.09 | 34.37 | 27.39 | 76 | 1.37 |
| 1152 | 2.87 | 34.42 | 0.39 | 27.46 | | | | | | |



a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

7

CNAV WHITETHROAT; July 1, 1958; 1627 GCT; 43°27'N, 141°50'W; sounding, missing; wind, 260°, 8 kt; weather, overcast; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.30 | 33.07 | 5.94 | 24.44 | 0 | 15.30 | 33.07 | 24.44 | 350 | 0.00 |
| 10 | 15.17 | 33.05 | 5.98 | 24.46 | 10 | 15.17 | 33.05 | 24.46 | 349 | 0.04 |
| 25 | 13.87 | 33.05 | 6.44 | 24.73 | 20 | 14.45 | 33.05 | 24.60 | 335 | 0.07 |
| 50 | 9.61 | 33.08 | 6.76 | 25.54 | 30 | 13.23 | 33.05 | 24.86 | 311 | 0.10 |
| 75 | 8.95 | 33.10 | 6.44 | 25.66 | 50 | 9.61 | 33.08 | 25.54 | 246 | 0.16 |
| 100 | 8.76 | 33.15 | 6.33 | 25.73 | 75 | 8.95 | 33.10 | 25.66 | 235 | 0.22 |
| 125 | 8.58 | 33.74 | 5.44 | 26.22 | 100 | 8.76 | 33.15 | 25.73 | 229 | 0.28 |
| 150 | 8.11 | 33.89 | 5.31 | 26.40 | 150 | 8.11 | 33.89 | 26.40 | 166 | 0.38 |
| 175 | 7.80 | 33.89 | 5.35 | 26.45 | 200 | 7.51 | 33.92 | 26.52 | 156 | 0.46 |
| 200 | 7.51 | 33.92 | 5.19 | 26.52 | 250 | 6.95 | 33.93 | 26.60 | 148 | 0.53 |
| 225 | 7.24 | 33.93 | 4.88 | 26.57 | 300 | 6.33 | 33.94 | 26.69 | 140 | 0.61 |
| 250 | 6.95 | 33.93 | 4.67 | 26.60 | 400 | 5.23 | 33.95 | 26.84 | 126 | 0.74 |
| 300 | 6.33 | 33.94 | 4.17 | 26.69 | 500 | 4.44 | 34.02 | 26.98 | 113 | 0.86 |
| 394 | 5.29 | 33.95 | 2.78 | 26.83 | 600 | 4.06 | 34.11 | 27.10 | 103 | 0.97 |
| 492 | 4.49 | 34.01 | 1.88 | 26.97 | 700 | 3.74 | 34.19 | 27.19 | 94 | 1.07 |
| 590 | 4.10 | 34.10 | 1.10 | 27.09 | 800 | 3.48 | 34.26 | 27.27 | 87 | 1.16 |
| 786 | 3.51 | 34.25 | 0.56 | 27.26 | 1000 | 3.08 | 34.35 | 27.38 | 77 | 1.33 |
| 982 | 3.11 | 34.34 | 0.20 | 27.37 | 1200 | 2.74 | 34.43 | 27.48 | 69 | 1.48 |
| 1474 | 2.37 | 34.52 | 0.63 | 27.58 | | | | | | |

8

CNAV WHITETHROAT; July 2, 1958; 1050 GCT; 43°50'N, 145°30'W; sounding, missing; wind, 270°, 18 kt; weather, drizzle; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 32.63 | 5.96 | 24.13 | 0 | 15.20 | 32.63 | 24.13 | 380 | 0.00 |
| 10 | 15.02 | 33.04 | 6.00 | 24.48 | 10 | 15.02 | 33.04 | 24.48 | 346 | 0.04 |
| 24 | 13.70 | 33.07 | 6.36 | 24.78 | 20 | 14.20 | 33.13 | 24.72 | 324 | 0.07 |
| 48 | 8.79 | 33.06 | 6.80 | 25.66 | 30 | 12.79 | 33.07 | 24.96 | 301 | 0.10 |
| 71 | 8.45 | 32.63 | 6.56 | 25.37 | 50 | 8.59 | 33.04 | 25.67 | 234 | 0.16 |
| 95 | 8.39 | 33.19 | 6.53 | 25.81 | 75 | 8.42 | 32.65 | 25.39 | 261 | 0.22 |
| 119 | 8.28 | 33.08 | 5.89 | 25.74 | 100 | 8.37 | 33.22 | 25.84 | 218 | 0.28 |
| 142 | 8.36 | 33.30 | 5.25 | 25.91 | 150 | 8.33 | 33.48 | 26.05 | 199 | 0.38 |
| 165 | 8.19 | 33.93 | 5.13 | 26.43 | 200 | 7.46 | 33.92 | 26.52 | 155 | 0.47 |
| 189 | 7.76 | 33.94 | 5.22 | 26.50 | 250 | 6.35 | 33.88 | 26.64 | 144 | 0.55 |
| 212 | 7.07 | 33.88 | 4.97 | 26.55 | 300 | 5.75 | 33.87 | 26.71 | 138 | 0.62 |
| 236 | 6.58 | 33.88 | 4.96 | 26.62 | 400 | 4.86 | 33.95 | 26.88 | 122 | 0.75 |
| 283 | 5.95 | 33.87 | 4.40 | 26.69 | 500 | 4.40 | 34.04 | 27.00 | 111 | 0.87 |
| 398 | 4.87 | 33.95 | 2.52 | 26.88 | 600 | 4.02 | 34.11 | 27.10 | 102 | 0.98 |
| 497 | 4.41 | 34.04 | 1.74 | 27.00 | 700 | 3.70 | 34.19 | 27.20 | 94 | 1.07 |
| 597 | 4.03 | 34.11 | 1.08 | 27.10 | 800 | 3.43 | 34.27 | 27.28 | 86 | 1.16 |
| 796 | 3.44 | 34.27 | 0.57 | 27.28 | 1000 | 3.00 | 34.36 | 27.40 | 76 | 1.33 |
| 995 | 3.01 | 34.36 | 0.45 | 27.39 | 1200 | 2.65 | 34.43 | 27.49 | 68 | 1.47 |
| 1492 | 2.29 | 34.50 | 0.44 | 27.57 | | | | | | |

9

CNAV WHITETHROAT; July 3, 1958; 0033 GCT; 45°02'N, 147°06'W; sounding, 2000 fm; wind, 220°, 12 kt; weather, drizzle; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.90 | 33.06 | 5.90 | 24.73 | 0 | 13.90 | 33.06 | 24.73 | 323 | 0.00 |
| 10 | 13.30 | 33.03 | 6.38 | 24.83 | 10 | 13.30 | 33.03 | 24.83 | 313 | 0.03 |
| 24 | 13.00 | 33.06 | 6.65 | 24.91 | 20 | 13.02 | 33.05 | 24.90 | 307 | 0.06 |
| 48 | 8.94 | 33.16 | 6.54 | 25.71 | 30 | 12.40 | 33.08 | 25.04 | 293 | 0.09 |
| 73 | 8.23 | 33.18 | 6.63 | 25.84 | 50 | 8.75 | 33.16 | 25.74 | 227 | 0.15 |
| 98 | 7.61 | 33.19 | 6.12 | 25.93 | 75 | 8.18 | 33.19 | 25.85 | 218 | 0.20 |
| 122 | 7.79 | 33.29 | 6.44 | 25.98 | 100 | 7.60 | 33.19 | 25.93 | 209 | 0.26 |
| 146 | 8.07 | 33.68 | 5.76 | 26.25 | 150 | 8.07 | 33.72 | 26.28 | 177 | 0.35 |
| 170 | 7.85 | 33.88 | 5.15 | 26.44 | 200 | 7.49 | 33.95 | 26.54 | 153 | 0.44 |
| 195 | 7.60 | 33.95 | 5.02 | 26.53 | 250 | 6.39 | 33.89 | 26.65 | 143 | 0.51 |
| 219 | 6.92 | 33.92 | 4.84 | 26.60 | 300 | 5.67 | 33.90 | 26.75 | 134 | 0.58 |
| 243 | 6.50 | 33.90 | 4.86 | 26.64 | 400 | 4.67 | 33.95 | 26.90 | 120 | 0.71 |
| 291 | 5.79 | 33.90 | 4.48 | 26.73 | 500 | 4.37 | 34.06 | 27.02 | 110 | 0.82 |
| 400 | 4.67 | 33.95 | 2.58 | 26.90 | 600 | 4.04 | 34.14 | 27.12 | 100 | 0.93 |
| 500 | 4.37 | 34.06 | 1.74 | 27.02 | 700 | 3.72 | 34.22 | 27.21 | 92 | 1.03 |
| 600 | 4.04 | 34.14 | 1.11 | 27.12 | 800 | 3.40 | 34.28 | 27.29 | 85 | 1.12 |
| 800 | 3.40 | 34.28 | 0.71 | 27.29 | 1000 | 2.98 | 34.37 | 27.41 | 75 | 1.28 |
| 1000 | 2.98 | 34.37 | 0.53 | 27.41 | 1200 | 2.64 | 34.44 | 27.49 | 67 | 1.42 |
| 1500 | 2.29 | 34.51 | 0.57 | 27.58 | 1500 | 2.29 | 34.51 | 27.58 | 60 | 1.62 |
| 2000 | 1.92 | 34.59 | 1.00 | 27.67 | 2000 | 1.92 | 34.59 | 27.67 | 52 | 1.90 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 10 | CNAV WHITETHROAT; July 3, 1958; 1255 GCT; 45°53'N, 148°50'W; sounding, missing; wind, 180°, 4 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 12.40 | 33.06 | 6.14 | 25.03 | 0 | 12.40 | 33.06 | 25.03 | 294 | 0.00 |
| 10 | 12.26 | 33.01 | 6.35 | 25.02 | 10 | 12.26 | 33.01 | 25.02 | 295 | 0.03 |
| 24 | 11.63 | 33.01 | 6.85 | 25.13 | 20 | 11.86 | 33.00 | 25.08 | 289 | 0.06 |
| 48 | 8.26 | 33.03 | 6.98 | 25.71 | 30 | 11.06 | 33.01 | 25.24 | 274 | 0.09 |
| 73 | 7.27 | 33.05 | 6.70 | 25.87 | 50 | 8.09 | 33.03 | 25.74 | 227 | 0.14 |
| 97 | 7.04 | 33.10 | 6.51 | 25.94 | 75 | 7.22 | 33.05 | 25.88 | 214 | 0.19 |
| 121 | 6.75 | 33.12 | 6.28 | 25.99 | 100 | 7.01 | 33.10 | 25.95 | 208 | 0.25 |
| 145 | 7.17 | 33.70 | 5.34 | 26.40 | 150 | 7.16 | 33.77 | 26.45 | 161 | 0.34 |
| 170 | 6.79 | 33.84 | 5.07 | 26.56 | 200 | 6.26 | 33.86 | 26.64 | 144 | 0.42 |
| 196 | 6.33 | 33.86 | 4.88 | 26.63 | 250 | 5.34 | 33.86 | 26.76 | 132 | 0.49 |
| 218 | 5.91 | 33.85 | 4.08 | 26.68 | 300 | 4.72 | 33.91 | 26.86 | 123 | 0.55 |
| 242 | 5.47 | 33.86 | 3.90 | 26.74 | 400 | 4.20 | 33.97 | 26.97 | 113 | 0.67 |
| 290 | 4.83 | 33.90 | 3.39 | 26.84 | 500 | 4.04 | 34.09 | 27.08 | 103 | 0.78 |
| 396 | 4.21 | 33.96 | 2.37 | 26.96 | 600 | 3.82 | 34.17 | 27.17 | 96 | 0.88 |
| 495 | 4.05 | 34.09 | 1.74 | 27.08 | 700 | 3.58 | 34.24 | 27.25 | 89 | 0.97 |
| 594 | 3.83 | 34.17 | 1.13 | 27.17 | 800 | 3.35 | 34.29 | 27.31 | 83 | 1.06 |
| 793 | 3.36 | 34.29 | 0.99 | 27.31 | 1000 | 2.99 | 34.37 | 27.41 | 75 | 1.22 |
| 989 | 3.01 | 34.37 | 0.75 | 27.40 | 1200 | 2.69 | 34.44 | 27.49 | 68 | 1.36 |
| 1486 | 2.34 | 34.51 | 0.93 | 27.57 | | | | | | |
| 11 | CNAV WHITETHROAT; July 4, 1958; 0133 GCT; 46°49'N, 151°18'W; sounding, 2000 fm; wind, 270°, 10 kt; weather, cloudy; sea, moderate. | | | | | | | | | |
| 0 | 11.30 | 33.18 | 6.83 | 25.33 | 0 | 11.30 | 33.18 | 25.33 | 266 | 0.00 |
| 10 | 11.27 | 33.13 | 6.65 | 25.29 | 10 | 11.27 | 33.13 | 25.29 | 269 | 0.03 |
| 25 | 11.15 | 33.21 | 6.97 | 25.38 | 20 | 11.20 | 33.16 | 25.33 | 266 | 0.05 |
| 50 | 9.74 | 33.23 | 6.74 | 25.63 | 30 | 10.99 | 33.22 | 25.42 | 258 | 0.08 |
| 75 | 7.83 | 33.29 | 6.69 | 25.98 | 50 | 9.74 | 33.23 | 25.63 | 237 | 0.13 |
| 100 | 7.19 | 33.34 | 6.57 | 26.11 | 75 | 7.83 | 33.29 | 25.98 | 205 | 0.19 |
| 125 | 7.75 | 33.73 | 5.75 | 26.34 | 100 | 7.19 | 33.34 | 26.11 | 193 | 0.24 |
| 150 | 7.51 | 33.90 | 5.13 | 26.50 | 150 | 7.51 | 33.90 | 26.50 | 156 | 0.32 |
| 175 | 7.11 | 33.91 | 5.10 | 26.56 | 200 | 6.52 | 33.90 | 26.64 | 144 | 0.40 |
| 200 | 6.52 | 33.90 | 4.87 | 26.64 | 250 | 5.66 | 33.86 | 26.71 | 137 | 0.47 |
| 225 | 6.03 | 33.88 | 4.67 | 26.68 | 300 | 4.99 | 33.86 | 26.80 | 129 | 0.54 |
| 250 | 5.66 | 33.86 | 4.54 | 26.71 | 400 | 4.32 | 33.93 | 26.93 | 117 | 0.66 |
| 300 | 4.99 | 33.86 | 4.01 | 26.80 | 500 | 4.13 | 34.07 | 27.06 | 106 | 0.77 |
| 392 | 4.35 | 33.92 | 2.81 | 26.91 | 600 | 3.90 | 34.17 | 27.16 | 97 | 0.88 |
| 491 | 4.15 | 34.06 | 1.64 | 27.05 | 700 | 3.67 | 34.23 | 27.23 | 90 | 0.97 |
| 587 | 3.93 | 34.16 | 1.12 | 27.14 | 800 | 3.44 | 34.28 | 27.29 | 85 | 1.06 |
| 785 | 3.47 | 34.27 | 0.69 | 27.28 | 1000 | 3.02 | 34.37 | 27.40 | 75 | 1.22 |
| 982 | 3.05 | 34.36 | 0.48 | 27.39 | 1200 | 2.68 | 34.44 | 27.49 | 67 | 1.37 |
| 1474 | 2.37 | 34.50 | 0.52 | 27.57 | 1500 | 2.34 | 34.51 | 27.57 | 60 | 1.56 |
| 1966 | 1.99 | 34.58 | 1.30 | 27.66 | | | | | | |
| 12 | CNAV WHITETHROAT; July 4, 1958; 1230 GCT; 47°55'N, 152°45'W; sounding, missing; wind, 150°, 10 kt; weather, intermittent slight rain; sea, slight. | | | | | | | | | |
| 0 | 10.40 | 32.98 | 6.68 | 25.33 | 0 | 10.40 | 32.98 | 25.33 | 265 | 0.00 |
| 10 | 10.15 | 33.00 | 6.50 | 25.39 | 10 | 10.15 | 33.00 | 25.39 | 260 | 0.03 |
| 25 | 8.87 | 33.04 | 6.57 | 25.62 | 20 | 9.42 | 33.03 | 25.53 | 247 | 0.05 |
| 49 | 8.02 | 33.04 | 6.80 | 25.76 | 30 | 8.57 | 33.04 | 25.67 | 233 | 0.08 |
| 73 | 6.37 | 33.16 | 5.86 | 26.07 | 50 | 7.97 | 33.04 | 25.77 | 225 | 0.12 |
| 98 | 6.64 | 33.35 | 6.25 | 26.19 | 75 | 6.32 | 33.17 | 26.09 | 194 | 0.18 |
| 123 | 6.45 | 33.46 | 5.69 | 26.30 | 100 | 6.64 | 33.36 | 26.20 | 184 | 0.22 |
| 148 | 7.01 | 33.90 | 4.96 | 26.57 | 150 | 7.00 | 33.91 | 26.58 | 149 | 0.31 |
| 172 | 6.42 | 33.88 | 3.94 | 26.64 | 200 | 5.61 | 33.84 | 26.71 | 137 | 0.38 |
| 197 | 5.68 | 33.84 | 4.42 | 26.70 | 250 | 4.96 | 33.85 | 26.79 | 129 | 0.44 |
| 221 | 5.19 | 33.84 | 3.65 | 26.75 | 300 | 4.41 | 33.87 | 26.87 | 122 | 0.51 |
| 246 | 5.00 | 33.85 | 3.51 | 26.79 | 400 | 3.95 | 34.00 | 27.02 | 109 | 0.62 |
| 295 | 4.45 | 33.86 | 3.35 | 26.86 | 500 | 3.82 | 34.11 | 27.12 | 100 | 0.73 |
| 379 | 4.01 | 33.97 | 2.27 | 26.99 | 600 | 3.69 | 34.20 | 27.21 | 92 | 0.83 |
| 474 | 3.86 | 34.08 | 1.61 | 27.09 | 700 | 3.47 | 34.27 | 27.28 | 86 | 0.92 |
| 569 | 3.74 | 34.18 | 1.00 | 27.18 | 800 | 3.24 | 34.31 | 27.33 | 81 | 1.00 |
| 640 758 | 3.32 | 34.29 | 0.57 | 27.31 | 1000 | 2.95 | 34.38 | 27.42 | 74 | 1.16 |
| 948 | 3.03 | 34.36 | 0.48 | 27.39 | 1200 | 2.66 | 34.44 | 27.49 | 67 | 1.30 |
| 1421 | 2.36 | 34.49 | 1.03 | 27.56 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CNAV WHITETHROAT; July 5, 1958; 0020 GCT; 48°54'N, 154°30'W; sounding, 2000 fm; wind, 140°, 7 kt; weather, missing; sea, slight. 13

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.70 | 32.88 | 6.61 | 25.37 | 0 | 9.70 | 32.88 | 25.37 | 262 | 0.00 |
| 10 | 8.95 | 32.89 | 6.84 | 25.49 | 10 | 8.95 | 32.89 | 25.49 | 250 | 0.03 |
| 25 | 8.56 | 32.91 | 6.98 | 25.57 | 20 | 8.59 | 32.90 | 25.56 | 244 | 0.05 |
| 50 | 5.93 | 32.96 | 7.15 | 25.97 | 30 | 8.23 | 32.92 | 25.63 | 237 | 0.08 |
| 75 | 5.13 | 33.01 | 6.90 | 26.10 | 50 | 5.93 | 32.96 | 25.97 | 205 | 0.12 |
| 100 | 4.76 | 33.35 | 5.84 | 26.42 | 75 | 5.13 | 33.01 | 26.10 | 192 | 0.17 |
| 125 | 4.37 | 33.69 | 4.55 | 26.73 | 100 | 4.76 | 33.35 | 26.42 | 163 | 0.21 |
| 150 | 4.00 | 33.73 | 4.14 | 26.80 | 150 | 4.00 | 33.73 | 26.80 | 127 | 0.29 |
| 175 | 3.82 | 33.77 | 3.62 | 26.85 | 200 | 3.60 | 33.81 | 26.90 | 117 | 0.35 |
| 200 | 3.60 | 33.81 | 2.96 | 26.90 | 250 | 3.59 | 33.87 | 26.95 | 113 | 0.41 |
| 225 | 3.61 | 33.85 | 2.46 | 26.93 | 300 | 3.57 | 33.95 | 27.01 | 108 | 0.46 |
| 250 | 3.59 | 33.87 | 2.20 | 26.95 | 400 | 3.63 | 34.05 | 27.09 | 101 | 0.57 |
| 300 | 3.57 | 33.95 | 1.62 | 27.01 | 500 | 3.65 | 34.16 | 27.17 | 94 | 0.67 |
| 398 | 3.63 | 34.05 | 1.13 | 27.09 | 600 | 3.56 | 34.24 | 27.25 | 88 | 0.76 |
| 498 | 3.65 | 34.15 | 0.84 | 27.17 | 700 | 3.36 | 34.30 | 27.31 | 82 | 0.84 |
| 597 | 3.56 | 34.24 | 0.68 | 27.25 | 800 | 3.08 | 34.32 | 27.36 | 78 | 0.92 |
| 796 | 3.09 | 34.32 | 0.58 | 27.36 | 1000 | 2.76 | 34.40 | 27.45 | 70 | 1.08 |
| 995 | 2.77 | 34.40 | 0.64 | 27.45 | 1200 | 2.51 | 34.46 | 27.52 | 64 | 1.21 |
| 1493 | 2.27 | 34.52 | 0.84 | 27.59 | 1500 | 2.26 | 34.52 | 27.59 | 58 | 1.40 |
| 1990 | 1.94 | 34.58 | 1.29 | 27.66 | | | | | | |

CNAV WHITETHROAT; July 5, 1958; 1130 GCT; 49°55'N, 156°12'W; sounding, missing; wind, 140°, 5 kt; weather, overcast; sea, slight. 14

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.00 | 32.85 | 6.22 | 25.30 | 0 | 10.00 | 32.85 | 25.30 | 268 | 0.00 |
| 10 | 8.90 | 32.84 | 6.80 | 25.46 | 10 | 8.90 | 32.84 | 25.46 | 253 | 0.03 |
| 25 | 8.44 | 32.85 | 6.60 | 25.54 | 20 | 8.43 | 32.84 | 25.54 | 246 | 0.05 |
| 50 | 5.51 | 32.97 | 4.88 | 26.03 | 30 | 8.07 | 32.86 | 25.61 | 239 | 0.08 |
| 75 | 4.97 | 33.07 | - | 26.17 | 50 | 5.51 | 32.97 | 26.03 | 199 | 0.12 |
| 100 | 4.63 | 33.36 | 5.01 | 26.44 | 75 | 4.97 | 33.07 | 26.17 | 186 | 0.17 |
| 125 | 3.94 | 33.63 | 2.65 | 26.72 | 100 | 4.63 | 33.36 | 26.44 | 161 | 0.21 |
| 150 | 3.65 | 33.71 | 3.36 | 26.82 | 150 | 3.65 | 33.71 | 26.82 | 125 | 0.28 |
| 175 | 3.60 | 33.78 | 2.33 | 26.88 | 200 | 3.57 | 33.83 | 26.92 | 115 | 0.34 |
| 200 | 3.57 | 33.83 | 2.06 | 26.92 | 250 | 3.59 | 33.90 | 26.97 | 111 | 0.40 |
| 225 | 3.59 | 33.87 | 1.04 | 26.95 | 300 | 3.63 | 33.98 | 27.04 | 106 | 0.46 |
| 250 | 3.59 | 33.90 | 1.59 | 26.97 | 400 | 3.61 | 34.08 | 27.12 | 99 | 0.56 |
| 300 | 3.63 | 33.98 | 0.92 | 27.04 | 500 | 3.51 | 34.17 | 27.20 | 92 | 0.66 |
| 400 | 3.61 | 34.08 | 0.65 | 27.12 | 600 | 3.29 | 34.25 | 27.28 | 84 | 0.74 |
| 500 | 3.51 | 34.17 | 0.65 | 27.20 | 700 | 3.12 | 34.30 | 27.34 | 79 | 0.83 |
| 600 | 3.29 | 34.25 | 0.29 | 27.28 | 800 | 2.99 | 34.33 | 27.37 | 77 | 0.91 |
| 800 | 2.99 | 34.33 | 0.31 | 27.37 | 1000 | 2.71 | 34.40 | 27.45 | 70 | 1.05 |
| 1000 | 2.71 | 34.40 | 0.36 | 27.45 | 1200 | 2.47 | 34.46 | 27.52 | 64 | 1.19 |
| 1500 | 2.19 | 34.52 | 0.99 | 27.59 | 1500 | 2.19 | 34.52 | 27.59 | 58 | 1.37 |

CNAV WHITETHROAT; July 6, 1958; 0028 GCT; 50°54'N, 157°50'W; sounding, 2000 fm; wind, 140°, 12 kt; weather, overcast; sea, slight. 15

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.10 | 32.77 | 6.97 | 25.38 | 0 | 9.10 | 32.77 | 25.38 | 261 | 0.00 |
| 10 | 8.36 | 32.75 | 7.04 | 25.48 | 10 | 8.36 | 32.75 | 25.48 | 252 | 0.03 |
| 25 | 7.77 | 32.78 | 7.13 | 25.58 | 20 | 7.90 | 32.76 | 25.55 | 244 | 0.05 |
| 50 | 6.09 | 32.80 | 7.29 | 25.83 | 30 | 7.50 | 32.78 | 25.63 | 237 | 0.08 |
| 75 | 4.81 | 32.85 | 7.12 | 26.01 | 50 | 6.09 | 32.80 | 25.83 | 218 | 0.12 |
| 100 | 3.92 | 33.56 | 3.51 | 26.67 | 75 | 4.81 | 32.85 | 26.01 | 201 | 0.17 |
| 125 | 3.82 | 33.76 | 2.49 | 26.84 | 100 | 3.92 | 33.56 | 26.67 | 138 | 0.22 |
| 150 | 3.63 | 33.82 | 2.09 | 26.91 | 150 | 3.63 | 33.82 | 26.91 | 117 | 0.28 |
| 175 | 3.72 | 33.86 | 1.71 | 26.93 | 200 | 3.67 | 33.90 | 26.97 | 112 | 0.34 |
| 200 | 3.67 | 33.90 | 1.41 | 26.97 | 250 | 3.70 | 33.97 | 27.02 | 107 | 0.39 |
| 225 | 3.69 | 33.95 | 1.12 | 27.00 | 300 | 3.75 | 34.04 | 27.07 | 103 | 0.45 |
| 250 | 3.70 | 33.97 | 0.99 | 27.02 | 400 | 3.58 | 34.13 | 27.16 | 95 | 0.54 |
| 300 | 3.75 | 34.04 | 0.54 | 27.07 | 500 | 3.51 | 34.20 | 27.22 | 89 | 0.64 |
| 400 | 3.58 | 34.13 | 0.58 | 27.16 | 600 | 3.29 | 34.26 | 27.29 | 84 | 0.73 |
| 500 | 3.51 | 34.20 | 0.44 | 27.22 | 700 | 3.11 | 34.30 | 27.34 | 79 | 0.81 |
| 600 | 3.29 | 34.26 | 0.30 | 27.29 | 800 | 2.96 | 34.34 | 27.39 | 75 | 0.89 |
| 800 | 2.96 | 34.34 | 0.30 | 27.39 | 1000 | 2.67 | 34.41 | 27.46 | 69 | 1.03 |
| 1000 | 2.67 | 34.41 | 0.57 | 27.46 | 1200 | 2.43 | 34.46 | 27.52 | 63 | 1.17 |
| 1500 | 2.15 | 34.52 | 0.94 | 27.60 | 1500 | 2.15 | 34.52 | 27.60 | 57 | 1.35 |
| 2000 | 1.87 | 34.59 | 1.51 | 27.67 | 2000 | 1.87 | 34.59 | 27.67 | 51 | 1.62 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 16 | CNAV WHITETHROAT; July 6, 1958; 1149 GCT; 51°50'N, 159°35'W; sounding, missing; wind, 140°, 15 kt; weather, overcast; sea, moderate. | | | | | | | | | |
| 0 | 8.20 | 32.78 | 6.93 | 25.53 | 0 | 8.20 | 32.78 | 25.53 | 246 | 0.00 |
| 10 | 7.97 | 32.71 | 7.11 | 25.51 | 10 | 7.97 | 32.71 | 25.51 | 249 | 0.02 |
| 24 | 7.97 | 32.72 | 7.12 | 25.51 | 20 | 7.93 | 32.70 | 25.50 | 249 | 0.05 |
| 49 | 6.59 | 32.74 | 7.24 | 25.72 | 30 | 7.80 | 32.72 | 25.54 | 246 | 0.08 |
| 73 | 5.15 | 32.78 | 7.73 | 25.92 | 50 | 6.53 | 32.75 | 25.73 | 228 | 0.12 |
| 97 | 3.86 | 33.26 | 4.67 | 26.44 | 75 | 5.04 | 32.80 | 25.95 | 207 | 0.18 |
| 121 | 4.01 | 33.75 | 2.04 | 26.81 | 100 | 3.80 | 33.32 | 26.49 | 156 | 0.22 |
| 145 | 3.94 | 33.86 | 2.35 | 26.91 | 150 | 3.93 | 33.88 | 26.92 | 115 | 0.29 |
| 170 | 3.88 | 33.90 | 1.30 | 26.95 | 200 | 3.85 | 33.95 | 26.99 | 109 | 0.35 |
| 196 | 3.85 | 33.95 | 1.14 | 26.99 | 250 | 3.76 | 34.02 | 27.05 | 104 | 0.40 |
| 218 | 3.83 | 33.98 | 0.75 | 27.01 | 300 | 3.74 | 34.08 | 27.10 | 100 | 0.45 |
| 242 | 3.77 | 34.01 | 0.84 | 27.04 | 400 | 3.63 | 34.15 | 27.17 | 93 | 0.55 |
| 291 | 3.75 | 34.07 | 0.53 | 27.09 | 500 | 3.50 | 34.21 | 27.23 | 89 | 0.64 |
| 382 | 3.65 | 34.14 | 0.80 | 27.16 | 600 | 3.32 | 34.27 | 27.29 | 83 | 0.73 |
| 477 | 3.54 | 34.20 | 0.78 | 27.22 | 700 | 3.15 | 34.32 | 27.35 | 78 | 0.81 |
| 572 | 3.37 | 34.25 | 0.77 | 27.27 | 800 | 2.98 | 34.37 | 27.41 | 74 | 0.89 |
| 762 | 3.04 | 34.35 | 0.72 | 27.39 | 1000 | 2.69 | 34.43 | 27.48 | 67 | 1.03 |
| 954 | 2.75 | 34.41 | 0.76 | 27.46 | 1200 | 2.43 | 34.48 | 27.54 | 62 | 1.16 |
| 1430 | 2.19 | 34.53 | 1.27 | 27.60 | | | | | | |
| 17 | CNAV WHITETHROAT; July 7, 1958; 0013 GCT; 52°42'N, 161°35'W; sounding, 2000 fm; wind, 220°, 10 kt; weather, overcast; sea, moderate. | | | | | | | | | |
| 0 | 8.30 | 32.71 | 7.00 | 25.45 | 0 | 8.30 | 32.71 | 25.45 | 254 | 0.00 |
| 10 | 8.27 | 32.71 | 7.11 | 25.46 | 10 | 8.27 | 32.71 | 25.46 | 253 | 0.02 |
| 24 | 8.07 | 32.71 | 7.37 | 25.49 | 20 | 8.15 | 32.71 | 25.48 | 252 | 0.05 |
| 49 | 5.45 | 32.82 | 7.16 | 25.92 | 30 | 7.71 | 32.73 | 25.55 | 244 | 0.08 |
| 73 | 4.20 | 33.10 | 5.64 | 26.28 | 50 | 5.37 | 32.83 | 25.94 | 208 | 0.12 |
| 98 | 4.00 | 33.55 | 3.17 | 26.65 | 75 | 4.14 | 33.13 | 26.31 | 173 | 0.17 |
| 122 | 4.13 | 33.87 | 1.39 | 26.90 | 100 | 4.00 | 33.58 | 26.68 | 138 | 0.21 |
| 146 | 4.11 | 33.95 | 1.08 | 26.96 | 150 | 4.11 | 33.95 | 26.97 | 111 | 0.27 |
| 171 | 4.09 | 33.98 | 1.06 | 26.99 | 200 | 4.01 | 34.02 | 27.03 | 106 | 0.33 |
| 195 | 4.02 | 34.01 | 0.72 | 27.02 | 250 | 3.92 | 34.08 | 27.08 | 101 | 0.38 |
| 219 | 3.97 | 34.04 | 0.72 | 27.05 | 300 | 3.84 | 34.11 | 27.12 | 98 | 0.43 |
| 244 | 3.93 | 34.07 | 0.43 | 27.08 | 400 | 3.70 | 34.18 | 27.19 | 92 | 0.52 |
| 292 | 3.85 | 34.11 | 0.41 | 27.11 | 500 | 3.47 | 34.25 | 27.27 | 85 | 0.61 |
| 392 | 3.71 | 34.18 | 0.44 | 27.18 | 600 | 3.29 | 34.30 | 27.32 | 80 | 0.70 |
| 490 | 3.49 | 34.25 | 0.43 | 27.26 | 700 | 3.11 | 34.35 | 27.37 | 76 | 0.78 |
| 588 | 3.31 | 34.30 | 0.47 | 27.32 | 800 | 2.95 | 34.38 | 27.42 | 72 | 0.85 |
| 784 | 2.97 | 34.38 | 0.53 | 27.41 | 1000 | 2.68 | 34.43 | 27.48 | 67 | 0.99 |
| 980 | 2.71 | 34.43 | 0.54 | 27.48 | 1200 | 2.43 | 34.48 | 27.54 | 62 | 1.12 |
| 1472 | 2.11 | 34.55 | 1.11 | 27.63 | 1500 | 2.09 | 34.56 | 27.63 | 54 | 1.30 |
| 1962 | 1.83 | 34.61 | 1.67 | 27.70 | | | | | | |
| 18 | CNAV WHITETHROAT; July 7, 1958; 1129 GCT; 54°02'N, 163°34'W; sounding, 52 fm; wind, 220°, 15 kt; weather, overcast; sea, moderate. | | | | | | | | | |
| 0 | 8.60 | 32.15 | 6.90 | 24.97 | 0 | 8.60 | 32.15 | 24.97 | 299 | 0.00 |
| 10 | 8.53 | 32.16 | 6.99 | 24.99 | 10 | 8.53 | 32.16 | 24.99 | 298 | 0.03 |
| 20 | 7.97 | 32.14 | 6.85 | 25.06 | 20 | 7.97 | 32.14 | 25.06 | 292 | 0.06 |
| 30 | 6.15 | 32.17 | 6.70 | 25.33 | 30 | 6.15 | 32.17 | 25.33 | 266 | 0.09 |
| 40 | 5.97 | 32.23 | 6.63 | 25.39 | 50 | 5.62 | 32.27 | 25.47 | 253 | 0.14 |
| 50 | 5.62 | 32.27 | 6.44 | 25.47 | 75 | 5.61 | 32.39 | 25.56 | 244 | 0.20 |
| 60 | 5.61 | 32.32 | 6.38 | 25.51 | | | | | | |
| 70 | 5.60 | 32.38 | 6.32 | 25.55 | | | | | | |
| 80 | 5.63 | 32.39 | 6.24 | 25.56 | | | | | | |
| 90 | 5.60 | 32.42 | 6.33 | 25.59 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

19

CNAV WHITETHROAT; July 7, 1958; 1915 GCT; 54°24'N, 165°18'W; sounding, 100 fm; wind, missing; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.80 | 32.55 | 7.30 | 25.40 | 0 | 7.80 | 32.55 | 25.40 | 259 | 0.00 |
| 10 | 6.64 | 32.54 | 7.31 | 25.55 | 10 | 6.64 | 32.54 | 25.55 | 244 | 0.02 |
| 20 | 6.61 | 32.53 | 7.32 | 25.55 | 20 | 6.61 | 32.53 | 25.55 | 244 | 0.05 |
| 30 | 6.65 | 32.53 | 7.35 | 25.55 | 30 | 6.65 | 32.53 | 25.55 | 245 | 0.08 |
| 50 | 6.63 | 32.54 | 7.30 | 25.55 | 50 | 6.63 | 32.54 | 25.55 | 245 | 0.12 |
| 75 | 6.45 | 32.60 | 6.94 | 25.63 | 75 | 6.45 | 32.60 | 25.63 | 238 | 0.18 |
| 100 | 5.83 | 32.76 | 6.33 | 25.83 | 100 | 5.83 | 32.76 | 25.83 | 219 | 0.24 |
| 125 | 5.23 | 32.90 | 6.03 | 26.01 | 150 | 5.27 | 32.91 | 26.01 | 202 | 0.35 |
| 150 | 5.27 | 32.91 | 5.98 | 26.01 | | | | | | |

20

CNAV WHITETHROAT; July 8, 1958; 0850 GCT; 54°17'N, 166°20'W; sounding, 440 fm; wind, missing; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.60 | 32.73 | 7.31 | 25.57 | 0 | 7.60 | 32.73 | 25.57 | 242 | 0.00 |
| 10 | 7.41 | 32.71 | 7.37 | 25.58 | 10 | 7.41 | 32.71 | 25.58 | 242 | 0.02 |
| 24 | 6.05 | 32.97 | 6.48 | 25.97 | 20 | 6.57 | 32.86 | 25.81 | 220 | 0.05 |
| 48 | 5.63 | 33.00 | 5.84 | 26.04 | 30 | 5.72 | 33.03 | 26.05 | 197 | 0.07 |
| 71 | 5.45 | 33.02 | 5.44 | 26.08 | 50 | 5.61 | 33.00 | 26.05 | 198 | 0.11 |
| 95 | 5.31 | 33.07 | 5.35 | 26.13 | 75 | 5.42 | 33.03 | 26.09 | 194 | 0.16 |
| 119 | 4.92 | 33.13 | 5.43 | 26.22 | 100 | 5.25 | 33.08 | 26.15 | 188 | 0.21 |
| 142 | 4.80 | 33.19 | 5.44 | 26.28 | 150 | 4.76 | 33.21 | 26.30 | 174 | 0.30 |
| 166 | 4.66 | 33.25 | 5.29 | 26.35 | 200 | 4.21 | 33.28 | 26.42 | 163 | 0.38 |
| 190 | 4.26 | 33.25 | 5.43 | 26.39 | 250 | 3.42 | 33.39 | 26.59 | 147 | 0.46 |
| 213 | 4.24 | 33.34 | 4.86 | 26.46 | 300 | 3.69 | 33.53 | 26.67 | 140 | 0.53 |
| 236 | 3.60 | 33.37 | 5.33 | 26.55 | 400 | 3.80 | 33.79 | 26.87 | 122 | 0.66 |
| 284 | 3.67 | 33.48 | 4.50 | 26.64 | 500 | 3.61 | 33.98 | 27.04 | 107 | 0.78 |
| 376 | 3.81 | 33.73 | 2.84 | 26.82 | 600 | 3.41 | 34.12 | 27.17 | 95 | 0.88 |
| 469 | 3.66 | 33.93 | - | 26.99 | | | | | | |
| 562 | 3.49 | 34.07 | 1.09 | 27.12 | | | | | | |
| 656 | 3.28 | 34.18 | 0.86 | 27.23 | | | | | | |

21

CNAV WHITETHROAT; July 8, 1958; 1720 GCT; 54°49'N, 167°52'W; sounding, 800 fm; wind, 220°, 10 kt; weather, drizzle; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.90 | 32.41 | 7.19 | 25.28 | 0 | 7.90 | 32.41 | 25.28 | 270 | 0.00 |
| 10 | 7.91 | 32.72 | 7.22 | 25.52 | 10 | 7.91 | 32.72 | 25.52 | 248 | 0.03 |
| 25 | 7.34 | 32.79 | 7.30 | 25.66 | 20 | 7.61 | 32.82 | 25.64 | 236 | 0.05 |
| 50 | 4.33 | 33.11 | 6.31 | 26.27 | 30 | 6.94 | 32.84 | 25.75 | 226 | 0.07 |
| 75 | 3.99 | 33.17 | 6.23 | 26.36 | 50 | 4.33 | 33.11 | 26.27 | 176 | 0.11 |
| 100 | 3.75 | 33.22 | 6.07 | 26.42 | 75 | 3.99 | 33.17 | 26.36 | 168 | 0.16 |
| 125 | 3.83 | 33.32 | 5.51 | 26.49 | 100 | 3.75 | 33.22 | 26.42 | 162 | 0.20 |
| 150 | 3.53 | 33.33 | 5.38 | 26.53 | 150 | 3.53 | 33.33 | 26.53 | 152 | 0.28 |
| 175 | 3.51 | 33.37 | 5.30 | 26.56 | 200 | 3.67 | 33.45 | 26.61 | 145 | 0.35 |
| 200 | 3.67 | 33.45 | 5.24 | 26.61 | 250 | 3.83 | 33.61 | 26.72 | 135 | 0.42 |
| 225 | 3.74 | 33.54 | 4.16 | 26.67 | 300 | 3.81 | 33.76 | 26.84 | 124 | 0.49 |
| 250 | 3.83 | 33.61 | 3.46 | 26.72 | 400 | 3.66 | 33.95 | 27.01 | 109 | 0.61 |
| 300 | 3.81 | 33.76 | 2.60 | 26.84 | 500 | 3.51 | 34.04 | 27.09 | 102 | 0.71 |
| 395 | 3.67 | 33.94 | 1.62 | 27.00 | 600 | 3.34 | 34.14 | 27.19 | 93 | 0.81 |
| 494 | 3.52 | 34.03 | 1.20 | 27.09 | 700 | 3.19 | 34.21 | 27.26 | 87 | 0.90 |
| 592 | 3.35 | 34.13 | 0.86 | 27.18 | 800 | 3.06 | 34.27 | 27.32 | 82 | 0.99 |
| 790 | 3.08 | 34.27 | 0.62 | 27.32 | 1000 | 2.69 | 34.38 | 27.44 | 71 | 1.14 |
| 986 | 2.71 | 34.38 | 0.63 | 27.44 | 1200 | 2.45 | 34.45 | 27.51 | 64 | 1.28 |
| 1380 | 2.36 | 34.47 | 0.71 | 27.54 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 22 | CNAV WHITETHROAT; July 9, 1958; 0226 GCT; 55°21'N, 169°28'W; sounding, 1350 fm; wind, variable, 3 kt; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | 7.50 | 32.63 | 7.30 | 25.50 | 0 | 7.50 | 32.63 | 25.50 | 249 | 0.00 |
| 10 | 7.55 | 32.56 | 7.08 | 25.45 | 10 | 7.55 | 32.56 | 25.45 | 254 | 0.02 |
| 25 | 6.66 | 32.76 | 6.19 | 25.72 | 20 | 7.09 | 32.66 | 25.59 | 241 | 0.05 |
| 50 | 5.14 | 32.89 | 5.72 | 26.01 | 30 | 6.36 | 32.81 | 25.80 | 221 | 0.07 |
| 75 | 4.52 | 32.96 | 5.77 | 26.14 | 50 | 5.14 | 32.89 | 26.01 | 201 | 0.12 |
| 100 | 4.10 | 33.08 | 6.16 | 26.27 | 75 | 4.52 | 32.96 | 26.14 | 189 | 0.16 |
| 125 | 3.91 | 33.13 | 5.90 | 26.33 | 100 | 4.10 | 33.08 | 26.27 | 177 | 0.21 |
| 150 | 3.73 | 33.18 | 5.90 | 26.39 | 150 | 3.73 | 33.18 | 26.39 | 166 | 0.30 |
| 175 | 3.57 | 33.23 | 5.97 | 26.44 | 200 | 3.43 | 33.27 | 26.49 | 157 | 0.38 |
| 200 | 3.43 | 33.27 | 6.08 | 26.49 | 250 | 3.39 | 33.36 | 26.57 | 149 | 0.46 |
| 225 | 3.31 | 33.30 | 5.91 | 26.52 | 300 | 3.67 | 33.55 | 26.69 | 138 | 0.53 |
| 250 | 3.39 | 33.36 | 5.45 | 26.57 | 400 | 3.78 | 33.87 | 26.93 | 116 | 0.66 |
| 300 | 3.67 | 33.55 | 3.84 | 26.69 | 500 | 3.58 | 34.01 | 27.06 | 105 | 0.77 |
| 388 | 3.78 | 33.84 | 2.25 | 26.91 | 600 | 3.38 | 34.00 | 27.07 | 104 | 0.87 |
| 485 | 3.61 | 34.00 | 1.37 | 27.05 | 700 | 3.21 | 34.05 | 27.13 | 99 | 0.98 |
| 582 | 3.41 | 34.00 | 1.14 | 27.07 | 800 | 3.07 | 34.14 | 27.21 | 92 | 1.07 |
| 776 | 3.11 | 34.11 | 0.81 | 27.19 | 1000 | 2.72 | 34.38 | 27.44 | 71 | 1.24 |
| 970 | 2.77 | 34.35 | 0.94 | 27.41 | 1200 | 2.45 | 34.51 | 27.56 | 60 | 1.37 |
| 1454 | 2.19 | 34.51 | 1.05 | 27.59 | 1500 | 2.15 | 34.52 | 27.60 | 57 | 1.55 |
| 1937 | 1.87 | 34.59 | 1.67 | 27.68 | | | | | | |
| 23 | CNAV WHITETHROAT; July 9, 1958; 1117 GCT; 55°52'N, 171°00'W; sounding, 1800 fm; wind, 270°, 10 kt; weather, overcast; sea, smooth. | | | | | | | | | |
| 0 | 7.90 | 32.79 | 7.36 | 25.58 | 0 | 7.90 | 32.79 | 25.58 | 242 | 0.00 |
| 10 | 7.85 | 32.79 | 7.39 | 25.58 | 10 | 7.85 | 32.79 | 25.58 | 241 | 0.02 |
| 24 | 6.22 | 32.96 | 7.00 | 25.94 | 20 | 6.87 | 32.89 | 25.80 | 221 | 0.05 |
| 49 | 4.51 | 33.14 | 7.15 | 26.28 | 30 | 5.67 | 33.02 | 26.05 | 197 | 0.07 |
| 73 | 3.76 | 33.20 | 6.57 | 26.40 | 50 | 4.46 | 33.15 | 26.29 | 175 | 0.10 |
| 98 | 3.43 | 33.24 | 6.53 | 26.46 | 75 | 3.72 | 33.20 | 26.41 | 163 | 0.15 |
| 123 | 3.21 | 33.28 | 6.45 | 26.52 | 100 | 3.41 | 33.24 | 26.47 | 158 | 0.19 |
| 147 | 3.11 | 33.30 | 6.40 | 26.54 | 150 | 3.12 | 33.30 | 26.54 | 151 | 0.27 |
| 172 | 3.38 | 33.38 | 5.51 | 26.58 | 200 | 3.67 | 33.49 | 26.64 | 142 | 0.34 |
| 196 | 3.64 | 33.48 | 4.57 | 26.64 | 250 | 3.80 | 33.71 | 26.80 | 127 | 0.41 |
| 221 | 3.73 | 33.55 | 3.91 | 26.68 | 300 | 3.79 | 33.84 | 26.91 | 118 | 0.47 |
| 245 | 3.79 | 33.69 | 3.33 | 26.79 | 400 | 3.51 | 34.06 | 27.11 | 99 | 0.58 |
| 294 | 3.80 | 33.83 | 2.40 | 26.90 | 500 | 3.37 | 34.15 | 27.20 | 92 | 0.68 |
| 345 | 3.64 | 33.96 | 1.52 | 27.02 | 600 | 3.24 | 34.21 | 27.26 | 87 | 0.77 |
| 531 | 3.35 | 34.15 | 0.80 | 27.20 | 700 | 3.09 | 34.28 | 27.33 | 80 | 0.85 |
| 970 | 2.68 | 34.39 | 0.58 | 27.45 | 800 | 2.94 | 34.33 | 27.38 | 76 | 0.93 |
| 1413 | 2.52 | 34.42 | 0.65 | 27.49 | 1000 | 2.65 | 34.40 | 27.46 | 69 | 1.08 |
| | | | | | 1200 | 2.53 | 34.43 | 27.49 | 67 | 1.21 |
| 24 | CNAV WHITETHROAT; July 10, 1958; 1925 GCT; 55°00'N, 171°00'W; sounding, 1800 fm; wind, 270°, 20 kt; weather, overcast; sea, rough. | | | | | | | | | |
| 0 | 8.20 | 32.94 | 7.07 | 25.65 | 0 | 8.20 | 32.94 | 25.65 | 235 | 0.00 |
| 10 | 7.47 | 32.95 | 6.87 | 25.76 | 10 | 7.47 | 32.95 | 25.76 | 224 | 0.02 |
| 25 | 6.89 | 32.98 | 6.88 | 25.87 | 20 | 7.01 | 32.97 | 25.84 | 217 | 0.04 |
| 50 | 5.11 | 33.09 | 6.29 | 26.17 | 30 | 6.62 | 33.00 | 25.92 | 210 | 0.07 |
| 75 | 4.33 | 33.22 | 5.44 | 26.36 | 50 | 5.11 | 33.09 | 26.17 | 186 | 0.11 |
| 100 | 4.11 | 33.27 | 5.32 | 26.42 | 75 | 4.33 | 33.22 | 26.36 | 168 | 0.15 |
| 125 | 3.83 | 33.31 | 4.79 | 26.49 | 100 | 4.11 | 33.27 | 26.42 | 162 | 0.19 |
| 149 | 3.79 | 33.35 | 4.35 | 26.52 | 150 | 3.79 | 33.36 | 26.52 | 153 | 0.27 |
| 174 | 3.74 | 33.42 | 4.28 | 26.58 | 200 | 4.00 | 33.54 | 26.65 | 142 | 0.35 |
| 199 | 4.00 | 33.54 | 4.01 | 26.65 | 250 | 3.95 | 33.64 | 26.74 | 134 | 0.42 |
| 223 | 3.99 | 33.61 | 3.51 | 26.70 | 300 | 3.84 | 33.77 | 26.85 | 123 | 0.48 |
| 248 | 3.95 | 33.64 | 3.43 | 26.73 | 400 | 3.72 | 33.94 | 27.00 | 110 | 0.60 |
| 298 | 3.84 | 33.77 | 2.73 | 26.85 | 500 | 3.54 | 34.06 | 27.11 | 100 | 0.71 |
| 378 | 3.75 | 33.91 | 1.75 | 26.97 | 600 | 3.43 | 34.17 | 27.21 | 92 | 0.80 |
| 473 | 3.58 | 34.03 | 1.18 | 27.08 | 700 | 3.28 | 34.23 | 27.27 | 86 | 0.89 |
| 567 | 3.47 | 34.14 | 1.06 | 27.18 | 800 | 3.12 | 34.26 | 27.31 | 83 | 0.98 |
| 756 | 3.19 | 34.24 | 0.77 | 27.29 | 1000 | 2.83 | 34.35 | 27.41 | 74 | 1.14 |
| 945 | 2.91 | 34.33 | 0.72 | 27.38 | 1200 | 2.57 | 34.43 | 27.49 | 67 | 1.28 |
| 1418 | 2.30 | 34.49 | 0.90 | 27.56 | 1500 | 2.22 | 34.51 | 27.58 | 59 | 1.47 |
| 1890 | 1.92 | 34.59 | 1.42 | 27.67 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

25

CNAV WHITETHROAT; July 10, 1958; 0523 GCT; 53°53'N, 171°00'W; sounding, 1150 fm; wind, 320°, 10 kt; weather, overcast; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.80 | 32.95 | 7.11 | 25.71 | 0 | 7.80 | 32.95 | 25.71 | 229 | 0.00 |
| 10 | 7.61 | 32.95 | 7.34 | 25.74 | 10 | 7.61 | 32.95 | 25.74 | 226 | 0.02 |
| 25 | 6.91 | 33.00 | 7.37 | 25.88 | 20 | 7.20 | 32.98 | 25.82 | 219 | 0.04 |
| 50 | 4.35 | 33.19 | 6.04 | 26.33 | 30 | 6.54 | 33.03 | 25.95 | 206 | 0.07 |
| 75 | 3.76 | 33.23 | 6.01 | 26.42 | 50 | 4.35 | 33.19 | 26.33 | 170 | 0.10 |
| 100 | 3.45 | 33.26 | 5.94 | 26.48 | 75 | 3.76 | 33.23 | 26.42 | 162 | 0.15 |
| 125 | 3.23 | 33.31 | 5.85 | 26.54 | 100 | 3.45 | 33.26 | 26.48 | 156 | 0.19 |
| 150 | 3.29 | 33.36 | 5.84 | 26.57 | 150 | 3.29 | 33.36 | 26.57 | 148 | 0.26 |
| 175 | 3.64 | 33.46 | 4.89 | 26.62 | 200 | 3.91 | 33.59 | 26.70 | 137 | 0.34 |
| 200 | 3.91 | 33.59 | 3.94 | 26.70 | 250 | 3.95 | 33.67 | 26.76 | 131 | 0.40 |
| 225 | 3.94 | 33.64 | 3.57 | 26.73 | 300 | 3.87 | 33.79 | 26.86 | 122 | 0.47 |
| 250 | 3.95 | 33.67 | 3.14 | 26.76 | 400 | 3.67 | 33.89 | 26.96 | 114 | 0.59 |
| 300 | 3.87 | 33.79 | 2.68 | 26.86 | 500 | 3.54 | 34.02 | 27.08 | 103 | 0.70 |
| 393 | 3.68 | 33.88 | 2.00 | 26.95 | 600 | 3.38 | 34.11 | 27.16 | 96 | 0.80 |
| 491 | 3.55 | 34.01 | 1.44 | 27.07 | 700 | 3.27 | 34.18 | 27.23 | 90 | 0.89 |
| 590 | 3.39 | 34.10 | 1.15 | 27.16 | 800 | 3.19 | 34.23 | 27.27 | 86 | 0.98 |
| 786 | 3.21 | 34.22 | 0.75 | 27.27 | 1000 | 2.92 | 34.32 | 27.37 | 78 | 1.14 |
| 982 | 2.95 | 34.31 | 0.59 | 27.37 | 1200 | 2.63 | 34.41 | 27.47 | 69 | 1.29 |
| 1473 | 2.19 | 34.50 | 0.87 | 27.58 | | | | | | |

26

CNAV WHITETHROAT; July 10, 1958; 0930 GCT; 53°30'N, 171°00'W; sounding, missing; wind, missing; weather, partly cloudy; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 33.06 | 7.01 | 25.85 | 0 | 7.50 | 33.06 | 25.85 | 216 | 0.00 |
| 10 | 7.21 | 33.06 | 7.26 | 25.88 | 10 | 7.21 | 33.06 | 25.88 | 213 | 0.02 |
| 25 | 5.94 | 33.13 | 7.21 | 26.11 | 20 | 6.47 | 33.09 | 26.01 | 201 | 0.04 |
| 49 | 4.82 | 33.17 | 7.26 | 26.27 | 30 | 5.61 | 33.15 | 26.16 | 187 | 0.06 |
| 73 | 3.40 | 33.25 | 6.94 | 26.47 | 50 | 4.77 | 33.17 | 26.28 | 176 | 0.10 |
| 98 | 3.03 | 33.28 | 6.80 | 26.54 | 75 | 3.33 | 33.25 | 26.48 | 156 | 0.14 |
| 122 | 2.95 | 33.32 | 6.55 | 26.57 | 100 | 3.01 | 33.29 | 26.54 | 151 | 0.18 |
| 146 | 3.34 | 33.42 | 5.39 | 26.62 | 150 | 3.40 | 33.44 | 26.63 | 143 | 0.25 |
| 171 | 3.67 | 33.55 | 4.27 | 26.69 | 200 | 3.82 | 33.60 | 26.71 | 135 | 0.32 |
| 195 | 3.79 | 33.58 | 3.85 | 26.70 | 250 | 3.90 | 33.70 | 26.79 | 129 | 0.39 |
| 219 | 3.93 | 33.67 | 3.49 | 26.76 | 300 | 3.82 | 33.79 | 26.86 | 122 | 0.45 |
| 244 | 3.91 | 33.69 | 3.30 | 26.78 | 400 | 3.74 | 33.92 | 26.97 | 112 | 0.57 |
| 292 | 3.83 | 33.78 | 2.65 | 26.85 | 500 | 3.59 | 34.06 | 27.10 | 101 | 0.68 |
| 388 | 3.75 | 33.90 | 2.20 | 26.96 | 600 | 3.42 | 34.13 | 27.18 | 94 | 0.78 |
| 486 | 3.61 | 34.04 | 1.48 | 27.09 | 700 | 3.25 | 34.20 | 27.25 | 88 | 0.87 |
| 582 | 3.45 | 34.12 | 1.20 | 27.16 | 800 | 3.07 | 34.27 | 27.32 | 82 | 0.96 |
| 778 | 3.11 | 34.26 | 0.82 | 27.30 | 1000 | 2.77 | 34.37 | 27.42 | 72 | 1.11 |
| 974 | 2.81 | 34.36 | 0.94 | 27.41 | 1200 | 2.52 | 34.44 | 27.50 | 66 | 1.25 |
| 1460 | 2.26 | 34.50 | 1.13 | 27.57 | | | | | | |

27

CNAV WHITETHROAT; July 10, 1958; 1520 GCT; 52°53'N, 171°40'W; sounding, 450 fm; wind, 180°, 12 kt; weather, shallow fog in patches; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 4.80 | 33.46 | 4.93 | 26.50 | 0 | 4.80 | 33.46 | 26.50 | 154 | 0.00 |
| 10 | 4.77 | 33.49 | 4.61 | 26.53 | 10 | 4.77 | 33.49 | 26.53 | 152 | 0.02 |
| 25 | 4.68 | 33.51 | 4.28 | 26.55 | 20 | 4.72 | 33.50 | 26.54 | 150 | 0.03 |
| 50 | 4.65 | 33.52 | 4.20 | 26.56 | 30 | 4.66 | 33.51 | 26.56 | 149 | 0.05 |
| 75 | 4.57 | 33.53 | 3.99 | 26.58 | 50 | 4.65 | 33.52 | 26.56 | 149 | 0.08 |
| 100 | 4.57 | 33.54 | 3.96 | 26.59 | 75 | 4.57 | 33.53 | 26.58 | 147 | 0.11 |
| 125 | 4.51 | 33.54 | 3.93 | 26.60 | 100 | 4.57 | 33.54 | 26.59 | 147 | 0.15 |
| 150 | 4.50 | 33.54 | 3.88 | 26.60 | 150 | 4.50 | 33.54 | 26.60 | 146 | 0.22 |
| 175 | 4.49 | 33.56 | 3.77 | 26.61 | 200 | 4.49 | 33.57 | 26.62 | 144 | 0.30 |
| 200 | 4.49 | 33.57 | 3.68 | 26.62 | 250 | 4.43 | 33.59 | 26.64 | 143 | 0.37 |
| 225 | 4.45 | 33.57 | 3.64 | 26.63 | 300 | 4.36 | 33.64 | 26.69 | 139 | 0.44 |
| 250 | 4.43 | 33.59 | 2.81 | 26.64 | 400 | 4.06 | 33.77 | 26.82 | 127 | 0.57 |
| 391 | 4.11 | 33.74 | 1.87 | 26.80 | 500 | 3.36 | 34.12 | 27.17 | 94 | 0.68 |
| 488 | 3.41 | 34.09 | 0.80 | 27.15 | | | | | | |
| 585 | 3.17 | 34.21 | - | 27.26 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **28** | CNAV WHITETHROAT; July 10, 1958; 1919 GCT; 52°40'N, 172°25'W; sounding, 200 fm; wind, missing; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 6.80 | 33.11 | 7.16 | 25.98 | 0 | 6.80 | 33.11 | 25.98 | 203 | 0.00 |
| 10 | 6.68 | 33.11 | 7.22 | 26.00 | 10 | 6.68 | 33.11 | 26.00 | 202 | 0.02 |
| 24 | 6.57 | 33.12 | 7.43 | 26.02 | 20 | 6.59 | 33.12 | 26.01 | 201 | 0.04 |
| 48 | 5.97 | 33.15 | 7.39 | 26.12 | 30 | 6.47 | 33.13 | 26.04 | 198 | 0.06 |
| 73 | 4.44 | 33.20 | 7.08 | 26.33 | 50 | 5.88 | 33.16 | 26.13 | 190 | 0.10 |
| 97 | 3.41 | 33.25 | 6.83 | 26.47 | 75 | 4.34 | 33.20 | 26.35 | 169 | 0.14 |
| 121 | 3.10 | 33.26 | 6.76 | 26.51 | 100 | 3.33 | 33.25 | 26.48 | 156 | 0.19 |
| 145 | 3.03 | 33.28 | 6.62 | 26.53 | 150 | 3.04 | 33.29 | 26.54 | 151 | 0.26 |
| 170 | 3.19 | 33.37 | 5.82 | 26.59 | 200 | 3.69 | 33.56 | 26.69 | 137 | 0.34 |
| 194 | 3.63 | 33.52 | 4.45 | 26.67 | 250 | 3.78 | 33.72 | 26.81 | 126 | 0.40 |
| 218 | 3.75 | 33.66 | 3.30 | 26.76 | | | | | | |
| 242 | 3.77 | 33.71 | 2.92 | 26.80 | | | | | | |
| 290 | 3.84 | 33.76 | 2.72 | 26.84 | | | | | | |
| **29** | CNAV WHITETHROAT; July 11, 1958; 0144 GCT; 52°27'N, 171°34'W; sounding, 285 fm; wind, missing; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 7.80 | 32.31 | 7.06 | 25.22 | 0 | 7.80 | 32.31 | 25.22 | 276 | 0.00 |
| 9 | 6.24 | 32.78 | 6.13 | 25.79 | 10 | 6.11 | 32.82 | 25.84 | 217 | 0.02 |
| 23 | 5.22 | 33.03 | 4.93 | 26.11 | 20 | 5.29 | 33.02 | 26.10 | 192 | 0.04 |
| 46 | 5.05 | 33.35 | 4.11 | 26.39 | 30 | 4.97 | 33.13 | 26.22 | 181 | 0.06 |
| 69 | 5.11 | 33.43 | 4.37 | 26.44 | 50 | 5.04 | 33.38 | 26.41 | 163 | 0.10 |
| 91 | 4.93 | 33.50 | 3.07 | 26.52 | 75 | 5.08 | 33.45 | 26.46 | 159 | 0.14 |
| 113 | 4.83 | 33.52 | 3.53 | 26.55 | 100 | 4.88 | 33.52 | 26.54 | 152 | 0.18 |
| 136 | 4.80 | 33.53 | 3.46 | 26.55 | 150 | 4.79 | 33.53 | 26.56 | 150 | 0.25 |
| 158 | 4.79 | 33.54 | 3.52 | 26.56 | 200 | 4.46 | 33.60 | 26.65 | 142 | 0.33 |
| 180 | 4.67 | 33.57 | 3.51 | 26.60 | 250 | 4.20 | 33.66 | 26.72 | 135 | 0.40 |
| 203 | 4.42 | 33.60 | 3.51 | 26.66 | 300 | 4.05 | 33.74 | 26.80 | 128 | 0.46 |
| 225 | 4.31 | 33.63 | 3.10 | 26.68 | | | | | | |
| 271 | 4.13 | 33.70 | 3.01 | 26.76 | | | | | | |
| 360 | 3.98 | 33.79 | 3.21 | 26.85 | | | | | | |
| **30** | CNAV WHITETHROAT; July 11, 1958; 0521 GCT; 52°05'N, 171°04'W; sounding, missing; wind, 090°, 25 kt; weather, moderate rain; sea, moderate. | | | | | | | | | |
| 0 | 8.00 | 32.10 | 7.06 | 25.02 | 0 | 8.00 | 32.10 | 25.02 | 295 | 0.00 |
| 10 | 7.97 | 32.21 | 6.73 | 25.11 | 10 | 7.97 | 32.21 | 25.11 | 286 | 0.03 |
| 24 | 7.97 | 32.21 | 6.43 | 25.11 | 20 | 7.96 | 32.23 | 25.13 | 285 | 0.06 |
| 48 | 7.79 | 32.55 | 6.00 | 25.40 | 30 | 7.95 | 32.26 | 25.15 | 283 | 0.09 |
| 72 | 5.51 | 32.71 | 5.69 | 25.82 | 50 | 7.68 | 32.57 | 25.43 | 256 | 0.14 |
| 95 | 5.07 | 32.98 | 5.33 | 26.09 | 75 | 5.36 | 32.74 | 25.87 | 215 | 0.20 |
| 119 | 4.62 | 33.22 | 4.91 | 26.33 | 100 | 4.98 | 33.03 | 26.14 | 189 | 0.25 |
| 142 | 5.03 | 33.49 | 3.61 | 26.50 | 150 | 5.08 | 33.57 | 26.55 | 151 | 0.34 |
| 166 | 5.05 | 33.69 | 2.93 | 26.66 | 200 | 4.89 | 33.78 | 26.75 | 133 | 0.41 |
| 190 | 4.93 | 33.75 | 2.73 | 26.71 | 250 | 4.48 | 33.92 | 26.90 | 119 | 0.47 |
| 213 | 4.85 | 33.84 | 2.21 | 26.80 | 300 | 4.24 | 34.00 | 26.99 | 110 | 0.53 |
| 237 | 4.59 | 33.89 | 1.89 | 26.86 | 400 | 3.98 | 34.08 | 27.08 | 103 | 0.64 |
| 285 | 4.31 | 33.98 | 1.30 | 26.96 | 500 | 3.78 | 34.14 | 27.15 | 96 | 0.74 |
| 395 | 3.99 | 34.07 | 0.81 | 27.07 | 600 | 3.58 | 34.21 | 27.22 | 91 | 0.83 |
| 494 | 3.79 | 34.14 | 0.52 | 27.15 | 700 | 3.40 | 34.26 | 27.28 | 85 | 0.92 |
| 988 | 2.90 | 34.38 | 0.11 | 27.42 | 800 | 3.22 | 34.31 | 27.33 | 81 | 1.00 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

31

CNAV WHITETHROAT; July 11, 1958; 1454 GCT; 51°00'N, 171°00'W; sounding, 3750 fm; wind, calm; weather, fog; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 32.60 | 6.94 | 25.49 | 0 | 7.50 | 32.60 | 25.49 | 250 | 0.00 |
| 10 | 7.55 | 32.61 | 7.01 | 25.48 | 10 | 7.55 | 32.61 | 25.48 | 251 | 0.02 |
| 25 | 6.85 | 32.64 | 7.02 | 25.60 | 20 | 7.19 | 32.63 | 25.55 | 245 | 0.05 |
| 50 | 4.95 | 32.79 | 6.78 | 25.96 | 30 | 6.54 | 32.66 | 25.66 | 234 | 0.07 |
| 75 | 4.30 | 33.03 | 5.84 | 26.21 | 50 | 4.95 | 32.79 | 25.96 | 206 | 0.12 |
| 100 | 4.17 | 33.46 | 3.76 | 26.56 | 75 | 4.30 | 33.03 | 26.21 | 182 | 0.17 |
| 125 | 4.11 | 33.58 | 2.98 | 26.67 | 100 | 4.17 | 33.46 | 26.56 | 149 | 0.21 |
| 150 | 4.33 | 33.78 | 2.02 | 26.81 | 150 | 4.33 | 33.78 | 26.81 | 126 | 0.28 |
| 175 | 4.26 | 33.86 | 1.56 | 26.87 | 200 | 4.21 | 33.91 | 26.92 | 116 | 0.34 |
| 200 | 4.21 | 33.91 | 1.18 | 26.92 | 250 | 4.00 | 34.01 | 27.02 | 107 | 0.40 |
| 225 | 4.13 | 34.02 | 0.83 | 27.01 | 300 | 3.89 | 34.07 | 27.08 | 101 | 0.45 |
| 250 | 4.00 | 34.01 | 0.69 | 27.02 | 400 | 3.71 | 34.18 | 27.19 | 92 | 0.54 |
| 300 | 3.89 | 34.07 | 0.57 | 27.08 | 500 | 3.44 | 34.25 | 27.27 | 85 | 0.64 |
| 398 | 3.71 | 34.18 | 0.47 | 27.19 | 600 | 3.20 | 34.31 | 27.34 | 79 | 0.72 |
| 498 | 3.45 | 34.25 | 0.41 | 27.27 | 700 | 2.99 | 34.36 | 27.40 | 74 | 0.80 |
| 597 | 3.21 | 34.31 | 0.39 | 27.34 | 800 | 2.80 | 34.40 | 27.45 | 69 | 0.87 |
| 796 | 2.81 | 34.40 | 0.45 | 27.45 | 1000 | 2.52 | 34.46 | 27.52 | 63 | 1.00 |
| 995 | 2.53 | 34.46 | 0.62 | 27.52 | 1200 | 2.29 | 34.51 | 27.58 | 58 | 1.12 |
| 1492 | 2.03 | 34.56 | 1.15 | 27.64 | 1500 | 2.02 | 34.56 | 27.64 | 53 | 1.29 |
| 1989 | 1.77 | 34.62 | 1.81 | 27.71 | | | | | | |

32

CNAV WHITETHROAT; July 11, 1958; 2353 GCT; 50°00'N, 171°00'W; sounding, 2750 fm; wind, missing; weather, fog; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.80 | 32.58 | 6.92 | 25.28 | 0 | 8.80 | 32.58 | 25.28 | 270 | 0.00 |
| 10 | 7.87 | 32.59 | 7.03 | 25.43 | 10 | 7.87 | 32.59 | 25.43 | 256 | 0.03 |
| 25 | 7.76 | 32.61 | 6.75 | 25.46 | 20 | 7.63 | 32.60 | 25.47 | 252 | 0.05 |
| 50 | 5.88 | 32.71 | 7.06 | 25.78 | 30 | 7.55 | 32.62 | 25.50 | 250 | 0.08 |
| 75 | 4.30 | 32.88 | 7.00 | 26.09 | 50 | 5.88 | 32.71 | 25.78 | 223 | 0.12 |
| 100 | 3.78 | 33.07 | 6.42 | 26.30 | 75 | 4.30 | 32.88 | 26.09 | 193 | 0.18 |
| 125 | 4.19 | 33.41 | 5.47 | 26.53 | 100 | 3.78 | 33.07 | 26.30 | 174 | 0.22 |
| 150 | 3.53 | 33.60 | 3.79 | 26.74 | 150 | 3.53 | 33.60 | 26.74 | 132 | 0.30 |
| 175 | 3.38 | 33.75 | 2.96 | 26.87 | 200 | 3.47 | 33.83 | 26.93 | 115 | 0.36 |
| 200 | 3.47 | 33.83 | 2.84 | 26.93 | 250 | 3.57 | 33.94 | 27.01 | 107 | 0.42 |
| 225 | 3.55 | 33.89 | 2.91 | 26.97 | 300 | 3.61 | 34.02 | 27.07 | 103 | 0.47 |
| 250 | 3.57 | 33.94 | 2.99 | 27.01 | 400 | 3.56 | 34.14 | 27.17 | 94 | 0.57 |
| 300 | 3.61 | 34.02 | 2.55 | 27.07 | 500 | 3.48 | 34.21 | 27.23 | 89 | 0.66 |
| 395 | 3.56 | 34.14 | 1.89 | 27.16 | 600 | 3.34 | 34.27 | 27.29 | 84 | 0.75 |
| 492 | 3.49 | 34.20 | 1.22 | 27.22 | 700 | 3.16 | 34.32 | 27.35 | 79 | 0.83 |
| 594 | 3.35 | 34.26 | 0.93 | 27.29 | 800 | 2.96 | 34.36 | 27.40 | 74 | 0.91 |
| 792 | 2.97 | 34.36 | 0.77 | 27.40 | 1000 | 2.65 | 34.42 | 27.47 | 68 | 1.05 |
| 992 | 2.66 | 34.42 | 0.43 | 27.47 | 1200 | 2.40 | 34.47 | 27.54 | 62 | 1.18 |
| 1490 | 2.15 | 34.54 | 1.03 | 27.61 | 1500 | 2.14 | 34.54 | 27.62 | 55 | 1.36 |
| 1988 | 1.85 | 34.60 | 1.79 | 27.69 | | | | | | |

33

CNAV WHITETHROAT; July 12, 1958; 1024 GCT; 50°30'N, 173°00'W; sounding, 3000 fm; wind, 290°, 20 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.00 | 32.62 | 6.89 | 25.43 | 0 | 8.00 | 32.62 | 25.43 | 256 | 0.00 |
| 10 | 7.78 | 32.60 | 7.11 | 25.45 | 10 | 7.78 | 32.60 | 25.45 | 254 | 0.03 |
| 24 | 7.59 | 32.62 | 7.29 | 25.49 | 20 | 7.63 | 32.61 | 25.47 | 252 | 0.05 |
| 48 | 4.37 | 33.01 | 7.34 | 26.19 | 30 | 7.13 | 32.68 | 25.59 | 240 | 0.08 |
| 73 | 4.05 | 33.32 | 6.60 | 26.47 | 50 | 4.23 | 33.04 | 26.23 | 180 | 0.12 |
| 96 | 4.39 | 33.54 | 6.01 | 26.61 | 75 | 4.06 | 33.34 | 26.48 | 156 | 0.16 |
| 120 | 4.28 | 33.60 | 4.89 | 26.66 | 100 | 4.40 | 33.56 | 26.63 | 143 | 0.20 |
| 144 | 4.26 | 33.68 | 3.28 | 26.74 | 150 | 4.24 | 33.71 | 26.76 | 131 | 0.27 |
| 167 | 4.18 | 33.79 | 3.23 | 26.83 | 200 | 4.12 | 33.89 | 26.91 | 117 | 0.33 |
| 191 | 4.15 | 33.86 | 2.02 | 26.89 | 250 | 3.99 | 34.00 | 27.02 | 107 | 0.39 |
| 215 | 4.06 | 33.93 | 1.95 | 26.95 | 300 | 3.87 | 34.07 | 27.09 | 101 | 0.44 |
| 239 | 4.01 | 33.98 | 1.79 | 27.00 | 400 | 3.73 | 34.15 | 27.16 | 95 | 0.54 |
| 286 | 3.90 | 34.06 | 1.56 | 27.07 | 500 | 3.58 | 34.20 | 27.22 | 90 | 0.63 |
| 384 | 3.75 | 34.13 | 1.22 | 27.15 | 600 | 3.41 | 34.25 | 27.27 | 85 | 0.72 |
| 480 | 3.61 | 34.19 | 0.96 | 27.21 | 700 | 3.24 | 34.30 | 27.33 | 81 | 0.80 |
| 575 | 3.45 | 34.24 | 0.58 | 27.26 | 800 | 3.07 | 34.35 | 27.38 | 76 | 0.88 |
| 767 | 3.12 | 34.33 | 0.48 | 27.36 | 1000 | 2.79 | 34.41 | 27.46 | 70 | 1.03 |
| 958 | 2.85 | 34.40 | 0.52 | 27.44 | 1200 | 2.51 | 34.47 | 27.53 | 64 | 1.16 |
| 1438 | 2.17 | 34.52 | 0.67 | 27.60 | 1500 | 2.11 | 34.53 | 27.61 | 56 | 1.35 |
| 1915 | 1.87 | 34.59 | 1.33 | 27.68 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **34** | CNAV WHITETHROAT; July 12, 1958; 2340 GCT; 50°57'N, 174°53'W; sounding, 2600 fm; wind, 320°, 10 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 8.10 | 32.57 | 6.98 | 25.37 | 0 | 8.10 | 32.57 | 25.37 | 261 | 0.00 |
| 10 | 8.01 | 32.56 | 6.71 | 25.38 | 10 | 8.01 | 32.56 | 25.38 | 261 | 0.03 |
| 25 | 4.99 | 32.55 | 6.59 | 25.76 | 20 | 6.38 | 32.55 | 25.60 | 240 | 0.05 |
| 50 | 4.31 | 32.86 | 6.65 | 26.08 | 30 | 4.42 | 32.58 | 25.85 | 216 | 0.07 |
| 75 | 3.53 | 33.12 | 6.10 | 26.36 | 50 | 4.31 | 32.86 | 26.08 | 194 | 0.12 |
| 100 | 3.54 | 33.28 | 5.77 | 26.49 | 75 | 3.53 | 33.12 | 26.36 | 168 | 0.16 |
| 125 | 3.98 | 33.54 | 4.17 | 26.65 | 100 | 3.54 | 33.28 | 26.49 | 156 | 0.20 |
| 150 | 3.73 | 33.76 | 3.01 | 26.85 | 150 | 3.73 | 33.76 | 26.85 | 122 | 0.27 |
| 174 | 4.09 | 33.90 | 2.78 | 26.92 | 200 | 4.07 | 33.95 | 26.96 | 112 | 0.33 |
| 199 | 4.07 | 33.94 | 2.49 | 26.96 | 250 | 3.97 | 34.00 | 27.01 | 108 | 0.39 |
| 223 | 4.02 | 33.98 | 1.30 | 27.00 | 300 | 3.86 | 34.06 | 27.08 | 102 | 0.44 |
| 248 | 3.97 | 33.99 | 1.25 | 27.01 | 400 | 3.76 | 34.15 | 27.15 | 95 | 0.54 |
| 298 | 3.86 | 34.06 | 1.14 | 27.07 | 500 | 3.58 | 34.20 | 27.22 | 90 | 0.63 |
| 395 | 3.77 | 34.14 | 0.90 | 27.15 | 600 | 3.37 | 34.27 | 27.29 | 84 | 0.72 |
| 494 | 3.59 | 34.20 | 0.83 | 27.21 | 700 | 3.19 | 34.32 | 27.35 | 79 | 0.80 |
| 592 | 3.39 | 34.26 | 0.65 | 27.28 | 800 | 3.02 | 34.36 | 27.39 | 75 | 0.88 |
| 790 | (3.04)a) | 34.35 | 0.74 | (27.39) | 1000 | 2.73 | 34.43 | 27.48 | 68 | 1.02 |
| 988 | 2.75 | 34.42 | 0.90 | 27.47 | 1200 | 2.47 | 34.49 | 27.54 | 62 | 1.16 |
| 1482 | 2.15 | 34.54 | 1.33 | 27.61 | 1500 | 2.13 | 34.55 | 27.62 | 55 | 1.33 |
| 1976 | 1.85 | 34.61 | 1.34 | 27.70 | | | | | | |
| **35** | CNAV WHITETHROAT; July 13, 1958; 0508 GCT; 51°26'N, 175°00'W; sounding, 2500 fm; wind, 320°, 10 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 8.70 | 32.46 | 7.01 | 25.20 | 0 | 8.70 | 32.46 | 25.20 | 278 | 0.00 |
| 10 | 8.29 | 32.42 | 7.03 | 25.23 | 10 | 8.29 | 32.42 | 25.23 | 275 | 0.03 |
| 25 | 7.19 | 32.57 | 6.97 | 25.50 | 20 | 7.62 | 32.49 | 25.38 | 261 | 0.06 |
| 50 | 5.47 | 32.75 | 6.96 | 25.87 | 30 | 6.83 | 32.61 | 25.58 | 242 | 0.08 |
| 75 | 4.27 | 32.99 | 6.05 | 26.18 | 50 | 5.47 | 32.75 | 25.87 | 215 | 0.13 |
| 100 | 4.09 | 33.33 | 4.35 | 26.47 | 75 | 4.27 | 32.99 | 26.18 | 185 | 0.18 |
| 125 | 4.23 | 33.72 | 2.28 | 26.77 | 100 | 4.09 | 33.33 | 26.47 | 158 | 0.22 |
| 150 | 4.21 | 33.86 | 1.56 | 26.88 | 150 | 4.21 | 33.86 | 26.88 | 120 | 0.29 |
| 175 | 4.09 | 33.92 | 1.16 | 26.94 | 200 | 4.06 | 33.98 | 26.99 | 110 | 0.35 |
| 200 | 4.06 | 33.98 | 0.78 | 26.99 | 250 | 3.99 | 34.03 | 27.04 | 105 | 0.40 |
| 225 | 4.05 | 34.01 | 0.59 | 27.02 | 300 | 3.88 | 34.07 | 27.08 | 101 | 0.45 |
| 250 | 3.99 | 34.03 | 0.68 | 27.04 | 400 | 3.73 | 34.16 | 27.17 | 94 | 0.55 |
| 300 | 3.88 | 34.07 | 0.52 | 27.08 | 500 | 3.99 | 34.08 | 27.08 | 104 | 0.65 |
| 400 | 3.73 | 34.16 | 0.49 | 27.17 | 600 | 3.39 | 34.27 | 27.29 | 84 | 0.75 |
| 500 | 3.99 | 34.08 | 0.46 | 27.08 | 700 | 3.09 | 34.36 | 27.39 | 75 | 0.83 |
| 600 | 3.39 | 34.27 | 0.47 | 27.29 | 800 | 3.10 | 34.36 | 27.38 | 76 | 0.90 |
| 800 | 3.10 | 34.36 | 0.48 | 27.38 | 1000 | 2.71 | 34.42 | 27.47 | 68 | 1.05 |
| 1000 | 2.71 | 34.42 | 0.57 | 27.47 | 1200 | 2.42 | 34.47 | 27.54 | 62 | 1.18 |
| 1500 | 2.17 | 34.53 | 0.96 | 27.60 | 1500 | 2.17 | 34.53 | 27.60 | 57 | 1.36 |
| 2000 | 1.83 | 34.61 | 1.66 | 27.69 | 2000 | 1.83 | 34.61 | 27.69 | 49 | 1.63 |
| **36** | CNAV WHITETHROAT; July 13, 1958; 0930 GCT; 51°40'N, 175°08'W; sounding, 220 fm; wind, 300°, 15 kt; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 7.30 | 32.64 | 6.48 | 25.54 | 0 | 7.30 | 32.64 | 25.54 | 245 | 0.00 |
| 9 | 7.10 | 32.58 | 7.01 | 25.52 | 10 | 7.06 | 32.58 | 25.52 | 247 | 0.02 |
| 23 | 6.33 | 32.70 | 6.68 | 25.72 | 20 | 6.54 | 32.65 | 25.65 | 235 | 0.05 |
| 46 | 5.58 | 32.95 | 5.81 | 26.01 | 30 | 6.03 | 32.77 | 25.81 | 220 | 0.07 |
| 68 | 5.26 | 33.07 | 5.12 | 26.14 | 50 | 5.49 | 32.98 | 26.04 | 198 | 0.11 |
| 92 | 5.06 | 33.28 | 4.50 | 26.33 | 75 | 5.19 | 33.12 | 26.19 | 184 | 0.16 |
| 114 | 4.75 | 33.37 | 4.17 | 26.44 | 100 | 4.96 | 33.32 | 26.37 | 167 | 0.21 |
| 137 | 4.75 | 33.38 | 4.03 | 26.44 | 150 | 4.73 | 33.38 | 26.45 | 160 | 0.29 |
| 159 | 4.71 | 33.39 | 3.71 | 26.45 | 200 | 4.73 | 33.42 | 26.48 | 158 | 0.37 |
| 182 | 4.75 | 33.41 | 3.57 | 26.46 | 250 | 4.63 | 33.48 | 26.53 | 153 | 0.45 |
| 205 | 4.71 | 33.43 | 3.45 | 26.48 | | | | | | |
| 227 | 4.66 | 33.45 | 3.30 | 26.51 | | | | | | |
| 273 | 4.61 | 33.50 | 3.10 | 26.55 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

37

CNAV WHITETHROAT; July 13, 1958; 1417 GCT; 51°35'N, 176°00'W; sounding, 545 fm; wind, 180°, 20 kt; weather, squalls; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.70 | 32.63 | 7.01 | 25.48 | 0 | 7.70 | 32.63 | 25.48 | 251 | 0.00 |
| 10 | 7.74 | 32.64 | 7.16 | 25.48 | 10 | 7.74 | 32.64 | 25.48 | 251 | 0.02 |
| 25 | 6.91 | 32.69 | 7.31 | 25.63 | 20 | 7.31 | 32.67 | 25.56 | 243 | 0.05 |
| 50 | 5.95 | 32.95 | 6.68 | 25.96 | 30 | 6.68 | 32.72 | 25.69 | 231 | 0.07 |
| 75 | 5.33 | 33.14 | 6.55 | 26.19 | 50 | 5.95 | 32.95 | 25.96 | 206 | 0.12 |
| 100 | 5.01 | 33.24 | 6.20 | 26.30 | 75 | 5.33 | 33.14 | 26.19 | 184 | 0.17 |
| 125 | 4.91 | 33.31 | 5.70 | 26.37 | 100 | 5.01 | 33.24 | 26.30 | 174 | 0.21 |
| 150 | 4.76 | 33.36 | 5.47 | 26.42 | 150 | 4.76 | 33.36 | 26.42 | 163 | 0.30 |
| 175 | 4.65 | 33.41 | 5.19 | 26.48 | 200 | 4.64 | 33.45 | 26.51 | 155 | 0.38 |
| 200 | 4.64 | 33.45 | 4.75 | 26.51 | 250 | 4.52 | 33.52 | 26.57 | 149 | 0.45 |
| 225 | 4.57 | 33.49 | 4.68 | 26.55 | 300 | 4.51 | 33.62 | 26.66 | 142 | 0.53 |
| 250 | 4.52 | 33.52 | 4.52 | 26.57 | 400 | 4.20 | 33.92 | 26.93 | 117 | 0.66 |
| 299 | 4.51 | 33.62 | 3.67 | 26.66 | 500 | 3.96 | 34.03 | 27.04 | 107 | 0.77 |
| 389 | 4.23 | 33.90 | 1.72 | 26.91 | 600 | 3.67 | 34.17 | 27.18 | 94 | 0.87 |
| 486 | 4.00 | 34.01 | 1.29 | 27.02 | 700 | 3.44 | 34.26 | 27.28 | 86 | 0.96 |
| 583 | 3.71 | 34.15 | 0.69 | 27.16 | | | | | | |
| 778 | 3.31 | 34.31 | 0.54 | 27.32 | | | | | | |

38

CNAV WHITETHROAT; July 17, 1958; 0245 GCT; 52°14'N, 176°00'W; sounding, 1400 fm; wind, 090°, 20 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 33.16 | - | 25.92 | 0 | 7.50 | 33.16 | 25.92 | 209 | 0.00 |
| 10 | 7.47 | 33.15 | 7.12 | 25.92 | 10 | 7.47 | 33.15 | 25.92 | 209 | 0.02 |
| 25 | 7.12 | 33.15 | 7.24 | 25.97 | 20 | 7.28 | 33.15 | 25.95 | 207 | 0.04 |
| 49 | 5.91 | 33.18 | 7.25 | 26.15 | 30 | 6.93 | 33.15 | 26.00 | 202 | 0.06 |
| 73 | 4.15 | 33.19 | 7.24 | 26.36 | 50 | 5.85 | 33.18 | 26.15 | 188 | 0.10 |
| 98 | 3.23 | 33.21 | 7.20 | 26.46 | 75 | 4.04 | 33.19 | 26.37 | 167 | 0.15 |
| 123 | 3.05 | 33.24 | 6.91 | 26.50 | 100 | 3.19 | 33.21 | 26.46 | 158 | 0.19 |
| 147 | 2.93 | 33.23 | 6.80 | 26.50 | 150 | 2.92 | 33.23 | 26.50 | 155 | 0.27 |
| 172 | 2.83 | 33.28 | 6.81 | 26.55 | 200 | 3.00 | 33.35 | 26.59 | 147 | 0.34 |
| 196 | 2.95 | 33.33 | 6.32 | 26.58 | 250 | 3.84 | 33.61 | 26.72 | 135 | 0.41 |
| 221 | 3.39 | 33.44 | 5.05 | 26.63 | 300 | 3.83 | 33.76 | 26.84 | 124 | 0.48 |
| 245 | 3.79 | 33.58 | 3.88 | 26.70 | 400 | 3.69 | 33.98 | 27.03 | 107 | 0.60 |
| 294 | 3.83 | 33.74 | 2.63 | 26.82 | 500 | 3.53 | 34.08 | 27.13 | 99 | 0.70 |
| 400 | 3.69 | 33.98 | 1.34 | 27.03 | 600 | 3.35 | 34.17 | 27.22 | 90 | 0.80 |
| 500 | 3.53 | 34.08 | 0.92 | 27.13 | 700 | 3.18 | 34.24 | 27.29 | 84 | 0.88 |
| 600 | 3.35 | 34.17 | 0.68 | 27.22 | 800 | 3.02 | 34.29 | 27.34 | 80 | 0.97 |
| 800 | 3.02 | 34.29 | 0.56 | 27.34 | 1000 | 2.77 | 34.38 | 27.43 | 72 | 1.12 |
| 1000 | 2.77 | 34.38 | 0.56 | 27.43 | 1200 | 2.53 | 34.45 | 27.51 | 65 | 1.26 |
| 1500 | 2.18 | 34.53 | 0.91 | 27.60 | 1500 | 2.18 | 34.53 | 27.60 | 57 | 1.44 |
| 2000 | 1.89 | 34.59 | 1.32 | 27.67 | 2000 | 1.89 | 34.59 | 27.67 | 51 | 1.72 |

39

CNAV WHITETHROAT; July 17, 1958; 0856 GCT; 52°23'N, 175°06'W; sounding, missing; wind, 010°, 25 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 33.17 | - | 25.93 | 0 | 7.50 | 33.17 | 25.93 | 208 | 0.00 |
| 9 | 7.54 | 33.13 | 7.17 | 25.89 | 10 | 7.53 | 33.12 | 25.89 | 212 | 0.02 |
| 23 | 7.11 | 33.13 | 7.32 | 25.95 | 20 | 7.25 | 33.12 | 25.93 | 209 | 0.04 |
| 48 | 5.38 | 33.17 | 7.31 | 26.21 | 30 | 6.75 | 33.13 | 26.01 | 202 | 0.06 |
| 71 | 3.97 | 33.22 | 6.87 | 26.40 | 50 | 5.25 | 33.18 | 26.23 | 180 | 0.10 |
| 95 | 3.46 | 33.24 | 6.69 | 26.46 | 75 | 3.82 | 33.23 | 26.42 | 162 | 0.14 |
| 119 | 3.53 | 33.27 | 6.34 | 26.48 | 100 | 3.43 | 33.24 | 26.47 | 158 | 0.18 |
| 142 | 3.52 | (33.30)a) | - | (26.50) | 150 | 3.46 | 33.30 | 26.51 | 154 | 0.26 |
| 166 | 3.23 | 33.31 | 6.16 | 26.54 | 200 | 3.33 | 33.37 | 26.57 | 148 | 0.34 |
| 190 | 3.28 | 33.35 | 5.95 | 26.56 | 250 | 3.60 | 33.50 | 26.66 | 141 | 0.41 |
| 213 | 3.43 | 33.39 | 5.35 | 26.59 | 300 | 3.84 | 33.72 | 26.81 | 127 | 0.48 |
| 236 | 3.53 | 33.45 | 4.85 | 26.63 | 400 | 3.76 | 33.92 | 26.97 | 112 | 0.60 |
| 284 | 3.79 | 33.67 | 3.73 | 26.77 | 500 | 3.53 | 34.04 | 27.09 | 102 | 0.71 |
| 362 | 3.83 | 33.86 | 2.34 | 26.92 | 600 | 3.38 | 34.14 | 27.19 | 93 | 0.81 |
| 442 | 3.62 | 33.97 | 1.42 | 27.03 | 700 | 3.21 | 34.21 | 27.26 | 87 | 0.90 |
| 520 | 3.51 | 34.06 | 1.23 | 27.11 | 800 | 3.05 | 34.27 | 27.32 | 82 | 0.98 |
| 678 | 3.25 | 34.20 | 0.94 | 27.24 | 1000 | 2.74 | 34.36 | 27.42 | 73 | 1.14 |
| 836 | 2.99 | 34.29 | 0.87 | 27.34 | 1200 | 2.47 | 34.42 | 27.49 | 67 | 1.28 |
| 1234 | 2.43 | 34.42 | 0.95 | 27.50 | 1500 | 2.17 | 34.49 | 27.57 | 60 | 1.47 |
| 1628 | 2.07 | 34.51 | - | 27.60 | | | | | | |

a) Value interpolated by three-point parabolic method.

POG

NP-58-2

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 40 | CNAV WHITETHROAT; July 17, 1958; 1633 GCT; 53°00'N, 175°03'W; sounding, 2000 fm; wind, 090°, 30 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 7.40 | 33.13 | - | 25.92 | 0 | 7.40 | 33.13 | 25.92 | 210 | 0.00 |
| 10 | 7.50 | 33.09 | 6.75 | 25.87 | 10 | 7.50 | 33.09 | 25.87 | 214 | 0.02 |
| 24 | 7.41 | 33.09 | 7.16 | 25.88 | 20 | 7.46 | 33.08 | 25.87 | 214 | 0.04 |
| 47 | 5.53 | 33.16 | 7.21 | 26.18 | 30 | 7.13 | 33.10 | 25.93 | 209 | 0.06 |
| 71 | 4.05 | 33.17 | 6.89 | 26.35 | 50 | 5.32 | 33.16 | 26.21 | 183 | 0.10 |
| 94 | 3.53 | 33.21 | 6.78 | 26.43 | 75 | 3.90 | 33.18 | 26.37 | 167 | 0.15 |
| 117 | 3.53 | 33.26 | 6.63 | 26.47 | 100 | 3.48 | 33.22 | 26.45 | 160 | 0.19 |
| 140 | 3.35 | 33.28 | 6.46 | 26.50 | 150 | 3.16 | 33.27 | 26.52 | 153 | 0.27 |
| 163 | 2.81 | 33.26 | 6.17 | 26.54 | 200 | 3.40 | 33.40 | 26.60 | 146 | 0.34 |
| 187 | 3.19 | 33.34 | 5.96 | 26.57 | 250 | 3.91 | 33.65 | 26.74 | 133 | 0.41 |
| 210 | 3.57 | 33.46 | 4.60 | 26.63 | 300 | 3.85 | 33.78 | 26.85 | 123 | 0.48 |
| 234 | 3.83 | 33.58 | 3.63 | 26.70 | 400 | 3.71 | 33.93 | 26.99 | 111 | 0.60 |
| 280 | 3.85 | 33.73 | 2.78 | 26.81 | 500 | 3.55 | 34.03 | 27.09 | 102 | 0.70 |
| 397 | 3.71 | 33.92 | 1.55 | 26.98 | 600 | 3.40 | 34.13 | 27.17 | 95 | 0.80 |
| 497 | 3.55 | 34.03 | 1.00 | 27.08 | 700 | 3.28 | 34.20 | 27.24 | 89 | 0.90 |
| 596 | 3.41 | 34.12 | 0.81 | 27.17 | 800 | 3.17 | 34.24 | 27.28 | 85 | 0.98 |
| 795 | 3.18 | 34.24 | 0.65 | 27.28 | 1000 | 2.87 | 34.33 | 27.38 | 77 | 1.15 |
| 994 | 2.88 | 34.32 | 0.65 | 27.38 | 1200 | 2.61 | 34.40 | 27.46 | 70 | 1.30 |
| 1491 | 2.31 | 34.47 | 0.78 | 27.55 | | | | | | |
| 41 | CNAV WHITETHROAT; July 18, 1958; 2349 GCT; 55°02'N, 175°00'W; sounding, missing; wind, 360°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 7.70 | 33.32 | - | 26.02 | 0 | 7.70 | 33.32 | 26.02 | 200 | 0.00 |
| 10 | 7.51 | 33.14 | 6.98 | 25.90 | 10 | 7.51 | 33.14 | 25.90 | 211 | 0.02 |
| 25 | 7.40 | 33.13 | 7.02 | 25.92 | 20 | 7.41 | 33.10 | 25.89 | 213 | 0.04 |
| 50 | 5.35 | 33.15 | 7.30 | 26.19 | 30 | 7.18 | 33.14 | 25.95 | 207 | 0.06 |
| 75 | 3.36 | 33.21 | 7.09 | 26.44 | 50 | 5.35 | 33.15 | 26.19 | 184 | 0.10 |
| 100 | 3.18 | 33.24 | 7.00 | 26.49 | 75 | 3.36 | 33.21 | 26.44 | 160 | 0.15 |
| 125 | 2.97 | 33.27 | 6.74 | 26.53 | 100 | 3.18 | 33.24 | 26.49 | 156 | 0.18 |
| 150 | 3.07 | 33.34 | 5.98 | 26.58 | 150 | 3.07 | 33.34 | 26.58 | 148 | 0.26 |
| 175 | 3.55 | 33.47 | 4.69 | 26.63 | 200 | 3.78 | 33.61 | 26.73 | 134 | 0.33 |
| 200 | 3.78 | 33.61 | 3.49 | 26.73 | 250 | 3.86 | 33.75 | 26.83 | 125 | 0.40 |
| 225 | 3.87 | 33.71 | 2.80 | 26.79 | 300 | 3.77 | 33.85 | 26.92 | 117 | 0.46 |
| 250 | 3.86 | 33.75 | 2.28 | 26.83 | 400 | 3.59 | 33.97 | 27.03 | 107 | 0.57 |
| 300 | 3.77 | 33.85 | 1.96 | 26.92 | 500 | 3.53 | 34.07 | 27.11 | 100 | 0.68 |
| 395 | 3.60 | 33.97 | 1.33 | 27.03 | 600 | 3.40 | 34.14 | 27.18 | 94 | 0.77 |
| 493 | 3.54 | 34.06 | 0.91 | 27.11 | 700 | 3.25 | 34.20 | 27.25 | 88 | 0.87 |
| 592 | 3.41 | 34.13 | 0.75 | 27.18 | 800 | 3.09 | 34.26 | 27.31 | 83 | 0.95 |
| 788 | 3.11 | 34.25 | 0.66 | 27.30 | 1000 | 2.83 | 34.33 | 27.39 | 76 | 1.11 |
| 984 | 2.85 | 34.33 | 0.55 | 27.38 | 1200 | 2.58 | 34.40 | 27.46 | 69 | 1.26 |
| 1478 | 2.25 | 34.48 | 0.82 | 27.55 | 1500 | 2.23 | 34.48 | 27.56 | 61 | 1.46 |
| 1970 | 1.87 | 34.56 | 1.29 | 27.65 | | | | | | |
| 42 | CNAV WHITETHROAT; July 19, 1958; 0956 GCT; 56°01'N, 175°00'W; sounding, 2000 fm; wind, 360°, 10 kt; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 8.80 | 32.90 | - | 25.53 | 0 | 8.80 | 32.90 | 25.53 | 247 | 0.00 |
| 10 | 8.06 | 32.76 | 7.28 | 25.53 | 10 | 8.06 | 32.76 | 25.53 | 246 | 0.02 |
| 25 | 6.33 | 32.73 | 7.38 | 25.74 | 20 | 6.99 | 32.72 | 25.65 | 236 | 0.05 |
| 50 | 4.32 | 32.93 | 7.53 | 26.13 | 30 | 5.84 | 32.75 | 25.82 | 219 | 0.07 |
| 75 | 3.81 | 33.01 | 7.37 | 26.25 | 50 | 4.32 | 32.93 | 26.13 | 190 | 0.11 |
| 100 | 3.73 | 33.05 | 7.31 | 26.28 | 75 | 3.81 | 33.01 | 26.25 | 178 | 0.16 |
| 125 | 3.61 | 33.11 | 6.50 | 26.34 | 100 | 3.73 | 33.05 | 26.28 | 176 | 0.20 |
| 150 | 3.44 | 33.19 | 6.53 | 26.42 | 150 | 3.44 | 33.19 | 26.42 | 162 | 0.29 |
| 175 | 3.24 | 33.19 | 6.76 | 26.44 | 200 | 3.13 | 33.22 | 26.47 | 158 | 0.37 |
| 200 | 3.13 | 33.22 | 6.74 | 26.47 | 250 | 3.06 | 33.28 | 26.53 | 153 | 0.45 |
| 225 | 3.02 | 33.27 | 6.70 | 26.52 | 300 | 3.61 | 33.46 | 26.63 | 144 | 0.52 |
| 250 | 3.06 | 33.28 | 6.40 | 26.53 | 400 | 3.87 | 33.77 | 26.84 | 125 | 0.66 |
| 300 | 3.61 | 33.46 | 4.48 | 26.63 | 500 | 3.68 | 33.93 | 26.99 | 111 | 0.78 |
| 362 | 3.85 | 33.67 | 3.05 | 26.77 | 600 | 3.52 | 34.02 | 27.08 | 104 | 0.89 |
| 452 | 3.75 | 33.88 | 2.02 | 26.94 | 700 | 3.35 | 34.14 | 27.19 | 94 | 0.99 |
| 532 | 3.63 | 33.95 | 1.49 | 27.01 | 800 | 3.18 | 34.22 | 27.27 | 87 | 1.08 |
| 722 | 3.31 | 34.16 | 0.77 | 27.21 | 1000 | 2.86 | 34.31 | 27.37 | 78 | 1.24 |
| 902 | 3.01 | 34.26 | 0.63 | 27.32 | 1200 | 2.60 | 34.39 | 27.45 | 71 | 1.40 |
| 1352 | 2.43 | 34.43 | 0.68 | 27.50 | 1500 | 2.26 | 34.48 | 27.56 | 61 | 1.60 |
| 1800 | 1.94 | 34.56 | 1.11 | 27.64 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

43

CNAV WHITETHROAT; July 19, 1958; 2113 GCT; 56°00'N, 177°44'W; sounding, 2000 fm; wind, 300°, 5 kt; weather, overcast; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.40 | 33.12 | - | 25.76 | 0 | 8.40 | 33.12 | 25.76 | 224 | 0.00 |
| 10 | 8.01 | 33.08 | 7.11 | 25.79 | 10 | 8.01 | 33.08 | 25.79 | 222 | 0.02 |
| 25 | 6.60 | 33.12 | 7.38 | 26.01 | 20 | 7.18 | 33.10 | 25.92 | 210 | 0.04 |
| 50 | 3.94 | 33.19 | 7.69 | 26.38 | 30 | 6.10 | 33.13 | 26.09 | 194 | 0.06 |
| 75 | 2.95 | 33.22 | 7.37 | 26.49 | 50 | 3.94 | 33.19 | 26.38 | 166 | 0.10 |
| 100 | 2.76 | 33.21 | 7.31 | 26.50 | 75 | 2.95 | 33.22 | 26.49 | 155 | 0.14 |
| 125 | 2.68 | 33.24 | 6.94 | 26.53 | 100 | 2.76 | 33.21 | 26.50 | 155 | 0.18 |
| 150 | 2.68 | 33.30 | 6.70 | 26.58 | 150 | 2.68 | 33.30 | 26.58 | 147 | 0.26 |
| 175 | 3.31 | 33.45 | 4.87 | 26.64 | 200 | 3.81 | 33.60 | 26.71 | 135 | 0.33 |
| 200 | 3.81 | 33.60 | 3.44 | 26.71 | 250 | 3.82 | 33.75 | 26.83 | 124 | 0.39 |
| 225 | 3.83 | 33.69 | 2.79 | 26.79 | 300 | 3.70 | 33.83 | 26.91 | 118 | 0.45 |
| 250 | 3.82 | 33.75 | 2.45 | 26.83 | 400 | 3.55 | 33.99 | 27.05 | 105 | 0.57 |
| 300 | 3.70 | 33.83 | 1.93 | 26.91 | 500 | 3.41 | 34.07 | 27.13 | 98 | 0.67 |
| 400 | 3.55 | 33.99 | 1.20 | 27.05 | 600 | 3.27 | 34.15 | 27.20 | 92 | 0.76 |
| 500 | 3.41 | 34.07 | 0.96 | 27.13 | 700 | 3.15 | 34.22 | 27.27 | 86 | 0.85 |
| 600 | 3.27 | 34.15 | 0.76 | 27.20 | 800 | 3.05 | 34.28 | 27.33 | 81 | 0.94 |
| 800 | 3.05 | 34.28 | 0.59 | 27.33 | 1000 | 2.78 | 34.35 | 27.41 | 74 | 1.10 |
| 1000 | 2.78 | 34.35 | 0.41 | 27.41 | | | | | | |

44

CNAV WHITETHROAT; July 20, 1958; 0858 GCT; 56°00'N, 179°45'E; sounding, 2000 fm; wind, 260°, 5 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.20 | 33.15 | - | 25.81 | 0 | 8.20 | 33.15 | 25.81 | 220 | 0.00 |
| 10 | 7.88 | 33.16 | 6.24 | 25.87 | 10 | 7.88 | 33.16 | 25.87 | 214 | 0.02 |
| 25 | 6.13 | 33.17 | 6.72 | 26.12 | 20 | 6.88 | 33.17 | 26.02 | 200 | 0.04 |
| 50 | 3.45 | 33.23 | 6.76 | 26.45 | 30 | 5.57 | 33.18 | 26.19 | 184 | 0.06 |
| 75 | 2.60 | 33.22 | 7.21 | 26.53 | 50 | 3.45 | 33.23 | 26.45 | 159 | 0.10 |
| 100 | 2.33 | 33.22 | 7.27 | 26.55 | 75 | 2.60 | 33.22 | 26.53 | 152 | 0.14 |
| 125 | 2.19 | 33.23 | 7.09 | 26.56 | 100 | 2.33 | 33.22 | 26.55 | 150 | 0.17 |
| 150 | 2.12 | 33.29 | 6.65 | 26.61 | 150 | 2.12 | 33.29 | 26.61 | 144 | 0.25 |
| 175 | 3.13 | 33.54 | 6.40 | 26.73 | 200 | 3.65 | 33.74 | 26.84 | 123 | 0.32 |
| 200 | 3.65 | 33.74 | 4.17 | 26.84 | 250 | 3.63 | 33.84 | 26.92 | 116 | 0.38 |
| 225 | 3.65 | 33.80 | 3.90 | 26.89 | 300 | 3.61 | 33.93 | 27.00 | 109 | 0.43 |
| 250 | 3.63 | 33.84 | 3.71 | 26.92 | 400 | 3.54 | 34.04 | 27.09 | 101 | 0.54 |
| 300 | 3.61 | 33.93 | 3.23 | 27.00 | 500 | 3.47 | 34.13 | 27.17 | 94 | 0.64 |
| 396 | 3.54 | 34.04 | 2.37 | 27.09 | 600 | 3.28 | 34.19 | 27.24 | 89 | 0.73 |
| 495 | 3.48 | 34.13 | 1.96 | 27.17 | 700 | 3.15 | 34.25 | 27.29 | 84 | 0.82 |
| 594 | 3.29 | 34.19 | 1.67 | 27.23 | 800 | 3.08 | 34.31 | 27.35 | 79 | 0.90 |
| 794 | 3.09 | 34.30 | 1.40 | 27.34 | 1000 | 2.81 | 34.38 | 27.43 | 72 | 1.05 |
| 982 | 2.83 | 34.37 | 0.71 | 27.42 | 1200 | 2.57 | 34.44 | 27.49 | 67 | 1.19 |
| 1489 | 2.31 | 34.50 | 1.28 | 27.57 | 1500 | 2.30 | 34.50 | 27.57 | 60 | 1.38 |
| 1985 | 1.91 | 34.58 | 1.38 | 27.67 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 45 | CNAV WHITETHROAT; July 20, 1958; 1753 GCT; 55°00'N, 179°29'E; sounding, 2000+ fm; wind, calm; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | 8.40 | 33.19 | - | 25.81 | 0 | 8.40 | 33.19 | 25.81 | 219 | 0.00 |
| 10 | 7.57 | 33.12 | 7.22 | 25.89 | 10 | 7.57 | 33.12 | 25.89 | 213 | 0.02 |
| 25 | 6.45 | 33.13 | 7.38 | 26.04 | 20 | 6.81 | 33.12 | 25.98 | 203 | 0.04 |
| 50 | 3.35 | 33.20 | 7.45 | 26.44 | 30 | 5.95 | 33.14 | 26.11 | 191 | 0.06 |
| 75 | 2.87 | 33.21 | 7.50 | 26.49 | 50 | 3.35 | 33.20 | 26.44 | 160 | 0.10 |
| 100 | 2.71 | 33.22 | 7.47 | 26.51 | 75 | 2.87 | 33.21 | 26.49 | 155 | 0.14 |
| 125 | 2.50 | 33.24 | 7.37 | 26.54 | 100 | 2.71 | 33.22 | 26.51 | 154 | 0.18 |
| 150 | 2.51 | 33.27 | 7.00 | 26.57 | 150 | 2.51 | 33.27 | 26.57 | 148 | 0.25 |
| 175 | 3.39 | 33.47 | 4.79 | 26.65 | 200 | 3.82 | 33.61 | 26.72 | 135 | 0.32 |
| 200 | 3.82 | 33.61 | 3.48 | 26.72 | 250 | 3.77 | 33.74 | 26.83 | 125 | 0.39 |
| 225 | 3.83 | 33.67 | 3.05 | 26.77 | 300 | 3.67 | 33.83 | 26.91 | 117 | 0.45 |
| 250 | 3.77 | 33.74 | 2.56 | 26.83 | 400 | 3.59 | 33.99 | 27.05 | 105 | 0.56 |
| 300 | 3.67 | 33.83 | 2.00 | 26.91 | 500 | 3.50 | 34.10 | 27.15 | 97 | 0.66 |
| 400 | 3.59 | 33.99 | 1.40 | 27.05 | 600 | 3.36 | 34.17 | 27.21 | 91 | 0.76 |
| 500 | 3.50 | 34.10 | 0.97 | 27.15 | 700 | 3.22 | 34.22 | 27.27 | 86 | 0.85 |
| 600 | 3.36 | 34.17 | 0.73 | 27.21 | 800 | 3.09 | 34.28 | 27.32 | 82 | 0.93 |
| 800 | 3.09 | 34.28 | 0.59 | 27.32 | 1000 | 2.78 | 34.37 | 27.42 | 73 | 1.09 |
| 1000 | 2.78 | 34.37 | 0.58 | 27.42 | 1200 | 2.53 | 34.44 | 27.50 | 66 | 1.23 |
| 1500 | 2.27 | (34.52)a) | 0.85 | (27.59) | 1500 | 2.27 | 34.52 | 27.59 | 58 | 1.42 |
| 2000 | 1.88 | 34.58 | 1.32 | 27.67 | 2000 | 1.88 | 34.58 | 27.67 | 51 | 1.70 |
| 46 | CNAV WHITETHROAT; July 21, 1958; 0011 GCT; 54°29'N, 179°23'E; sounding, 500 fm; wind, calm; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 9.40 | 33.18 | - | 25.65 | 0 | 9.40 | 33.18 | 25.65 | 234 | 0.00 |
| 10 | 7.81 | 33.16 | 7.12 | 25.88 | 10 | 7.81 | 33.16 | 25.88 | 213 | 0.02 |
| 25 | 6.63 | 33.17 | 7.31 | 26.05 | 20 | 6.86 | 33.16 | 26.01 | 201 | 0.04 |
| 50 | 4.65 | 33.20 | 7.59 | 26.31 | 30 | 6.24 | 33.17 | 26.10 | 192 | 0.06 |
| 75 | 3.27 | 33.22 | 7.32 | 26.46 | 50 | 4.65 | 33.20 | 26.31 | 173 | 0.10 |
| 100 | 3.13 | 33.25 | 7.13 | 26.50 | 75 | 3.27 | 33.22 | 26.46 | 158 | 0.14 |
| 125 | 3.13 | 33.34 | 6.12 | 26.58 | 100 | 3.13 | 33.25 | 26.50 | 154 | 0.18 |
| 150 | 3.35 | 33.48 | 4.83 | 26.67 | 150 | 3.35 | 33.48 | 26.67 | 139 | 0.26 |
| 175 | 3.76 | 33.68 | 3.39 | 26.78 | 200 | 3.77 | 33.72 | 26.82 | 126 | 0.32 |
| 200 | 3.77 | 33.72 | 3.02 | 26.82 | 250 | 3.81 | 33.86 | 26.92 | 116 | 0.38 |
| 225 | 3.83 | 33.80 | 2.14 | 26.87 | 300 | 3.73 | 33.93 | 26.98 | 111 | 0.44 |
| 250 | 3.81 | 33.86 | 1.85 | 26.92 | 400 | 3.58 | 34.04 | 27.09 | 102 | 0.55 |
| 300 | 3.73 | 33.93 | 1.36 | 26.98 | 500 | 3.47 | 34.13 | 27.17 | 94 | 0.65 |
| 400 | 3.58 | 34.04 | 1.12 | 27.09 | 600 | 3.37 | 34.19 | 27.23 | 90 | 0.74 |
| 500 | 3.47 | 34.13 | 0.69 | 27.17 | 700 | 3.26 | 34.24 | 27.28 | 86 | 0.83 |
| 600 | 3.37 | 34.19 | 0.60 | 27.23 | 800 | 3.14 | 34.28 | 27.32 | 82 | 0.91 |
| 800 | 3.14 | 34.28 | 0.56 | 27.32 | | | | | | |
| 47 | CNAV WHITETHROAT; July 21, 1958; 0405 GCT; 54°00'N, 179°16'E; sounding, 1000 fm; wind, calm; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | 8.40 | 33.20 | 7.34 | 25.82 | 0 | 8.40 | 33.20 | 25.82 | 219 | 0.00 |
| 10 | 7.55 | 33.14 | 7.29 | 25.90 | 10 | 7.55 | 33.14 | 25.90 | 211 | 0.02 |
| 25 | 6.69 | 33.16 | 7.02 | 26.03 | 20 | 6.92 | 33.14 | 25.99 | 203 | 0.04 |
| 50 | 5.03 | 33.19 | 6.81 | 26.26 | 30 | 6.38 | 33.16 | 26.07 | 195 | 0.06 |
| 75 | 3.69 | 33.25 | 6.54 | 26.45 | 50 | 5.03 | 33.19 | 26.26 | 178 | 0.10 |
| 100 | 3.23 | 33.28 | 5.81 | 26.52 | 75 | 3.69 | 33.25 | 26.45 | 160 | 0.14 |
| 125 | 3.31 | 33.36 | 5.23 | 26.57 | 100 | 3.23 | 33.28 | 26.52 | 153 | 0.18 |
| 150 | 3.33 | 33.43 | 4.19 | 26.63 | 150 | 3.33 | 33.43 | 26.63 | 143 | 0.26 |
| 175 | 3.59 | 33.55 | 3.18 | 26.70 | 200 | 3.77 | 33.66 | 26.77 | 130 | 0.32 |
| 200 | 3.77 | 33.66 | 2.61 | 26.77 | 250 | 3.77 | 33.83 | 26.90 | 118 | 0.39 |
| 225 | 3.80 | 33.75 | 1.98 | 26.83 | 300 | 3.70 | 33.92 | 26.98 | 111 | 0.44 |
| 250 | 3.77 | 33.83 | 1.60 | 26.90 | 400 | 3.67 | 34.06 | 27.10 | 101 | 0.55 |
| 300 | 3.70 | 33.92 | 0.77 | 26.98 | 500 | 3.51 | 34.13 | 27.16 | 95 | 0.65 |
| 400 | 3.67 | 34.06 | 0.71 | 27.10 | 600 | 3.39 | 34.19 | 27.22 | 90 | 0.74 |
| 500 | 3.51 | 34.13 | 0.59 | 27.16 | 700 | 3.26 | 34.24 | 27.28 | 85 | 0.83 |
| 600 | 3.39 | 34.19 | 0.52 | 27.22 | 800 | 3.11 | 34.28 | 27.33 | 81 | 0.92 |
| 800 | 3.11 | 34.28 | 0.58 | 27.33 | 1000 | 2.87 | 34.36 | 27.40 | 75 | 1.08 |
| 1000 | 2.87 | 34.36 | 0.53 | 27.40 | 1200 | 2.62 | 34.40 | 27.46 | 70 | 1.22 |
| 1600 | 2.11 | (34.40)b) | - | (27.50) | 1500 | 2.24 | 34.41 | 27.50 | 66 | 1.43 |



a) Value interpolated by three-point parabolic method.

b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

48

CNAV WHITETHROAT; July 21, 1958; 1133 GCT; 53°03'N, 179°04'E; sounding, 1600 fm; wind, 270°, 5 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.10 | 33.16 | - | 25.83 | 0 | 8.10 | 33.16 | 25.83 | 217 | 0.00 |
| 10 | 7.45 | 33.14 | 7.01 | 25.92 | 10 | 7.45 | 33.14 | 25.92 | 210 | 0.02 |
| 25 | 6.77 | 33.16 | 7.15 | 26.02 | 20 | 6.96 | 33.15 | 25.99 | 203 | 0.04 |
| 49 | 4.28 | 33.21 | 7.13 | 26.36 | 30 | 6.39 | 33.17 | 26.08 | 194 | 0.06 |
| 73 | 3.63 | 33.24 | 7.01 | 26.45 | 50 | 4.22 | 33.21 | 26.37 | 167 | 0.10 |
| 97 | 3.25 | 33.27 | 6.76 | 26.50 | 75 | 3.59 | 33.24 | 26.45 | 159 | 0.14 |
| 122 | 2.61 | 33.26 | 6.56 | 26.55 | 100 | 3.19 | 33.27 | 26.51 | 154 | 0.18 |
| 147 | 3.01 | 33.40 | 5.44 | 26.63 | 150 | 3.06 | 33.42 | 26.64 | 141 | 0.25 |
| 171 | 3.37 | 33.53 | 4.18 | 26.71 | 200 | 3.83 | 33.77 | 26.85 | 123 | 0.32 |
| 195 | 3.79 | 33.74 | 2.60 | 26.83 | 250 | 3.78 | 33.87 | 26.93 | 115 | 0.38 |
| 220 | 3.79 | 33.82 | 2.13 | 26.89 | 300 | 3.72 | 33.99 | 27.03 | 106 | 0.44 |
| 244 | 3.78 | 33.86 | 1.81 | 26.92 | 400 | 3.49 | 34.10 | 27.15 | 96 | 0.54 |
| 292 | 3.73 | 33.97 | 1.12 | 27.02 | 500 | 3.37 | 34.17 | 27.21 | 90 | 0.63 |
| 397 | 3.50 | 34.10 | 0.91 | 27.14 | 600 | 3.28 | 34.22 | 27.26 | 86 | 0.72 |
| 497 | 3.37 | 34.17 | 0.77 | 27.21 | 700 | 3.13 | 34.27 | 27.32 | 82 | 0.80 |
| 596 | 3.28 | 34.22 | 0.65 | 27.26 | 800 | 2.92 | 34.33 | 27.38 | 76 | 0.88 |
| 795 | 2.93 | 34.33 | 0.55 | 27.38 | 1000 | 2.67 | 34.40 | 27.46 | 69 | 1.03 |
| 995 | 2.68 | 34.40 | 0.60 | 27.46 | 1200 | 2.45 | 34.46 | 27.53 | 63 | 1.16 |
| 1492 | 2.17 | 34.53 | 0.95 | 27.60 | 1500 | 2.16 | 34.53 | 27.60 | 57 | 1.35 |
| 1990 | 1.83 | 34.59 | 1.42 | 27.68 | | | | | | |

49

CNAV WHITETHROAT; July 21, 1958; 2000 GCT; 52°00'N, 178°51'E; sounding, 455 fm; wind, 320°, 5 kt; weather, overcast; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.30 | 33.20 | - | 26.11 | 0 | 6.30 | 33.20 | 26.11 | 191 | 0.00 |
| 10 | 6.21 | 33.16 | 6.65 | 26.09 | 10 | 6.21 | 33.16 | 26.09 | 193 | 0.02 |
| 25 | 6.07 | 33.16 | 6.61 | 26.11 | 20 | 6.12 | 33.15 | 26.10 | 192 | 0.04 |
| 50 | 5.21 | 33.25 | 5.79 | 26.29 | 30 | 5.96 | 33.17 | 26.14 | 189 | 0.06 |
| 75 | 5.02 | 33.24 | 5.57 | 26.30 | 50 | 5.21 | 33.25 | 26.29 | 174 | 0.10 |
| 99 | 4.85 | 33.30 | 5.33 | 26.37 | 75 | 5.02 | 33.24 | 26.30 | 174 | 0.14 |
| 124 | 4.82 | 33.32 | 5.30 | 26.38 | 100 | 4.85 | 33.30 | 26.37 | 167 | 0.18 |
| 149 | 4.72 | 33.33 | 5.23 | 26.40 | 150 | 4.71 | 33.33 | 26.40 | 164 | 0.26 |
| 173 | 4.57 | 33.35 | 5.19 | 26.43 | 200 | 4.52 | 33.39 | 26.47 | 159 | 0.35 |
| 198 | 4.53 | 33.38 | 5.06 | 26.47 | 250 | 3.93 | 33.38 | 26.53 | 153 | 0.42 |
| 223 | 4.43 | 33.40 | 4.98 | 26.49 | 300 | 3.99 | 33.58 | 26.68 | 140 | 0.50 |
| 248 | 3.95 | 33.38 | 4.37 | 26.53 | 400 | 3.78 | 33.89 | 26.95 | 114 | 0.63 |
| 297 | 3.99 | 33.56 | 3.84 | 26.67 | 500 | 3.50 | 34.06 | 27.11 | 100 | 0.74 |
| 397 | 3.79 | 33.89 | 1.84 | 26.94 | | | | | | |
| 496 | 3.51 | 34.06 | 1.21 | 27.11 | | | | | | |
| 596 | 3.35 | 34.13 | 1.04 | 27.18 | | | | | | |

50

CNAV WHITETHROAT; July 22, 1958; 0146 GCT; 51°33'N, 179°46'E; sounding, 250 fm; wind, calm; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.80 | 33.15 | - | 25.87 | 0 | 7.80 | 33.15 | 25.87 | 214 | 0.00 |
| 10 | 7.32 | 33.13 | 6.92 | 25.92 | 10 | 7.32 | 33.13 | 25.92 | 209 | 0.02 |
| 25 | (7.04)a) | 33.13 | 6.93 | (25.96) | 20 | 7.08 | 33.12 | 25.95 | 206 | 0.04 |
| 50 | 6.32 | 33.15 | 6.99 | 26.07 | 30 | 6.92 | 33.13 | 25.98 | 204 | 0.06 |
| 75 | 5.27 | 33.21 | 6.32 | 26.25 | 50 | 6.32 | 33.15 | 26.07 | 195 | 0.10 |
| 100 | 4.05 | 33.29 | 5.91 | 26.45 | 75 | 5.27 | 33.21 | 26.25 | 178 | 0.15 |
| 125 | 3.96 | 33.33 | 5.72 | 26.48 | 100 | 4.05 | 33.29 | 26.45 | 160 | 0.19 |
| 150 | 3.58 | 33.35 | 5.85 | 26.54 | 150 | 3.58 | 33.35 | 26.54 | 151 | 0.27 |
| 175 | 3.87 | 33.42 | 5.82 | 26.56 | 200 | 4.13 | 33.65 | 26.72 | 135 | 0.34 |
| 200 | 4.13 | 33.65 | 3.27 | 26.72 | 250 | 3.91 | 33.79 | 26.86 | 122 | 0.41 |
| 225 | 4.06 | 33.70 | 3.04 | 26.77 | 300 | 3.68 | 33.93 | 26.99 | 110 | 0.47 |
| 250 | 3.91 | 33.79 | 2.58 | 26.86 | 400 | 3.46 | 34.06 | 27.11 | 99 | 0.57 |
| 300 | 3.68 | 33.93 | 1.92 | 26.99 | | | | | | |
| 400 | 3.46 | 34.06 | 1.19 | 27.11 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **51** | CNAV WHITETHROAT; July 22, 1958; 0500 GCT; 51°32'N, 179°27'W; sounding, 250 fm; wind, calm; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 8.50 | 32.81 | 6.84 | 25.51 | 0 | 8.50 | 32.81 | 25.51 | 248 | 0.00 |
| 10 | 7.55 | 32.79 | 6.98 | 25.63 | 10 | 7.55 | 32.79 | 25.63 | 237 | 0.02 |
| 24 | 6.97 | 32.80 | 7.00 | 25.72 | 20 | 7.05 | 32.80 | 25.70 | 230 | 0.05 |
| 48 | 6.15 | 32.92 | 6.78 | 25.92 | 30 | 6.74 | 32.82 | 25.76 | 225 | 0.07 |
| 72 | 6.05 | 33.07 | 6.50 | 26.05 | 50 | 6.11 | 32.93 | 25.93 | 209 | 0.11 |
| 96 | 5.61 | 33.18 | 6.32 | 26.19 | 75 | 6.01 | 33.09 | 26.06 | 197 | 0.17 |
| 120 | 5.19 | 33.24 | 5.84 | 26.28 | 100 | 5.54 | 33.19 | 26.20 | 183 | 0.21 |
| 143 | 4.84 | 33.40 | 4.30 | 26.45 | 150 | 4.73 | 33.44 | 26.49 | 156 | 0.30 |
| 167 | 4.46 | 33.53 | 3.90 | 26.59 | 200 | 4.23 | 33.65 | 26.71 | 136 | 0.37 |
| 190 | 4.35 | 33.61 | 3.26 | 26.67 | 250 | 3.88 | 33.86 | 26.91 | 117 | 0.44 |
| 213 | 4.00 | 33.68 | 3.20 | 26.76 | | | | | | |
| 227 | 3.95 | 33.77 | 2.61 | 26.84 | | | | | | |
| 285 | 3.81 | 33.87 | 2.08 | 26.93 | | | | | | |
| **52** | CNAV WHITETHROAT; July 22, 1958; 0915 GCT; 51°09'N, 179°29'W; sounding, 1600 fm; wind, missing; weather, cloudy; sea, missing. | | | | | | | | | |
| 0 | 8.40 | 32.64 | - | 25.39 | 0 | 8.40 | 32.64 | 25.39 | 260 | 0.00 |
| 10 | 6.67 | 32.79 | 6.96 | 25.75 | 10 | 6.67 | 32.79 | 25.75 | 226 | 0.02 |
| 25 | 5.41 | 33.19 | 5.98 | 26.22 | 20 | 5.65 | 33.03 | 26.07 | 196 | 0.05 |
| 50 | 4.97 | 33.28 | 5.31 | 26.34 | 30 | 5.16 | 33.27 | 26.31 | 173 | 0.06 |
| 75 | 4.81 | 33.33 | 5.14 | 26.40 | 50 | 4.97 | 33.28 | 26.34 | 170 | 0.10 |
| 100 | 4.75 | 33.34 | 5.12 | 26.41 | 75 | 4.81 | 33.33 | 26.40 | 164 | 0.14 |
| 125 | 4.73 | 33.37 | 4.80 | 26.44 | 100 | 4.75 | 33.34 | 26.41 | 163 | 0.18 |
| 150 | 4.65 | 33.42 | 4.58 | 26.49 | 150 | 4.65 | 33.42 | 26.49 | 157 | 0.26 |
| 175 | 4.53 | 33.44 | 4.46 | 26.52 | 200 | 4.47 | 33.47 | 26.54 | 152 | 0.34 |
| 199 | 4.47 | 33.47 | 4.28 | 26.54 | 250 | 4.42 | 33.54 | 26.61 | 146 | 0.42 |
| 224 | 4.41 | 33.51 | 4.08 | 26.58 | 300 | 4.39 | 33.65 | 26.70 | 138 | 0.49 |
| 249 | 4.42 | 33.54 | 3.88 | 26.61 | 400 | 4.12 | 33.91 | 26.93 | 117 | 0.62 |
| 298 | 4.39 | 33.65 | 3.30 | 26.70 | 500 | 3.70 | 34.00 | 27.05 | 106 | 0.73 |
| 397 | 4.13 | 33.90 | 1.65 | 26.92 | 600 | 3.54 | 34.10 | 27.14 | 98 | 0.83 |
| 496 | 3.71 | 34.00 | 1.34 | 27.04 | 700 | 3.37 | 34.20 | 27.23 | 90 | 0.93 |
| 595 | 3.55 | (34.10)a) | - | (27.14) | 800 | 3.19 | 34.28 | 27.32 | 82 | 1.01 |
| 794 | 3.20 | 34.28 | 0.65 | 27.31 | 1000 | 2.83 | 34.38 | 27.42 | 73 | 1.17 |
| 992 | 2.84 | 34.37 | 0.71 | 27.42 | 1200 | 2.53 | 34.45 | 27.51 | 65 | 1.31 |
| 1485 | 2.23 | 34.51 | 1.21 | 27.58 | 1500 | 2.22 | 34.51 | 27.59 | 58 | 1.50 |
| 1980 | 1.86 | 34.59 | 1.59 | 27.68 | | | | | | |
| **53** | CNAV WHITETHROAT; July 22, 1958; 1700 GCT; 51°05'N, 179°39'E; sounding, 1500 fm; wind, 220°, 20 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 8.20 | 32.70 | - | 25.46 | 0 | 8.20 | 32.70 | 25.46 | 253 | 0.00 |
| 10 | 8.25 | 32.65 | 7.04 | 25.42 | 10 | 8.25 | 32.65 | 25.42 | 257 | 0.03 |
| 24 | 7.69 | 32.70 | 7.07 | 25.54 | 20 | 7.92 | 32.68 | 25.48 | 251 | 0.05 |
| 48 | 5.37 | 32.87 | 7.30 | 25.97 | 30 | 7.27 | 32.74 | 25.62 | 238 | 0.08 |
| 71 | 4.20 | 32.97 | 7.07 | 26.18 | 50 | 5.23 | 32.88 | 26.00 | 202 | 0.12 |
| 94 | 3.59 | 33.06 | 6.93 | 26.30 | 75 | 4.05 | 32.99 | 26.21 | 182 | 0.17 |
| 117 | 3.41 | 33.28 | 5.73 | 26.50 | 100 | 3.50 | 33.10 | 26.35 | 169 | 0.21 |
| 140 | 3.47 | 33.46 | 4.54 | 26.64 | 150 | 3.49 | 33.58 | 26.73 | 133 | 0.29 |
| 163 | 3.51 | 33.76 | 3.88 | 26.87 | 200 | 3.70 | 33.85 | 26.92 | 116 | 0.35 |
| 186 | 3.63 | 33.81 | 2.30 | 26.90 | 250 | 3.65 | 33.91 | 26.98 | 110 | 0.41 |
| 210 | 3.75 | 33.88 | 1.70 | 26.94 | 300 | 3.71 | 34.00 | 27.04 | 105 | 0.46 |
| 233 | 3.67 | 33.89 | 1.84 | 26.96 | 400 | 3.74 | 34.10 | 27.12 | 99 | 0.57 |
| 280 | 3.70 | 33.97 | 1.31 | 27.02 | 500 | 3.59 | 34.17 | 27.19 | 93 | 0.66 |
| 382 | 3.75 | 34.08 | 0.84 | 27.10 | 600 | 3.38 | 34.22 | 27.25 | 87 | 0.75 |
| 477 | 3.63 | 34.15 | 1.00 | 27.17 | 700 | 3.27 | 34.26 | 27.29 | 84 | 0.84 |
| 572 | 3.43 | 34.21 | 0.85 | 27.24 | 800 | 3.20 | 34.29 | 27.32 | 82 | 0.92 |
| 764 | 3.24 | 34.28 | 0.90 | 27.31 | 1000 | 2.90 | 34.37 | 27.41 | 74 | 1.08 |
| 980 | 2.93 | 34.36 | 0.76 | 27.40 | 1200 | 2.63 | 34.45 | 27.50 | 66 | 1.22 |
| 1472 | 2.29 | (34.57)b) | - | (27.62) | | | | | | |

a) Value interpolated by three-point parabolic method.

b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

54

CNAV WHITETHROAT; July 23, 1958; 0632 GCT; 50°36'N, 179°30'E; sounding, 2900 fm; wind, 200°, 10 kt; weather, overcast; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.40 | 32.66 | - | 25.40 | 0 | 8.40 | 32.66 | 25.40 | 258 | 0.00 |
| 10 | 7.95 | 32.69 | 6.84 | 25.49 | 10 | 7.95 | 32.69 | 25.49 | 250 | 0.03 |
| 24 | 7.95 | 32.69 | 6.99 | 25.49 | 20 | 7.87 | 32.69 | 25.50 | 249 | 0.05 |
| 48 | 5.55 | 32.83 | 7.19 | 25.91 | 30 | 7.63 | 32.71 | 25.55 | 245 | 0.08 |
| 71 | 4.01 | 33.05 | 6.65 | 26.26 | 50 | 5.39 | 32.84 | 25.95 | 207 | 0.12 |
| 94 | 3.29 | 33.20 | 6.14 | 26.45 | 75 | 3.83 | 33.08 | 26.30 | 173 | 0.17 |
| 116 | 3.85 | 33.51 | 4.05 | 26.64 | 100 | 3.32 | 33.27 | 26.50 | 155 | 0.21 |
| 140 | 4.11 | 33.66 | 3.05 | 26.73 | 150 | 4.09 | 33.70 | 26.77 | 130 | 0.28 |
| 163 | 3.94 | 33.74 | 2.58 | 26.82 | 200 | 3.74 | 33.92 | 26.97 | 111 | 0.34 |
| 186 | 3.83 | 33.86 | 1.59 | 26.92 | 250 | 3.66 | 34.01 | 27.06 | 103 | 0.40 |
| 209 | 3.68 | 33.95 | 1.34 | 27.01 | | | | | | |
| 232 | 3.67 | 33.99 | 1.05 | 27.04 | | | | | | |
| 278 | 3.65 | 34.03 | 0.80 | 27.07 | | | | | | |

55

CNAV WHITETHROAT; July 23, 1958; 1545 GCT; 50°00'N, 178°57'E; sounding, 2500 fm; wind, 270°, 10 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.30 | 32.96 | - | 25.65 | 0 | 8.30 | 32.96 | 25.65 | 234 | 0.00 |
| 10 | 8.12 | 32.94 | 7.08 | 25.66 | 10 | 8.12 | 32.94 | 25.66 | 234 | 0.02 |
| 25 | 6.80 | 32.99 | 7.22 | 25.89 | 20 | 7.38 | 32.96 | 25.79 | 222 | 0.05 |
| 50 | 4.49 | 33.07 | 7.50 | 26.22 | 30 | 6.35 | 33.01 | 25.96 | 206 | 0.07 |
| 75 | 3.91 | 33.06 | 7.32 | 26.28 | 50 | 4.49 | 33.07 | 26.22 | 181 | 0.11 |
| 100 | 3.11 | 33.13 | 7.17 | 26.41 | 75 | 3.91 | 33.06 | 26.28 | 176 | 0.15 |
| 125 | 3.01 | 33.39 | 5.38 | 26.63 | 100 | 3.11 | 33.13 | 26.41 | 163 | 0.19 |
| 150 | 3.05 | 33.66 | 3.74 | 26.84 | 150 | 3.05 | 33.66 | 26.84 | 123 | 0.27 |
| 175 | 3.11 | 33.76 | 2.83 | 26.91 | 200 | 3.21 | 33.81 | 26.94 | 114 | 0.33 |
| 200 | 3.21 | 33.81 | 2.62 | 26.94 | 250 | 3.31 | 33.89 | 27.00 | 109 | 0.38 |
| 225 | 3.27 | 33.85 | 2.32 | 26.97 | 300 | 3.36 | 33.96 | 27.04 | 105 | 0.44 |
| 250 | 3.31 | 33.89 | 2.14 | 27.00 | 400 | 3.41 | 34.09 | 27.14 | 96 | 0.54 |
| 300 | 3.36 | 33.96 | 1.74 | 27.04 | 500 | 3.39 | 34.18 | 27.21 | 90 | 0.63 |
| 387 | 3.41 | 34.08 | 1.27 | 27.13 | 600 | 3.25 | 34.24 | 27.28 | 85 | 0.72 |
| 485 | 3.40 | 34.16 | 1.15 | 27.20 | 700 | 3.11 | 34.29 | 27.33 | 80 | 0.80 |
| 583 | 3.27 | 34.23 | 0.75 | 27.27 | 800 | 2.97 | 34.33 | 27.37 | 77 | 0.88 |
| 778 | 3.00 | 34.32 | 0.87 | 27.36 | 1000 | 2.68 | 34.40 | 27.46 | 69 | 1.03 |
| 978 | 2.71 | 34.39 | 0.94 | 27.45 | 1200 | 2.44 | 34.46 | 27.52 | 64 | 1.16 |
| 1454 | 2.21 | 34.51 | 1.36 | 27.58 | 1500 | 2.17 | 34.52 | 27.59 | 58 | 1.35 |
| 1945 | 1.91 | 34.58 | 1.85 | 27.66 | | | | | | |

56

CNAV WHITETHROAT; July 24, 1958; 0630 GCT; 50°00'N, 176°00'E; sounding, 2500 fm; wind, 040°, 10 kt; weather, overcast; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.50 | 32.75 | - | 25.46 | 0 | 8.50 | 32.75 | 25.46 | 253 | 0.00 |
| 10 | 8.33 | 32.74 | 6.90 | 25.47 | 10 | 8.33 | 32.74 | 25.47 | 252 | 0.02 |
| 25 | 8.05 | 32.77 | 7.01 | 25.54 | 20 | 8.15 | 32.75 | 25.51 | 248 | 0.05 |
| 49 | 5.09 | 32.95 | 7.31 | 26.06 | 30 | 7.69 | 32.79 | 25.61 | 239 | 0.08 |
| 73 | 4.01 | 32.98 | 7.28 | 26.20 | 50 | 5.01 | 32.95 | 26.08 | 195 | 0.12 |
| 98 | 3.42 | 33.14 | 6.34 | 26.38 | 75 | 3.94 | 32.99 | 26.21 | 182 | 0.17 |
| 122 | 3.73 | 33.55 | 3.51 | 26.68 | 100 | 3.41 | 33.16 | 26.40 | 164 | 0.21 |
| 147 | 3.85 | 33.83 | 1.85 | 26.89 | 150 | 3.85 | 33.84 | 26.91 | 117 | 0.28 |
| 171 | 3.70 | 33.88 | 1.38 | 26.95 | 200 | 3.83 | 33.94 | 26.99 | 110 | 0.34 |
| 196 | 3.82 | 33.94 | 1.28 | 26.98 | 250 | 3.81 | 34.03 | 27.06 | 103 | 0.39 |
| 221 | 3.81 | 33.98 | 0.67 | 27.02 | 300 | 3.68 | 34.07 | 27.10 | 100 | 0.44 |
| 245 | 3.81 | 34.02 | 0.59 | 27.05 | 400 | 3.66 | 34.11 | 27.13 | 97 | 0.54 |
| 294 | 3.69 | 34.07 | 0.52 | 27.10 | 500 | 3.50 | 34.19 | 27.22 | 90 | 0.64 |
| 356 | 3.69 | 34.08 | 0.53 | 27.11 | 600 | 3.29 | 34.26 | 27.29 | 83 | 0.72 |
| 452 | 3.59 | 34.15 | 0.55 | 27.18 | 700 | 3.10 | 34.31 | 27.35 | 78 | 0.81 |
| 528 | 3.43 | 34.22 | 0.57 | 27.24 | 800 | 2.95 | 34.35 | 27.39 | 75 | 0.88 |
| 718 | 3.07 | 34.32 | 0.60 | 27.36 | 1000 | 2.69 | 34.40 | 27.46 | 69 | 1.03 |
| 908 | 2.81 | 34.38 | 0.73 | 27.43 | 1200 | 2.42 | 34.46 | 27.53 | 63 | 1.16 |
| 1384 | 2.17 | 34.52 | 1.00 | 27.59 | 1500 | 2.06 | 34.54 | 27.62 | 55 | 1.34 |
| 1860 | 1.85 | 34.58 | 1.68 | 27.67 | | | | | | |

57 CNAV WHITETHROAT; July 24, 1958; 1544 GCT; 51°00'N, 176°00'E; sounding, 3000 fm; wind, 140°, 10 kt; weather, overcast; sea, missing.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 8.20 | 32.76 | 7.06 | 25.51 | 0 | 8.20 | 32.76 | 25.51 | 248 | 0.00 |
| 10 | 8.08 | 32.74 | (7.11)a) | 25.51 | 10 | 8.08 | 32.74 | 25.51 | 248 | 0.02 |
| 24 | 7.59 | 32.83 | 7.16 | 25.65 | 20 | 7.71 | 32.81 | 25.62 | 238 | 0.05 |
| 48 | 4.92 | 32.91 | 6.91 | 26.05 | 30 | 6.78 | 32.85 | 25.78 | 223 | 0.07 |
| 72 | 3.91 | 33.08 | 6.19 | 26.29 | 50 | 4.82 | 32.93 | 26.08 | 194 | 0.12 |
| 97 | 3.64 | 33.29 | 5.39 | 26.49 | 75 | 3.87 | 33.11 | 26.32 | 172 | 0.16 |
| 121 | 3.95 | 33.58 | 3.49 | 26.69 | 100 | 3.68 | 33.33 | 26.51 | 154 | 0.20 |
| 144 | 4.08 | 33.73 | 2.73 | 26.79 | 125 | 3.97 | 33.61 | 26.70 | 136 | 0.24 |
| 169 | 4.12 | 33.80 | 2.41 | 26.76 | 150 | 4.09 | 33.75 | 26.80 | 127 | 0.27 |
| 192 | 4.03 | 33.85 | (2.15)a) | 26.89 | 175 | 4.10 | 33.81 | 26.86 | 121 | 0.30 |
| 216 | 3.93 | 33.88 | 1.90 | 26.93 | 200 | 4.00 | 33.86 | 26.90 | 118 | 0.33 |
| 240 | 3.86 | 33.91 | 1.52 | 26.96 | 250 | 3.82 | 33.93 | 26.97 | 112 | 0.39 |
| 288 | 3.69 | 33.98 | 1.49 | 27.03 | 300 | 3.68 | 34.00 | 27.04 | 105 | 0.44 |
| 392 | 3.59 | 34.10 | 1.08 | 27.13 | 400 | 3.58 | 34.11 | 27.14 | 96 | 0.55 |
| 490 | 3.43 | 34.18 | 0.93 | 27.21 | 500 | 3.42 | 34.19 | 27.22 | 90 | 0.64 |
| 588 | 3.36 | 34.24 | 0.86 | 27.27 | 600 | 3.33 | 34.25 | 27.28 | 84 | 0.73 |
| 785 | 2.97 | 34.33 | 1.01 | 27.38 | 700 | 3.12 | 34.29 | 27.33 | 80 | 0.81 |
| 981 | 2.74 | 34.40 | 0.62 | 27.45 | 800 | 2.95 | 34.34 | 27.38 | 76 | 0.89 |
| 1474 | 2.11 | 34.54 | 1.36 | 27.62 | 1000 | 2.71 | 34.41 | 27.46 | 69 | 1.04 |
| 1964 | 1.81 | 34.59 | 2.04 | 27.68 | 1200 | 2.43 | 34.47 | 27.53 | 63 | 1.17 |
| | | | | | 1500 | 2.09 | 34.54 | 27.62 | 55 | 1.35 |

58 CNAV WHITETHROAT; July 24, 1958; 2240 GCT; 51°29'N, 176°00'E; sounding, 1150 fm; wind, 100°, 15 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.30 | 32.93 | - | 25.77 | 0 | 7.30 | 32.93 | 25.77 | 223 | 0.00 |
| 9 | 7.13 | 32.95 | 6.93 | 25.81 | 10 | 7.11 | 32.95 | 25.81 | 219 | 0.02 |
| 23 | 6.99 | 33.00 | 6.94 | 25.87 | 20 | 7.01 | 32.99 | 25.86 | 216 | 0.04 |
| 46 | 5.30 | 33.18 | 6.15 | 26.22 | 30 | 6.67 | 33.04 | 25.95 | 207 | 0.06 |
| 69 | 4.93 | 33.23 | 6.06 | 26.30 | 50 | 5.14 | 33.20 | 26.25 | 178 | 0.10 |
| 92 | 4.69 | 33.27 | 5.80 | 26.36 | 75 | 4.85 | 33.24 | 26.32 | 172 | 0.15 |
| 114 | 4.33 | 33.27 | 5.67 | 26.40 | 100 | 4.57 | 33.27 | 26.37 | 167 | 0.19 |
| 136 | 4.56 | 33.35 | 4.83 | 26.44 | 150 | 4.56 | 33.37 | 26.45 | 160 | 0.27 |
| 159 | 4.49 | 33.37 | 4.73 | 26.46 | 200 | 4.33 | 33.43 | 26.53 | 153 | 0.35 |
| 181 | 4.37 | 33.40 | 4.74 | 26.50 | 250 | 4.16 | 33.53 | 26.62 | 145 | 0.43 |
| 204 | 4.33 | 33.44 | 4.50 | 26.53 | 300 | 4.11 | 33.63 | 26.71 | 137 | 0.50 |
| 227 | 4.24 | 33.49 | 4.23 | 26.58 | 400 | 4.04 | 33.86 | 26.90 | 120 | 0.63 |
| 273 | 4.10 | 33.56 | 3.74 | 26.65 | 500 | 3.83 | 33.98 | 27.02 | 109 | 0.74 |
| 319 | 4.16 | 33.69 | 2.86 | 26.75 | 600 | 3.67 | 34.09 | 27.12 | 100 | 0.85 |
| 414 | 3.99 | 33.88 | 1.76 | 26.92 | 700 | 3.56 | 34.18 | 27.20 | 93 | 0.95 |
| 510 | 3.81 | 33.99 | 1.05 | 27.03 | 800 | 3.37 | 34.25 | 27.28 | 86 | 1.04 |
| 700 | 3.56 | 34.18 | 0.56 | 27.20 | 1000 | 2.96 | 34.36 | 27.40 | 75 | 1.20 |
| 890 | 3.17 | 34.30 | - | 27.33 | 1200 | 2.61 | 34.44 | 27.50 | 66 | 1.34 |
| 1342 | 2.38 | 34.49 | 0.83 | 27.55 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

59

CNAV WHITETHROAT; July 27, 1958; 0458 GCT; 50°18'N, 171°32'E; sounding, missing; wind, 300°, 20 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.50 | 32.81 | - | 25.50 | 0 | 8.50 | 32.81 | 25.50 | 249 | 0.00 |
| 10 | 8.15 | 32.77 | 6.90 | 25.52 | 10 | 8.15 | 32.77 | 25.52 | 247 | 0.02 |
| 24 | 8.17 | 32.76 | 6.98 | 25.52 | 20 | 8.10 | 32.76 | 25.52 | 247 | 0.05 |
| 48 | 6.19 | 32.83 | 7.35 | 25.84 | 30 | 7.91 | 32.77 | 25.56 | 244 | 0.08 |
| 72 | 4.00 | 32.99 | 6.96 | 26.21 | 50 | 6.02 | 32.84 | 25.87 | 215 | 0.12 |
| 96 | 3.39 | 33.11 | 6.45 | 26.37 | 75 | 3.84 | 33.01 | 26.24 | 179 | 0.17 |
| 119 | 3.65 | 33.43 | 5.19 | 26.60 | 100 | 3.38 | 33.15 | 26.40 | 164 | 0.21 |
| 144 | 4.03 | 33.70 | 3.21 | 26.78 | 150 | 4.03 | 33.75 | 26.81 | 126 | 0.29 |
| 167 | 3.86 | 33.82 | 2.00 | 26.88 | 200 | 3.86 | 33.89 | 26.94 | 114 | 0.35 |
| 190 | 3.87 | 33.88 | 1.41 | 26.93 | 250 | 3.83 | 33.96 | 27.00 | 109 | 0.40 |
| 214 | 3.82 | 33.91 | 0.99 | 26.96 | 300 | 3.78 | 34.04 | 27.06 | 103 | 0.46 |
| 238 | 3.83 | 33.94 | 1.03 | 26.99 | 400 | 3.64 | 34.11 | 27.14 | 97 | 0.56 |
| 286 | 3.80 | 34.02 | 1.09 | 27.05 | 500 | 3.47 | 34.19 | 27.21 | 90 | 0.65 |
| 343 | 3.71 | 34.07 | 1.00 | 27.10 | 600 | 3.29 | 34.24 | 27.28 | 85 | 0.74 |
| 424 | 3.62 | 34.13 | 0.96 | 27.15 | 700 | 3.16 | 34.28 | 27.32 | 81 | 0.82 |
| 512 | 3.44 | 34.19 | 0.88 | 27.22 | 800 | 3.04 | 34.31 | 27.35 | 79 | 0.90 |
| 748 | 3.11 | 34.29 | 0.87 | 27.33 | 1000 | 2.77 | 34.37 | 27.43 | 72 | 1.06 |
| 935 | 2.86 | 34.35 | 0.84 | 27.40 | 1200 | 2.50 | 34.43 | 27.50 | 66 | 1.20 |
| 1402 | 2.22 | 34.48 | 1.19 | 27.56 | | | | | | |

60

CNAV WHITETHROAT; July 27, 1958; 2034 GCT; 51°34'N, 170°00'E; sounding, 2500 fm; wind, 040°, 20 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.40 | 32.84 | - | 25.54 | 0 | 8.40 | 32.84 | 25.54 | 245 | 0.00 |
| 10 | 7.95 | 32.84 | 6.88 | 25.61 | 10 | 7.95 | 32.84 | 25.61 | 239 | 0.02 |
| 23 | 7.95 | 32.84 | 6.93 | 25.61 | 20 | 7.89 | 32.84 | 25.62 | 238 | 0.05 |
| 46 | 7.87 | 33.08 | 6.96 | 25.80 | 30 | 7.94 | 32.88 | 25.64 | 236 | 0.07 |
| 67 | 4.61 | 33.20 | 6.79 | 26.31 | 50 | 7.48 | 33.11 | 25.88 | 213 | 0.12 |
| 92 | 3.90 | 33.36 | 6.17 | 26.51 | 75 | 4.01 | 33.25 | 26.42 | 163 | 0.16 |
| 113 | 3.85 | 33.60 | 4.86 | 26.71 | 100 | 3.82 | 33.44 | 26.58 | 147 | 0.20 |
| 136 | 4.04 | 33.74 | 3.32 | 26.80 | 150 | 4.11 | 33.79 | 26.84 | 123 | 0.27 |
| 159 | 4.13 | 33.82 | 2.36 | 26.86 | 200 | 3.95 | 33.92 | 26.95 | 113 | 0.33 |
| 181 | 4.05 | 33.87 | 1.83 | 26.91 | 250 | 3.84 | 34.04 | 27.06 | 103 | 0.39 |
| 204 | 3.93 | 33.93 | 1.33 | 26.96 | 300 | 3.78 | 34.18 | 27.18 | 92 | 0.44 |
| 226 | 3.87 | 33.95 | 1.00 | 26.99 | 400 | 3.63 | 34.22 | 27.23 | 88 | 0.53 |
| 254 | 3.84 | 34.06 | 0.84 | 27.07 | 500 | 3.52 | 34.12 | 27.15 | 96 | 0.62 |
| 337 | 3.71 | (34.23)a) | 0.54 | (27.22) | 600 | 3.38 | 34.11 | 27.16 | 96 | 0.72 |
| 446 | 3.59 | 34.14 | 0.46 | 27.17 | 700 | 3.23 | 34.15 | 27.21 | 92 | 0.81 |
| 895 | 2.87 | 34.35 | 0.47 | 27.40 | 800 | 3.05 | 34.23 | 27.29 | 85 | 0.90 |
| 1340 | 2.20 | 34.49 | 1.04 | 27.57 | 1000 | 2.71 | 34.39 | 27.45 | 70 | 1.06 |
| | | | | | 1200 | 2.41 | 34.45 | 27.52 | 64 | 1.19 |

61

CNAV WHITETHROAT; July 28, 1958; 0753 GCT; 52°30'N, 169°23'E; sounding, 2800 fm; wind, 340°, 15 kt; weather, cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.20 | 32.99 | - | 25.69 | 0 | 8.20 | 32.99 | 25.69 | 231 | 0.00 |
| 10 | 7.67 | 32.99 | 7.15 | 25.76 | 10 | 7.67 | 32.99 | 25.76 | 224 | 0.02 |
| 24 | 7.53 | 33.00 | 7.10 | 25.79 | 20 | 7.50 | 32.99 | 25.79 | 222 | 0.04 |
| 48 | 3.47 | 33.11 | 7.22 | 26.36 | 30 | 6.97 | 33.01 | 25.88 | 213 | 0.07 |
| 73 | 2.47 | 33.09 | 7.59 | 26.43 | 50 | 3.27 | 33.11 | 26.38 | 166 | 0.10 |
| 97 | 2.03 | 33.17 | 7.25 | 26.53 | 75 | 2.41 | 33.09 | 26.43 | 161 | 0.15 |
| 121 | 2.49 | 33.44 | 4.93 | 26.71 | 100 | 2.04 | 33.19 | 26.54 | 150 | 0.19 |
| 146 | 3.22 | 33.71 | 2.52 | 26.86 | 150 | 3.29 | 33.74 | 26.88 | 119 | 0.25 |
| 170 | 3.41 | 33.83 | 1.53 | 26.94 | 200 | 3.49 | 33.88 | 26.97 | 111 | 0.31 |
| 195 | 3.48 | 33.87 | 1.21 | 26.96 | 250 | 3.51 | 33.96 | 27.03 | 105 | 0.37 |
| 219 | 3.50 | 33.92 | 1.09 | 27.00 | 300 | 3.46 | 34.03 | 27.09 | 100 | 0.42 |
| 243 | 3.51 | 33.95 | 0.84 | 27.03 | 400 | 3.41 | 34.12 | 27.17 | 94 | 0.52 |
| 292 | 3.47 | 34.02 | 0.73 | 27.08 | 500 | 3.33 | 34.19 | 27.23 | 88 | 0.61 |
| 376 | 3.42 | 34.10 | 0.56 | 27.15 | 600 | 3.18 | 34.24 | 27.28 | 84 | 0.70 |
| 474 | 3.36 | 34.17 | 0.65 | 27.22 | 700 | 3.03 | 34.29 | 27.34 | 80 | 0.78 |
| 572 | 3.22 | 34.23 | 0.59 | 27.27 | 800 | 2.88 | 34.33 | 27.38 | 75 | 0.86 |
| 769 | 2.92 | 34.32 | 0.56 | 27.37 | | | | | | |
| 966 | 2.65 | 34.39 | 0.63 | 27.45 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 62 | CNAV WHITETHROAT; July 28, 1958; 1530 GCT; 52°45'N, 171°11'E; sounding, 3600 fm; wind, 040°, 6 kt; weather, missing; sea, calm. | | | | | | | | | |
| 0 | 8.50 | 33.03 | - | 25.68 | 0 | 8.50 | 33.03 | 25.68 | 232 | 0.00 |
| 10 | 8.01 | 32.89 | 6.79 | 25.64 | 10 | 8.01 | 32.89 | 25.64 | 236 | 0.02 |
| 24 | 7.68 | 32.94 | 6.83 | 25.73 | 20 | 7.73 | 32.90 | 25.69 | 232 | 0.05 |
| 49 | 4.11 | 33.06 | 7.21 | 26.25 | 30 | 7.17 | 32.97 | 25.82 | 219 | 0.07 |
| 73 | 3.33 | 33.16 | 6.84 | 26.41 | 50 | 4.03 | 33.06 | 26.27 | 177 | 0.11 |
| 98 | 3.21 | 33.35 | 5.78 | 26.58 | 75 | 3.29 | 33.17 | 26.42 | 162 | 0.15 |
| 122 | 2.87 | 33.36 | 5.45 | 26.61 | 100 | 3.19 | 33.36 | 26.58 | 147 | 0.19 |
| 147 | 3.13 | 33.61 | 3.29 | 26.79 | 150 | 3.18 | 33.64 | 26.80 | 126 | 0.26 |
| 171 | 3.65 | 33.79 | 1.87 | 26.88 | 200 | 3.55 | 33.86 | 26.95 | 113 | 0.32 |
| 196 | 3.55 | 33.85 | 1.41 | 26.94 | 250 | 3.64 | 33.95 | 27.01 | 108 | 0.38 |
| 220 | 3.64 | 33.91 | 1.11 | 26.97 | 300 | 3.63 | 34.01 | 27.06 | 103 | 0.43 |
| 245 | 3.64 | 33.94 | 0.94 | 27.00 | 400 | 3.40 | 34.07 | 27.13 | 97 | 0.53 |
| 294 | 3.64 | 34.01 | 0.65 | 27.05 | 500 | 3.49 | 34.18 | 27.20 | 91 | 0.63 |
| 355 | 3.39 | 34.03 | 0.81 | 27.10 | 600 | 3.20 | 34.22 | 27.27 | 86 | 0.72 |
| 447 | 3.58 | 34.14 | 0.71 | 27.17 | 700 | 3.08 | 34.27 | 27.32 | 82 | 0.80 |
| 539 | 3.32 | 34.19 | 0.56 | 27.23 | 800 | 2.97 | 34.31 | 27.36 | 78 | 0.88 |
| 723 | 3.07 | 34.28 | 0.56 | 27.33 | 1000 | 2.73 | 34.38 | 27.44 | 71 | 1.03 |
| 909 | 2.84 | 34.35 | 0.57 | 27.40 | 1200 | 2.48 | 34.43 | 27.50 | 66 | 1.17 |
| 1370 | 2.26 | 34.47 | 0.87 | 27.55 | | | | | | |
| 63 | CNAV WHITETHROAT; July 29, 1958; 0104 GCT; 52°59'N, 172°17'E; sounding, 145 fm; wind, 270°, 15 kt; weather, cloudy; sea, smooth. | | | | | | | | | |
| 0 | 8.20 | 32.95 | 7.16 | 25.66 | 0 | 8.20 | 32.95 | 25.66 | 234 | 0.00 |
| 10 | 8.00 | 32.92 | 7.06 | 25.66 | 10 | 8.00 | 32.92 | 25.66 | 234 | 0.02 |
| 24 | 7.88 | 32.92 | 7.08 | 25.68 | 20 | 7.90 | 32.91 | 25.67 | 233 | 0.05 |
| 47 | 5.63 | 33.01 | 7.34 | 26.05 | 30 | 7.54 | 32.93 | 25.74 | 227 | 0.07 |
| 70 | 3.93 | 33.10 | 7.17 | 26.31 | 50 | 5.38 | 33.02 | 26.09 | 194 | 0.11 |
| 92 | 3.15 | 33.10 | 7.43 | 26.38 | 75 | 3.68 | 33.11 | 26.34 | 170 | 0.16 |
| 115 | 3.15 | 33.20 | 6.89 | 26.46 | 100 | 3.06 | 33.12 | 26.41 | 164 | 0.20 |
| 137 | 3.17 | 33.25 | 6.47 | 26.50 | 150 | 3.28 | 33.32 | 26.54 | 151 | 0.28 |
| 160 | 3.41 | 33.39 | 5.87 | 26.58 | 200 | 3.67 | 33.68 | 26.79 | 128 | 0.35 |
| 182 | 3.58 | 33.57 | 3.86 | 26.71 | | | | | | |
| 205 | 3.69 | 33.70 | 2.79 | 26.81 | | | | | | |
| 228 | 3.78 | 33.83 | 1.96 | 26.90 | | | | | | |
| 64 | CNAV WHITETHROAT; July 29, 1958; 0315 GCT; 53°20'N, 172°42'E; sounding, 2100 fm; wind, 320°, 20 kt; weather, cloudy; sea, moderate. | | | | | | | | | |
| 0 | 8.30 | 32.96 | - | 25.65 | 0 | 8.30 | 32.96 | 25.65 | 234 | 0.00 |
| 10 | 8.11 | 32.86 | 7.00 | 25.60 | 10 | 8.11 | 32.86 | 25.60 | 240 | 0.02 |
| 24 | 7.91 | 32.91 | 7.02 | 25.67 | 20 | 7.96 | 32.87 | 25.63 | 237 | 0.05 |
| 48 | 5.18 | 33.00 | 7.17 | 26.09 | 30 | 7.51 | 32.93 | 25.74 | 226 | 0.07 |
| 72 | 4.02 | 33.10 | 6.89 | 26.30 | 50 | 5.02 | 33.01 | 26.12 | 191 | 0.11 |
| 95 | 3.71 | 33.23 | 6.36 | 26.43 | 75 | 3.94 | 33.12 | 26.32 | 172 | 0.16 |
| 119 | 3.77 | 33.38 | 4.96 | 26.54 | 100 | 3.69 | 33.26 | 26.46 | 159 | 0.20 |
| 143 | 3.50 | 33.55 | 3.90 | 26.71 | 150 | 3.55 | 33.61 | 26.75 | 132 | 0.27 |
| 167 | 3.92 | 33.75 | 2.26 | 26.82 | 200 | 3.87 | 33.83 | 26.89 | 118 | 0.34 |
| 190 | 3.91 | 33.81 | 1.94 | 26.88 | 250 | 3.51 | 33.89 | 26.97 | 111 | 0.40 |
| 213 | 3.80 | 33.85 | 1.68 | 26.91 | 300 | 3.74 | 33.99 | 27.03 | 106 | 0.45 |
| 237 | 3.55 | 33.87 | 1.55 | 26.95 | 400 | 3.65 | 34.04 | 27.08 | 102 | 0.55 |
| 285 | 3.72 | 33.97 | 0.95 | 27.02 | 500 | 3.58 | 34.08 | 27.12 | 99 | 0.66 |
| 367 | 3.67 | 34.03 | 0.84 | 27.07 | 600 | 3.48 | 34.16 | 27.20 | 93 | 0.75 |
| 458 | 3.61 | 34.05 | 0.84 | 27.09 | 700 | 3.35 | 34.22 | 27.26 | 88 | 0.84 |
| 551 | 3.53 | 34.13 | 0.85 | 27.16 | 800 | 3.23 | 34.27 | 27.30 | 84 | 0.93 |
| 741 | 3.29 | 34.24 | 0.72 | 27.28 | 1000 | 3.02 | 34.32 | 27.36 | 79 | 1.10 |
| 937 | 3.10 | 34.30 | 0.57 | 27.34 | 1200 | 2.74 | 34.39 | 27.44 | 72 | 1.25 |
| 1430 | 2.32 | 34.47 | 0.96 | 27.54 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

65

CNAV WHITETHROAT; July 29, 1958; 1230 GCT; 53°47'N, 171°13'E; sounding, 1700 fm; wind, 270°, 20 kt; weather, overcast; sea, slight.

| | | | |
|---|---|---|---|
| 0 | 8.0 | 32.98 | - |
| 10 | 7.89 | 32.94 | 6.92 |
| 25 | 7.89 | 32.93 | 6.97 |
| 49 | 3.53 | 33.09 | 7.50 |
| 73 | 3.04 | 33.14 | 7.18 |
| 98 | 2.32 | 33.19 | 7.37 |
| 122 | 1.39 | 33.21 | 7.38 |
| 147 | 2.17 | 33.44 | 5.11 |
| 171 | 3.01 | 33.63 | 3.29 |
| 196 | 3.51 | 33.78 | 2.60 |
| 220 | 3.61 | 33.86 | 1.49 |
| 245 | 3.65 | 33.90 | 1.30 |
| 294 | 3.55 | 33.97 | 0.93 |
| 366 | 3.56 | 34.08 | 0.60 |
| 460 | 3.46 | 34.16 | 0.54 |
| 556 | 3.33 | 34.22 | 0.48 |
| 745 | 2.97 | 34.30 | 0.46 |
| 934 | 2.75 | 34.37 | 0.53 |
| 1406 | 2.17 | 34.50 | 0.90 |

66

CNAV WHITETHROAT; July 30, 1958; 2325 GCT; 54°10'N, 170°04'E; sounding, missing; wind, 280°, 10 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.70 | 32.99 | - | 25.76 | 0 | 7.70 | 32.99 | 25.76 | 224 | 0.00 |
| 10 | 7.38 | 32.96 | 7.30 | 25.79 | 10 | 7.38 | 32.96 | 25.79 | 222 | 0.02 |
| 25 | 7.37 | 32.98 | 7.40 | 25.80 | 20 | 7.31 | 32.97 | 25.80 | 221 | 0.04 |
| 49 | 2.49 | 33.15 | 8.01 | 26.48 | 30 | 6.85 | 33.00 | 25.89 | 213 | 0.07 |
| 73 | 1.48 | 33.16 | 7.72 | 26.56 | 50 | 2.37 | 33.16 | 26.49 | 155 | 0.10 |
| 97 | 1.21 | 33.18 | 7.81 | 26.60 | 75 | 1.43 | 33.16 | 26.56 | 148 | 0.14 |
| 121 | 0.96 | 33.19 | 7.69 | 26.62 | 100 | 1.18 | 33.19 | 26.60 | 145 | 0.18 |
| 146 | 0.69 | 33.19 | 7.62 | 26.64 | 150 | 0.72 | 33.20 | 26.64 | 141 | 0.25 |
| 170 | 1.19 | 33.28 | 6.78 | 26.68 | 200 | 3.26 | 33.69 | 26.84 | 123 | 0.32 |
| 194 | 3.03 | 33.64 | 3.30 | 26.82 | 250 | 3.66 | 33.89 | 26.96 | 112 | 0.38 |
| 218 | 3.41 | 33.75 | 2.33 | 26.87 | 300 | 3.54 | 33.95 | 27.02 | 107 | 0.43 |
| 242 | 3.63 | 33.86 | 1.59 | 26.94 | 400 | 3.54 | 34.09 | 27.13 | 98 | 0.54 |
| 290 | 3.55 | 33.93 | 1.40 | 27.01 | 500 | 3.45 | 34.17 | 27.20 | 91 | 0.63 |
| 384 | 3.55 | 34.07 | 0.68 | 27.11 | 600 | 3.17 | 34.23 | 27.28 | 85 | 0.72 |
| 480 | 3.49 | 34.16 | 0.66 | 27.19 | 700 | 3.01 | 34.28 | 27.33 | 80 | 0.80 |
| 577 | 3.22 | 34.22 | 0.49 | 27.26 | 800 | 2.92 | 34.32 | 27.37 | 77 | 0.88 |
| 770 | 2.96 | 34.31 | 0.40 | 27.36 | 1000 | 2.66 | 34.41 | 27.46 | 69 | 1.03 |
| 962 | 2.71 | 34.39 | 0.53 | 27.45 | 1200 | 2.43 | 34.47 | 27.53 | 63 | 1.16 |
| 1446 | 2.17 | 34.51 | 0.91 | 27.58 | | | | | | |

67

CNAV WHITETHROAT; July 30, 1958; 0330 GCT; 54°10'N, 172°00'E; sounding, 2100 fm; wind, 270°, 15 kt; weather, overcast; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.00 | 33.05 | 6.84 | 25.76 | 0 | 8.00 | 33.05 | 25.76 | 224 | 0.00 |
| 10 | 7.77 | 33.00 | 6.93 | 25.76 | 10 | 7.77 | 33.00 | 25.76 | 224 | 0.02 |
| 25 | 7.77 | 33.00 | 6.87 | 25.76 | 20 | 7.72 | 32.99 | 25.76 | 225 | 0.04 |
| 50 | 3.61 | 33.12 | 7.12 | 26.36 | 30 | 7.35 | 33.01 | 25.83 | 218 | 0.07 |
| 74 | 3.11 | 33.15 | 7.27 | 26.43 | 50 | 3.61 | 33.12 | 26.36 | 168 | 0.11 |
| 98 | 2.77 | 33.22 | 7.07 | 26.51 | 75 | 3.09 | 33.15 | 26.43 | 161 | 0.15 |
| 123 | 2.74 | 33.31 | 6.43 | 26.58 | 100 | 2.76 | 33.22 | 26.51 | 153 | 0.19 |
| 148 | 2.21 | 33.36 | 6.16 | 26.67 | 150 | 2.24 | 33.38 | 26.68 | 138 | 0.26 |
| 172 | 3.21 | 33.66 | 3.32 | 26.82 | 200 | 3.62 | 33.82 | 26.91 | 117 | 0.32 |
| 197 | 3.59 | 33.81 | 2.15 | 26.90 | 250 | 3.73 | 33.92 | 26.98 | 110 | 0.38 |
| 222 | 3.73 | 33.88 | 1.77 | 26.95 | 300 | 3.67 | 34.01 | 27.06 | 104 | 0.44 |
| 246 | 3.73 | 33.92 | 1.44 | 26.98 | 400 | 3.55 | 34.11 | 27.15 | 96 | 0.54 |
| 296 | 3.68 | 34.01 | 0.93 | 27.05 | 500 | 3.49 | 34.17 | 27.20 | 92 | 0.63 |
| 329 | 3.63 | 34.04 | 0.90 | 27.08 | 600 | 3.37 | 34.22 | 27.25 | 87 | 0.72 |
| 417 | 3.53 | 34.12 | 0.72 | 27.16 | 700 | 3.19 | 34.28 | 27.32 | 82 | 0.81 |
| 503 | 3.49 | 34.17 | 0.62 | 27.20 | 800 | 3.07 | 34.32 | 27.36 | 78 | 0.89 |
| 677 | 3.22 | 34.27 | 0.57 | 27.30 | 1000 | 2.84 | 34.38 | 27.43 | 72 | 1.04 |
| 855 | 3.02 | 34.34 | 0.73 | 27.38 | 1200 | 2.57 | 34.44 | 27.50 | 66 | 1.18 |
| 1293 | 2.43 | 34.46 | 0.97 | 27.52 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 68 | CNAV WHITETHROAT; July 30, 1958; 1430 GCT; 54°00'N, 174°02'E; sounding, missing; wind, 270°, 15 kt; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 7.90 | 33.11 | - | 25.83 | 0 | 7.90 | 33.11 | 25.83 | 218 | 0.00 |
| 10 | 7.61 | 33.00 | 7.03 | 25.78 | 10 | 7.61 | 33.00 | 25.78 | 222 | 0.02 |
| 25 | 7.61 | 33.00 | 7.09 | 25.78 | 20 | 7.55 | 32.98 | 25.77 | 223 | 0.04 |
| 49 | 4.51 | 33.14 | 6.69 | 26.28 | 30 | 7.28 | 33.02 | 25.84 | 217 | 0.07 |
| 73 | 4.01 | 33.27 | 6.08 | 26.43 | 50 | 4.44 | 33.15 | 26.29 | 174 | 0.11 |
| 97 | 3.71 | 33.30 | 5.91 | 26.49 | 75 | 3.98 | 33.27 | 26.44 | 161 | 0.15 |
| 121 | 3.69 | 33.40 | 5.24 | 26.57 | 100 | 3.69 | 33.31 | 26.49 | 155 | 0.19 |
| 146 | 3.80 | 33.52 | 4.27 | 26.65 | 150 | 3.82 | 33.54 | 26.67 | 140 | 0.26 |
| 171 | 3.91 | 33.61 | 2.92 | 26.72 | 200 | 3.97 | 33.73 | 26.80 | 127 | 0.33 |
| 195 | 3.96 | 33.71 | 1.76 | 26.79 | 250 | 3.90 | 33.88 | 26.93 | 115 | 0.39 |
| 219 | 3.97 | 33.80 | - | 26.86 | 300 | 3.78 | 33.96 | 27.00 | 109 | 0.45 |
| 243 | 3.92 | 33.87 | 1.53 | 26.92 | 400 | 3.62 | 34.05 | 27.09 | 101 | 0.55 |
| 292 | 3.80 | 33.95 | 1.46 | 26.99 | 500 | 3.49 | 34.12 | 27.16 | 96 | 0.65 |
| 364 | 3.67 | 34.02 | 1.23 | 27.06 | 600 | 3.35 | 34.17 | 27.21 | 91 | 0.75 |
| 454 | 3.55 | 34.09 | 0.92 | 27.13 | 700 | 3.18 | 34.24 | 27.29 | 84 | 0.84 |
| 544 | 3.43 | 34.14 | 0.66 | 27.18 | 800 | 3.04 | 34.30 | 27.35 | 79 | 0.92 |
| 724 | 3.14 | 34.27 | 0.65 | 27.31 | 1000 | 2.80 | 34.38 | 27.43 | 72 | 1.07 |
| 906 | 2.92 | 34.34 | 0.64 | 27.39 | 1200 | 2.55 | 34.44 | 27.50 | 66 | 1.21 |
| 1363 | 2.34 | 34.47 | 0.82 | 27.54 | | | | | | |
| 69 | CNAV WHITETHROAT; July 30, 1958; 2131 GCT; 53°23'N, 174°16'E; sounding, 1750 fm; wind, 270°, 20 kt; weather, missing; sea, missing. | | | | | | | | | |
| 0 | 7.80 | 33.01 | - | 25.76 | 0 | 7.80 | 33.01 | 25.76 | 224 | 0.00 |
| 10 | 7.63 | 33.00 | 7.06 | 25.78 | 10 | 7.63 | 33.00 | 25.78 | 223 | 0.02 |
| 25 | 7.65 | 32.98 | 6.98 | 25.77 | 20 | 7.61 | 32.99 | 25.77 | 223 | 0.04 |
| 50 | 5.15 | 33.11 | 7.02 | 26.18 | 30 | 7.40 | 33.00 | 25.81 | 220 | 0.07 |
| 75 | 4.39 | 33.16 | 6.79 | 26.31 | 50 | 5.15 | 33.11 | 26.18 | 185 | 0.11 |
| 100 | 4.02 | 33.25 | 6.06 | 26.41 | 75 | 4.39 | 33.16 | 26.31 | 173 | 0.15 |
| 125 | 3.81 | 33.34 | 5.53 | 26.51 | 100 | 4.02 | 33.25 | 26.41 | 163 | 0.20 |
| 150 | 3.87 | 33.45 | 5.03 | 26.59 | 150 | 3.87 | 33.45 | 26.59 | 146 | 0.27 |
| 175 | 3.87 | 33.56 | 3.92 | 26.67 | 200 | 3.93 | 33.68 | 26.76 | 131 | 0.34 |
| 200 | 3.93 | 33.68 | 3.12 | 26.76 | 250 | 3.91 | 33.80 | 26.87 | 121 | 0.41 |
| 225 | 3.93 | 33.75 | 2.63 | 26.82 | 300 | 3.84 | 33.90 | 26.95 | 114 | 0.47 |
| 250 | 3.91 | 33.80 | 2.28 | 26.87 | 400 | 3.64 | 34.07 | 27.10 | 100 | 0.57 |
| 300 | 3.84 | (33.90)a) | 1.48 | (26.95) | 500 | 3.52 | 34.14 | 27.17 | 94 | 0.67 |
| 371 | 3.69 | 34.03 | 1.05 | 27.07 | 600 | 3.33 | 34.19 | 27.23 | 90 | 0.76 |
| 468 | 3.57 | 34.11 | 0.71 | 27.15 | 700 | 3.19 | 34.24 | 27.28 | 85 | 0.85 |
| 566 | 3.39 | 34.17 | 0.56 | 27.21 | 800 | 3.07 | 34.29 | 27.33 | 80 | 0.94 |
| 762 | 3.12 | 34.27 | 0.55 | 27.32 | 1000 | 2.84 | 34.36 | 27.41 | 74 | 1.09 |
| 958 | 2.89 | 34.35 | 0.58 | 27.40 | 1200 | 2.60 | 34.43 | 27.48 | 68 | 1.24 |
| 1451 | 2.29 | 34.49 | 0.88 | 27.56 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

70

CNAV WHITETHROAT; July 31, 1958; 0700 GCT; 52°46'N, 174°41'E; sounding, 1900 fm; wind, 140°, 25 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.80 | 33.04 | - | 25.79 | 0 | 7.80 | 33.04 | 25.79 | 222 | 0.00 |
| 10 | 7.82 | 33.00 | 7.03 | 25.75 | 10 | 7.82 | 33.00 | 25.75 | 226 | 0.02 |
| 25 | 7.21 | 32.99 | 7.11 | 25.83 | 20 | 7.50 | 32.99 | 25.79 | 222 | 0.04 |
| 50 | 4.63 | 33.10 | 6.97 | 26.23 | 30 | 6.85 | 33.00 | 25.89 | 213 | 0.07 |
| 75 | 4.11 | 33.26 | 5.96 | 26.41 | 50 | 4.63 | 33.10 | 26.23 | 180 | 0.11 |
| 99 | 3.87 | 33.31 | 5.68 | 26.48 | 75 | 4.11 | 33.26 | 26.41 | 163 | 0.15 |
| 124 | 3.81 | 33.37 | 5.21 | 26.53 | 100 | 3.86 | 33.32 | 26.48 | 156 | 0.19 |
| 148 | 3.93 | 33.46 | 4.49 | 26.59 | 150 | 3.93 | 33.47 | 26.60 | 146 | 0.27 |
| 173 | 3.85 | 33.53 | 4.08 | 26.66 | 200 | 3.95 | 33.65 | 26.74 | 133 | 0.34 |
| 198 | 3.95 | 33.64 | 3.49 | 26.73 | 250 | 3.87 | 33.71 | 26.80 | 128 | 0.40 |
| 223 | 3.91 | 33.68 | 3.25 | 26.77 | 300 | 3.77 | 33.86 | 26.93 | 116 | 0.46 |
| 248 | 3.87 | 33.71 | 2.87 | 26.80 | 400 | 3.66 | 34.05 | 27.09 | 101 | 0.57 |
| 298 | 3.77 | 33.86 | 2.09 | 26.92 | 500 | 3.61 | 34.08 | 27.12 | 100 | 0.67 |
| 389 | 3.67 | 34.04 | 1.92 | 27.08 | 600 | 3.50 | 34.13 | 27.17 | 95 | 0.77 |
| 486 | 3.62 | 34.07 | 1.38 | 27.11 | 700 | 3.37 | 34.19 | 27.22 | 90 | 0.87 |
| 584 | 3.52 | 34.12 | 0.73 | 27.16 | 800 | 3.21 | 34.24 | 27.28 | 85 | 0.96 |
| 783 | 3.23 | 34.23 | 0.65 | 27.28 | 1000 | 2.92 | 34.32 | 27.37 | 78 | 1.12 |
| 981 | 2.95 | 34.31 | 0.81 | 27.36 | 1200 | 2.66 | 34.39 | 27.45 | 71 | 1.27 |
| 1478 | 2.32 | 34.47 | 0.95 | 27.54 | | | | | | |

71

CNAV WHITETHROAT; July 31, 1958; 1100 GCT; 52°18'N, 174°56'E; sounding, 750 fm; wind, 140°, 15 kt; weather, moderate rain; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.90 | 32.76 | - | 25.56 | 0 | 7.90 | 32.76 | 25.56 | 244 | 0.00 |
| 10 | 7.59 | 32.83 | 6.96 | 25.65 | 10 | 7.59 | 32.83 | 25.65 | 235 | 0.02 |
| 24 | 7.55 | 32.86 | 7.08 | 25.68 | 20 | 7.51 | 32.86 | 25.68 | 232 | 0.05 |
| 48 | 5.53 | 33.10 | 6.35 | 26.13 | 30 | 7.28 | 32.89 | 25.75 | 226 | 0.07 |
| 72 | 5.05 | 33.19 | 5.80 | 26.26 | 50 | 5.43 | 33.11 | 26.15 | 188 | 0.11 |
| 96 | 4.79 | 33.23 | 5.79 | 26.32 | 75 | 5.01 | 33.20 | 26.27 | 176 | 0.16 |
| 121 | 4.62 | 33.28 | 5.49 | 26.38 | 100 | 4.76 | 33.24 | 26.33 | 171 | 0.20 |
| 144 | 4.51 | 33.30 | 5.23 | 26.40 | 150 | 4.49 | 33.32 | 26.42 | 163 | 0.29 |
| 168 | 4.42 | 33.43 | 4.98 | 26.52 | 200 | 4.26 | 33.55 | 26.63 | 143 | 0.36 |
| 192 | 4.29 | 33.54 | 4.46 | 26.62 | 250 | 4.16 | 33.70 | 26.76 | 132 | 0.43 |
| 219 | 4.23 | 33.57 | 4.03 | 26.65 | 300 | 3.97 | 33.88 | 26.92 | 117 | 0.50 |
| 240 | 4.19 | 33.66 | 3.56 | 26.72 | 400 | 3.79 | 34.03 | 27.06 | 104 | 0.61 |
| 288 | 4.01 | 33.84 | 2.53 | 26.89 | | | | | | |
| 385 | 3.81 | 34.02 | 1.39 | 27.05 | | | | | | |
| 480 | 3.72 | 34.10 | 0.96 | 27.12 | | | | | | |

72

CNAV WHITETHROAT; July 31, 1958; 1830 GCT; 51°45'N, 174°58'E; sounding, 1500 fm; wind, 220°, 20 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.00 | 32.98 | - | 25.71 | 0 | 8.00 | 32.98 | 25.71 | 229 | 0.00 |
| 10 | 7.55 | 32.99 | 6.90 | 25.79 | 10 | 7.55 | 32.99 | 25.79 | 222 | 0.02 |
| 24 | 7.53 | 32.99 | 6.96 | 25.79 | 20 | 7.46 | 33.00 | 25.80 | 221 | 0.04 |
| 48 | 5.94 | 33.15 | 6.36 | 26.12 | 30 | 7.32 | 33.01 | 25.84 | 218 | 0.07 |
| 73 | 4.92 | 33.28 | 5.71 | 26.35 | 50 | 5.83 | 33.16 | 26.14 | 188 | 0.11 |
| 97 | 4.68 | 33.33 | 5.43 | 26.41 | 75 | 4.87 | 33.29 | 26.36 | 168 | 0.15 |
| 121 | 4.74 | 33.37 | 5.36 | 26.43 | 100 | 4.67 | 33.33 | 26.41 | 163 | 0.20 |
| 145 | 4.61 | 33.38 | 5.22 | 26.46 | 150 | 4.59 | 33.38 | 26.46 | 159 | 0.28 |
| 169 | 4.50 | 33.41 | 4.91 | 26.49 | 200 | 4.41 | 33.46 | 26.54 | 152 | 0.35 |
| 193 | 4.42 | 33.45 | 4.68 | 26.53 | 250 | 4.26 | 33.52 | 26.61 | 146 | 0.43 |
| 217 | 4.41 | 33.47 | 4.52 | 26.55 | 300 | 4.09 | 33.63 | 26.71 | 137 | 0.50 |
| 241 | 4.30 | 33.51 | 4.33 | 26.59 | 400 | 3.92 | 33.89 | 26.93 | 116 | 0.63 |
| 290 | 4.12 | 33.61 | 3.64 | 26.69 | 500 | 3.80 | 34.12 | 27.13 | 99 | 0.74 |
| 428 | 3.91 | 33.98 | 1.37 | 27.00 | 600 | 3.64 | 34.26 | 27.25 | 87 | 0.83 |
| 810 | 3.31 | 34.33 | 0.55 | 27.34 | 700 | 3.49 | 34.33 | 27.33 | 81 | 0.92 |
| | | | | | 800 | 3.33 | 34.33 | 27.34 | 80 | 1.00 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 73 | CNAV WHITETHROAT; August 1, 1958; 0200 GCT; 52°31'N, 175°35'E; sounding, 1400 fm; wind, 220°, 20 kt; weather, fog; sea, slight. | | | | | | | | | |
| 0 | 8.10 | 33.03 | - | 25.74 | 0 | 8.10 | 33.03 | 25.74 | 226 | 0.00 |
| 10 | 7.87 | 33.02 | 6.91 | 25.76 | 10 | 7.87 | 33.02 | 25.76 | 224 | 0.02 |
| 25 | (6.70)a) | 33.03 | 7.04 | (25.93) | 20 | 7.20 | 33.02 | 25.86 | 216 | 0.04 |
| 49 | 5.07 | 33.09 | 7.49 | 26.18 | 30 | 6.34 | 33.04 | 25.98 | 204 | 0.07 |
| 74 | 3.67 | 33.13 | 7.39 | 26.36 | 50 | 5.01 | 33.09 | 26.18 | 185 | 0.10 |
| 98 | 3.18 | 33.20 | 7.47 | 26.45 | 75 | 3.63 | 33.13 | 26.36 | 168 | 0.15 |
| 123 | 3.20 | 33.29 | 6.00 | 26.52 | 100 | 3.16 | 33.20 | 26.46 | 158 | 0.19 |
| 147 | 3.15 | 33.35 | 5.68 | 26.58 | 150 | 3.16 | 33.36 | 26.58 | 147 | 0.27 |
| 172 | 3.27 | 33.43 | 5.03 | 26.63 | 200 | 3.78 | 33.67 | 26.77 | 130 | 0.34 |
| 196 | 3.73 | 33.64 | 3.71 | 26.76 | 250 | 3.94 | 33.82 | 26.87 | 121 | 0.40 |
| 220 | 3.90 | 33.78 | 2.69 | 26.85 | 300 | 3.82 | 33.85 | 26.91 | 117 | 0.46 |
| 245 | 3.94 | 33.81 | 2.37 | 26.87 | 400 | 3.86 | 34.02 | 27.04 | 106 | 0.57 |
| 294 | 3.83 | 33.85 | 1.71 | 26.91 | 500 | 3.68 | 34.09 | 27.12 | 99 | 0.68 |
| 389 | 3.87 | 34.00 | 0.84 | 27.03 | 600 | 3.46 | 34.15 | 27.19 | 93 | 0.77 |
| 486 | 3.71 | 34.08 | 0.62 | 27.11 | 700 | 3.29 | 34.21 | 27.25 | 88 | 0.87 |
| 584 | 3.49 | 34.14 | 0.56 | 27.18 | 800 | 3.17 | 34.25 | 27.29 | 84 | 0.95 |
| 778 | 3.20 | 34.24 | 0.54 | 27.28 | 1000 | 2.89 | 34.34 | 27.39 | 76 | 1.12 |
| 972 | 2.93 | 34.33 | 0.53 | 27.37 | 1200 | 2.63 | 34.41 | 27.47 | 69 | 1.26 |
| 1458 | 2.32 | 34.48 | 0.76 | 27.55 | | | | | | |
| 74 | CNAV WHITETHROAT; August 1, 1958; 1015 GCT; 52°36'N, 176°58'E; sounding, 2100 fm; wind, 180°, 15 kt; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 8.20 | 33.09 | - | 25.77 | 0 | 8.20 | 33.09 | 25.77 | 224 | 0.00 |
| 10 | 7.71 | 33.06 | 7.08 | 25.82 | 10 | 7.71 | 33.06 | 25.82 | 219 | 0.02 |
| 24 | (6.88)a) | 33.07 | 6.97 | (25.94) | 20 | 7.14 | 33.06 | 25.90 | 212 | 0.04 |
| 48 | 5.23 | 33.18 | 7.36 | 26.23 | 30 | 6.50 | 33.09 | 26.00 | 202 | 0.06 |
| 73 | 3.20 | 33.20 | 7.45 | 26.46 | 50 | 5.08 | 33.18 | 26.25 | 178 | 0.10 |
| 97 | 2.91 | 33.22 | 7.16 | 26.49 | 75 | 3.11 | 33.21 | 26.47 | 158 | 0.14 |
| 121 | 2.73 | 33.26 | 7.02 | 26.54 | 100 | 2.88 | 33.22 | 26.50 | 155 | 0.18 |
| 145 | 2.99 | 33.42 | 6.05 | 26.65 | 150 | 3.08 | 33.46 | 26.67 | 139 | 0.26 |
| 170 | 3.55 | 33.62 | 3.83 | 26.75 | 200 | 3.81 | 33.77 | 26.85 | 123 | 0.32 |
| 194 | 3.78 | 33.74 | 2.76 | 26.83 | 250 | 3.89 | 33.89 | 26.94 | 115 | 0.38 |
| 217 | 3.85 | 33.81 | 2.23 | 26.88 | 300 | 3.68 | 33.94 | 27.00 | 109 | 0.44 |
| 242 | 3.90 | 33.88 | 1.75 | 26.93 | 400 | 3.63 | 34.07 | 27.11 | 100 | 0.55 |
| 290 | 3.71 | 33.93 | 1.33 | 26.99 | 500 | 3.51 | 34.14 | 27.18 | 94 | 0.64 |
| 378 | 3.65 | 34.05 | 0.95 | 27.09 | 600 | 3.43 | 34.20 | 27.23 | 90 | 0.74 |
| 471 | 3.54 | 34.12 | 0.85 | 27.16 | 700 | 3.29 | 34.25 | 27.28 | 85 | 0.82 |
| 566 | 3.47 | 34.18 | 0.84 | 27.21 | 800 | 3.13 | 34.30 | 27.34 | 80 | 0.91 |
| 758 | 3.19 | 34.28 | 0.85 | 27.32 | 1000 | 2.84 | 34.37 | 27.42 | 73 | 1.06 |
| 951 | 2.91 | 34.35 | 0.60 | 27.40 | 1200 | 2.58 | 34.44 | 27.49 | 67 | 1.20 |
| 1432 | 2.29 | 34.50 | 0.91 | 27.57 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

75

CNAV WHITETHROAT; August 1, 1958; 1545 GCT; 52°33'N, 177°39'E; sounding, 2100 fm; wind, 140°, 15 kt; weather, fog in patches; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.00 | 33.13 | - | 25.83 | 0 | 8.00 | 33.13 | 25.83 | 218 | 0.00 |
| 10 | 7.71 | 33.13 | 7.11 | 25.87 | 10 | 7.71 | 33.13 | 25.87 | 214 | 0.02 |
| 25 | 7.72 | 33.12 | 7.00 | 25.86 | 20 | 7.66 | 33.12 | 25.87 | 214 | 0.04 |
| 50 | 7.59 | 33.13 | 6.99 | 25.88 | 30 | 7.71 | 33.12 | 25.87 | 215 | 0.06 |
| 75 | (6.07)a) | 33.13 | 7.20 | (26.09) | 50 | 7.59 | 33.13 | 25.88 | 213 | 0.11 |
| 100 | 3.16 | 33.22 | 7.44 | 26.48 | 75 | 6.07 | 33.13 | 26.09 | 194 | 0.16 |
| 125 | 2.93 | 33.24 | 7.37 | 26.51 | 100 | 3.16 | 33.22 | 26.48 | 157 | 0.20 |
| 150 | 2.87 | 33.26 | 7.13 | 26.53 | 150 | 2.87 | 33.26 | 26.53 | 152 | 0.28 |
| 175 | 3.06 | 33.36 | 6.42 | 26.59 | 200 | 3.45 | 33.53 | 26.70 | 137 | 0.35 |
| 200 | 3.45 | 33.53 | 4.54 | 26.70 | 250 | 3.83 | 33.78 | 26.86 | 122 | 0.42 |
| 225 | 3.75 | 33.69 | 3.10 | 26.80 | 300 | 3.79 | 33.86 | 26.93 | 116 | 0.48 |
| 250 | 3.83 | 33.78 | 2.37 | 26.86 | 400 | 3.61 | 34.09 | 27.12 | 98 | 0.59 |
| 300 | 3.79 | 33.86 | 1.68 | 26.93 | 500 | 3.51 | 34.17 | 27.19 | 92 | 0.68 |
| 400 | 3.61 | 34.09 | 0.76 | 27.12 | 600 | 3.35 | 34.24 | 27.27 | 86 | 0.77 |
| 500 | 3.51 | 34.17 | 0.85 | 27.19 | 700 | 3.20 | 34.29 | 27.32 | 81 | 0.86 |
| 600 | 3.35 | 34.24 | 0.69 | 27.27 | 800 | 3.07 | 34.32 | 27.36 | 78 | 0.94 |
| 800 | 3.07 | 34.32 | 0.58 | 27.36 | 1000 | 2.81 | 34.40 | 27.44 | 71 | 1.09 |
| 1000 | 2.81 | 34.40 | 0.69 | 27.44 | 1200 | 2.56 | 34.46 | 27.52 | 65 | 1.23 |
| 1500 | 2.21 | 34.53 | 0.97 | 27.60 | 1500 | 2.21 | 34.53 | 27.60 | 57 | 1.41 |

76

CNAV WHITETHROAT; August 1, 1958; 2230 GCT; 52°26'N, 178°37'E; sounding, 1400 fm; wind, 220°, 15 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.00 | 33.15 | 6.79 | 25.99 | 0 | 7.00 | 33.15 | 25.99 | 203 | 0.00 |
| 10 | 6.96 | 33.16 | 6.93 | 26.00 | 10 | 6.96 | 33.16 | 26.00 | 202 | 0.02 |
| 23 | 6.91 | 33.10 | 6.98 | 25.96 | 20 | 6.92 | 33.12 | 25.97 | 204 | 0.04 |
| 47 | 4.87 | 33.17 | 6.78 | 26.26 | 30 | 6.58 | 33.09 | 26.00 | 202 | 0.06 |
| 71 | 4.11 | 33.22 | 6.35 | 26.38 | 50 | 4.70 | 33.17 | 26.28 | 175 | 0.10 |
| 94 | 3.72 | 33.24 | 6.26 | 26.44 | 75 | 4.02 | 33.23 | 26.40 | 164 | 0.14 |
| 117 | 3.72 | 33.32 | 5.85 | 26.50 | 100 | 3.68 | 33.25 | 26.45 | 159 | 0.18 |
| 140 | 3.65 | 33.40 | 5.22 | 26.57 | 150 | 3.64 | 33.42 | 26.59 | 146 | 0.26 |
| 163 | 3.66 | 33.45 | 4.80 | 26.61 | 200 | 3.97 | 33.68 | 26.76 | 131 | 0.33 |
| 186 | 3.89 | 33.58 | 3.90 | 26.69 | 250 | 4.01 | 33.79 | 26.85 | 123 | 0.39 |
| 210 | 4.01 | 33.76 | 3.04 | 26.82 | 300 | 3.94 | 33.92 | 26.96 | 113 | 0.45 |
| 234 | 4.02 | 33.77 | 2.41 | 26.83 | 400 | 3.76 | 34.03 | 27.06 | 104 | 0.56 |
| 280 | 3.97 | 33.89 | 1.72 | 26.93 | 500 | 3.62 | 34.12 | 27.15 | 96 | 0.66 |
| 382 | 3.79 | 34.01 | 1.05 | 27.05 | 600 | 3.47 | 34.19 | 27.22 | 91 | 0.76 |
| 479 | 3.65 | 34.11 | 0.81 | 27.13 | 700 | 3.32 | 34.25 | 27.28 | 86 | 0.85 |
| 576 | 3.51 | 34.17 | 0.64 | 27.20 | 800 | 3.17 | 34.29 | 27.33 | 81 | 0.93 |
| 772 | 3.21 | 34.28 | 0.58 | 27.31 | 1000 | 2.87 | 34.37 | 27.42 | 73 | 1.09 |
| 946 | 2.95 | 34.35 | 0.60 | 27.40 | 1200 | 2.61 | 34.44 | 27.49 | 67 | 1.23 |
| 1454 | 2.31 | 34.51 | 0.78 | 27.57 | | | | | | |

77

CNAV WHITETHROAT; August 2, 1958; 0630 GCT; 52°14.5'N, 178°50'W; sounding, 1800 fm; wind, 240°, 5 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.00 | 33.07 | - | 25.78 | 0 | 8.00 | 33.07 | 25.78 | 222 | 0.00 |
| 10 | 7.85 | 33.14 | 7.03 | 25.86 | 10 | 7.85 | 33.14 | 25.86 | 215 | 0.02 |
| 24 | 7.73 | 33.15 | 6.94 | 25.88 | 20 | 7.75 | 33.16 | 25.89 | 213 | 0.04 |
| 48 | 5.05 | 33.23 | 7.03 | 26.29 | 30 | 7.35 | 33.16 | 25.95 | 207 | 0.06 |
| 72 | 4.03 | 33.23 | 6.65 | 26.40 | 50 | 4.90 | 33.24 | 26.31 | 172 | 0.10 |
| 97 | 4.36 | 33.35 | 5.50 | 26.46 | 75 | 3.99 | 33.24 | 26.41 | 164 | 0.14 |
| 121 | 4.16 | 33.39 | 5.20 | 26.51 | 100 | 4.36 | 33.36 | 26.47 | 158 | 0.19 |
| 145 | 4.12 | 33.42 | 5.04 | 26.54 | 150 | 4.09 | 33.44 | 26.56 | 150 | 0.26 |
| 169 | 3.89 | 33.55 | 4.95 | 26.67 | 200 | 3.94 | 33.63 | 26.73 | 134 | 0.34 |
| 193 | 3.93 | 33.62 | 4.40 | 26.72 | 250 | 3.92 | 33.70 | 26.79 | 129 | 0.40 |
| 289 | 3.82 | 33.71 | 3.02 | 26.80 | 300 | 3.81 | 33.72 | 26.81 | 127 | 0.46 |
| 375 | 3.82 | 33.84 | 1.71 | 26.91 | 400 | 3.80 | 33.89 | 26.94 | 115 | 0.59 |
| 469 | 3.69 | 34.01 | 1.22 | 27.05 | 500 | 3.64 | 34.05 | 27.09 | 102 | 0.70 |
| 562 | 3.53 | 34.10 | 0.86 | 27.14 | 600 | 3.47 | 34.13 | 27.17 | 95 | 0.80 |
| 750 | 3.27 | 34.23 | 0.66 | 27.27 | 700 | 3.33 | 34.21 | 27.24 | 89 | 0.89 |
| 938 | 2.97 | 34.34 | 0.67 | 27.38 | 800 | 3.19 | 34.27 | 27.30 | 84 | 0.98 |
| 1406 | 2.39 | 34.48 | 0.86 | 27.55 | 1000 | 2.88 | 34.36 | 27.41 | 74 | 1.14 |
| | | | | | 1200 | 2.62 | 34.44 | 27.49 | 67 | 1.28 |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 78 | CNAV WHITETHROAT; August 5, 1958; 0720 GCT; 51°39'N, 175°43'W; sounding, missing; wind, calm; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 8.40 | 32.54 | - | 25.31 | 0 | 8.40 | 32.54 | 25.31 | 267 | 0.00 |
| 10 | 7.01 | 32.67 | 6.59 | 25.61 | 10 | 7.01 | 32.67 | 25.61 | 239 | 0.02 |
| 25 | 6.36 | 32.92 | 6.66 | 25.88 | 20 | 6.39 | 32.83 | 25.81 | 220 | 0.05 |
| 50 | 5.92 | 33.08 | 6.14 | 26.07 | 30 | 6.21 | 32.97 | 25.95 | 207 | 0.07 |
| 75 | 5.68 | 33.15 | 5.86 | 26.15 | 50 | 5.92 | 33.08 | 26.07 | 196 | 0.11 |
| 100 | 5.14 | 33.22 | 4.75 | 26.28 | 75 | 5.68 | 33.15 | 26.15 | 188 | 0.16 |
| 125 | 5.02 | 33.29 | 4.66 | 26.34 | 100 | 5.14 | 33.22 | 26.28 | 176 | 0.20 |
| 150 | 4.99 | 33.33 | 4.61 | 26.37 | 150 | 4.99 | 33.33 | 26.37 | 168 | 0.29 |
| 175 | 4.85 | 33.45 | 4.52 | 26.49 | 200 | 4.67 | 33.60 | 26.62 | 144 | 0.37 |
| 200 | 4.67 | 33.60 | 3.30 | 26.62 | 250 | 4.41 | 33.73 | 26.75 | 132 | 0.44 |
| 225 | 4.47 | 33.69 | 2.82 | 26.72 | 300 | 4.20 | 33.84 | 26.86 | 122 | 0.50 |
| 250 | 4.41 | 33.73 | 2.73 | 26.75 | 400 | 3.97 | 34.01 | 27.02 | 108 | 0.62 |
| 300 | 4.20 | 33.84 | 2.07 | 26.86 | | | | | | |
| 400 | 3.97 | 34.01 | 1.05 | 27.02 | | | | | | |
| 79 | CNAV WHITETHROAT; August 5, 1958; 2200 GCT; 51°45'N, 173°03'W; sounding, missing; wind, 100°, 5 kt; weather, overcast; sea, missing. | | | | | | | | | |
| 0 | 10.00 | 32.37 | - | 24.92 | 0 | 10.00 | 32.37 | 24.92 | 304 | 0.00 |
| 10 | 9.77 | 32.35 | 6.62 | 24.94 | 10 | 9.77 | 32.35 | 24.94 | 302 | 0.03 |
| 25 | (11.01)a) | 32.33 | 6.60 | (24.72) | 20 | 10.38 | 32.34 | 24.83 | 313 | 0.06 |
| 50 | 9.74 | 32.76 | 6.53 | 25.27 | 30 | 11.08 | 32.38 | 24.74 | 322 | 0.09 |
| 75 | 4.32 | 32.97 | 6.06 | 26.17 | 50 | 9.74 | 32.76 | 25.27 | 272 | 0.15 |
| 99 | 4.08 | 33.29 | 4.79 | 26.44 | 75 | 4.32 | 32.97 | 26.17 | 186 | 0.21 |
| 124 | 4.08 | 33.54 | 3.65 | 26.64 | 100 | 4.08 | 33.30 | 26.45 | 159 | 0.25 |
| 149 | 4.17 | 33.72 | 2.42 | 26.78 | 150 | 4.17 | 33.73 | 26.78 | 129 | 0.33 |
| 173 | 4.21 | 33.85 | 1.61 | 26.88 | 200 | 4.21 | 33.91 | 26.92 | 116 | 0.39 |
| 198 | 4.21 | 33.90 | 0.88 | 26.91 | 250 | 3.98 | 34.00 | 27.01 | 108 | 0.44 |
| 223 | 4.10 | 33.95 | 0.83 | 26.97 | 300 | 3.86 | 34.05 | 27.06 | 103 | 0.50 |
| 248 | 3.99 | 33.99 | 0.55 | 27.01 | 400 | 3.73 | 34.14 | 27.15 | 96 | 0.60 |
| 298 | 3.86 | 34.04 | 0.41 | 27.06 | 500 | 3.53 | 34.21 | 27.23 | 89 | 0.69 |
| 386 | 3.75 | 34.13 | 0.54 | 27.14 | 600 | 3.34 | 34.27 | 27.29 | 84 | 0.78 |
| 482 | 3.56 | 34.20 | 0.56 | 27.22 | 700 | 3.15 | 34.31 | 27.35 | 79 | 0.86 |
| 578 | 3.38 | 34.26 | 0.62 | 27.28 | 800 | 2.97 | 34.35 | 27.40 | 74 | 0.94 |
| 772 | 3.01 | 34.34 | 0.67 | 27.38 | 1000 | 2.74 | 34.40 | 27.45 | 70 | 1.08 |
| 964 | 2.78 | 34.39 | 0.93 | 27.44 | 1200 | 2.53 | 34.45 | 27.51 | 65 | 1.22 |
| 1450 | 2.31 | 34.50 | 1.44 | 27.57 | 1500 | 2.27 | 34.51 | 27.58 | 59 | 1.41 |
| 1937 | 1.95 | 34.58 | 1.71 | 27.66 | | | | | | |
| 80 | CNAV WHITETHROAT; August 6, 1958; 0938 GCT; 51°43'N, 170°34'W; sounding, missing; wind, 090°, 5 kt; weather, cloudy; sea, missing. | | | | | | | | | |
| 0 | 9.80 | 32.39 | - | 24.97 | 0 | 9.80 | 32.39 | 24.97 | 299 | 0.00 |
| 10 | 9.41 | 32.36 | 6.83 | 25.01 | 10 | 9.41 | 32.36 | 25.01 | 296 | 0.03 |
| 24 | 8.93 | 32.42 | 6.72 | 25.14 | 20 | 9.06 | 32.39 | 25.09 | 288 | 0.06 |
| 48 | 6.29 | 32.80 | - | 25.80 | 30 | 8.49 | 32.49 | 25.25 | 273 | 0.09 |
| 72 | 5.51 | 32.81 | 5.60 | 25.90 | 50 | 6.15 | 32.82 | 25.83 | 218 | 0.14 |
| 96 | 5.35 | 33.16 | 4.84 | 26.20 | 75 | 5.46 | 32.83 | 25.93 | 209 | 0.19 |
| 120 | 4.99 | 33.38 | 4.21 | 26.41 | 100 | 5.30 | 33.21 | 26.24 | 180 | 0.24 |
| 143 | 4.75 | 33.50 | 3.74 | 26.54 | 150 | 4.69 | 33.54 | 26.57 | 149 | 0.32 |
| 167 | 4.58 | 33.62 | 3.45 | 26.65 | 200 | 4.71 | 33.81 | 26.79 | 129 | 0.39 |
| 191 | 4.71 | 33.77 | 2.95 | 26.75 | 250 | 4.35 | 33.94 | 26.93 | 115 | 0.45 |
| 214 | 4.67 | 33.86 | 2.27 | 26.83 | 300 | 4.12 | 34.01 | 27.01 | 109 | 0.51 |
| 238 | 4.44 | 33.92 | 1.77 | 26.90 | 400 | 3.85 | 34.13 | 27.13 | 98 | 0.62 |
| 286 | 4.18 | 33.99 | 1.41 | 26.98 | 500 | 3.61 | 34.20 | 27.22 | 90 | 0.71 |
| 400 | 3.85 | 34.13 | 0.54 | 27.13 | 600 | 3.45 | 34.26 | 27.27 | 85 | 0.80 |
| 500 | 3.61 | 34.20 | 0.81 | 27.22 | 700 | 3.27 | 34.31 | 27.33 | 81 | 0.88 |
| 600 | 3.45 | 34.26 | 0.82 | 27.27 | 800 | 3.07 | 34.35 | 27.38 | 76 | 0.96 |
| 800 | 3.07 | 34.35 | 0.64 | 27.38 | 1000 | 2.75 | 34.45 | 27.49 | 66 | 1.10 |
| 1000 | 2.75 | 34.45 | 0.54 | 27.49 | 1200 | 2.48 | 34.51 | 27.56 | 60 | 1.23 |
| 1500 | 2.18 | 34.53 | 1.30 | 27.61 | 1500 | 2.18 | 34.53 | 27.61 | 56 | 1.41 |
| 2000 | 1.87 | 34.59 | 1.84 | 27.68 | 2000 | 1.87 | 34.59 | 27.68 | 50 | 1.68 |



a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

81

CNAV WHITETHROAT; August 6, 1958; 2121 GCT; 51°56'N, 168°23'W; sounding, missing; wind, 320°, 10 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.00 | 32.64 | - | 25.14 | 0 | 10.00 | 32.64 | 25.14 | 284 | 0.00 |
| 10 | 9.85 | 32.56 | 6.61 | 25.10 | 10 | 9.85 | 32.56 | 25.10 | 288 | 0.03 |
| 24 | 9.75 | 32.56 | 6.61 | 25.11 | 20 | 9.77 | 32.55 | 25.10 | 288 | 0.06 |
| 48 | 5.64 | 32.81 | 6.79 | 25.89 | 30 | 9.19 | 32.59 | 25.23 | 275 | 0.09 |
| 72 | 4.41 | 33.00 | 6.13 | 26.17 | 50 | 5.43 | 32.83 | 25.93 | 209 | 0.14 |
| 96 | 4.10 | 33.38 | 4.32 | 26.51 | 75 | 4.32 | 33.03 | 26.21 | 182 | 0.18 |
| 120 | 4.17 | 33.72 | 2.46 | 26.77 | 100 | 4.09 | 33.43 | 26.56 | 150 | 0.23 |
| 145 | 3.94 | 33.82 | 1.77 | 26.88 | 150 | 3.92 | 33.84 | 26.89 | 118 | 0.29 |
| 168 | 3.89 | 33.88 | 1.41 | 26.93 | 200 | 3.89 | 33.96 | 27.00 | 109 | 0.35 |
| 192 | 3.89 | 33.95 | 1.03 | 26.98 | 250 | 3.93 | 34.04 | 27.05 | 104 | 0.40 |
| 215 | 3.89 | 33.98 | 0.71 | 27.01 | 300 | 3.87 | 34.10 | 27.11 | 99 | 0.46 |
| 240 | 3.93 | 34.03 | 0.63 | 27.04 | 400 | 3.60 | 34.15 | 27.17 | 93 | 0.55 |
| 288 | 3.89 | 34.09 | 0.54 | 27.10 | 500 | 3.47 | 34.22 | 27.24 | 88 | 0.64 |
| 368 | 3.66 | 34.13 | 0.57 | 27.15 | 600 | 3.34 | 34.26 | 27.29 | 84 | 0.73 |
| 460 | 3.53 | 34.19 | 0.46 | 27.22 | 700 | 3.21 | 34.31 | 27.34 | 80 | 0.81 |
| 554 | 3.40 | 34.24 | 0.49 | 27.26 | 800 | 3.06 | 34.35 | 27.38 | 76 | 0.89 |
| 746 | 3.15 | 34.33 | 0.48 | 27.36 | 1000 | 2.70 | 34.43 | 27.48 | 68 | 1.04 |
| 944 | 2.79 | 34.41 | 0.54 | 27.45 | 1200 | 2.42 | 34.48 | 27.54 | 62 | 1.17 |
| 1438 | 2.18 | 34.53 | 0.97 | 27.60 | 1500 | 2.13 | 34.54 | 27.61 | 55 | 1.34 |
| 1933 | 1.89 | 34.60 | 1.64 | 27.68 | | | | | | |

82

CNAV WHITETHROAT; August 7, 1958; 0856 GCT; 51°48'N, 165°46'W; sounding, missing; wind, 360°, 10 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.00 | 32.55 | - | 25.07 | 0 | 10.00 | 32.55 | 25.07 | 290 | 0.00 |
| 10 | 9.75 | 32.54 | 6.51 | 25.09 | 10 | 9.75 | 32.54 | 25.09 | 288 | 0.03 |
| 25 | 9.59 | 32.54 | 6.66 | 25.12 | 20 | 9.61 | 32.53 | 25.11 | 286 | 0.06 |
| 50 | 5.51 | 32.82 | 7.02 | 25.91 | 30 | 9.16 | 32.57 | 25.21 | 277 | 0.09 |
| 75 | 4.57 | 32.97 | 6.29 | 26.14 | 50 | 5.51 | 32.82 | 25.91 | 211 | 0.14 |
| 100 | 4.26 | 33.55 | 3.60 | 26.63 | 75 | 4.57 | 32.97 | 26.14 | 189 | 0.19 |
| 125 | 4.04 | 33.81 | 1.58 | 26.86 | 100 | 4.26 | 33.55 | 26.63 | 143 | 0.23 |
| 150 | 3.93 | 33.88 | 1.27 | 26.93 | 150 | 3.93 | 33.88 | 26.93 | 115 | 0.29 |
| 175 | 3.84 | 33.91 | 1.08 | 26.96 | 200 | 3.81 | 33.95 | 26.99 | 109 | 0.35 |
| 200 | 3.81 | 33.95 | 1.08 | 26.99 | 250 | 3.78 | 34.00 | 27.04 | 105 | 0.40 |
| 225 | 3.78 | 33.99 | 0.83 | 27.03 | 300 | 3.71 | 34.06 | 27.09 | 100 | 0.46 |
| 250 | 3.78 | 34.00 | 1.09 | 27.04 | 400 | 3.52 | 34.17 | 27.19 | 92 | 0.55 |
| 300 | 3.71 | 34.06 | 0.84 | 27.09 | 500 | 3.44 | 34.23 | 27.25 | 87 | 0.64 |
| 378 | 3.55 | 34.15 | 0.53 | 27.17 | 600 | 3.30 | 34.28 | 27.30 | 82 | 0.73 |
| 474 | 3.47 | 34.22 | 0.49 | 27.24 | 700 | 3.12 | 34.32 | 27.35 | 78 | 0.81 |
| 569 | 3.35 | 34.26 | 0.62 | 27.29 | 800 | 2.92 | 34.35 | 27.40 | 74 | 0.88 |
| 759 | 2.99 | 34.33 | 0.65 | 27.38 | 1000 | 2.62 | 34.42 | 27.47 | 67 | 1.03 |
| 950 | 2.69 | (34.40)a) | 0.90 | (27.46) | 1200 | 2.37 | 34.48 | 27.54 | 61 | 1.16 |
| 1395 | 2.17 | 34.53 | 1.08 | 27.60 | 1500 | 2.09 | 34.55 | 27.62 | 54 | 1.34 |
| 1833 | 1.92 | 34.58 | 1.11 | 27.67 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 83 | CNAV WHITETHROAT; August 7, 1958; 1817 GCT; 51°50'N, 163°29'W; sounding, missing; wind, 320°, 15 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 9.40 | 32.66 | - | 25.24 | 0 | 9.40 | 32.66 | 25.24 | 273 | 0.00 |
| 10 | 9.42 | 32.61 | 6.62 | 25.20 | 10 | 9.42 | 32.61 | 25.20 | 278 | 0.03 |
| 24 | 9.20 | 32.61 | 6.80 | 25.24 | 20 | 9.29 | 32.60 | 25.22 | 276 | 0.06 |
| 48 | 5.26 | 32.80 | 7.02 | 25.93 | 30 | 8.64 | 32.64 | 25.35 | 264 | 0.08 |
| 72 | 4.68 | 32.90 | 6.61 | 26.07 | 50 | 5.08 | 32.81 | 25.96 | 206 | 0.13 |
| 96 | 4.09 | 33.31 | 4.42 | 26.46 | 75 | 4.61 | 32.93 | 26.10 | 192 | 0.18 |
| 120 | 4.22 | 33.71 | 2.26 | 26.76 | 100 | 4.06 | 33.38 | 26.51 | 154 | 0.22 |
| 144 | 4.20 | 33.85 | 1.47 | 26.87 | 150 | 4.20 | 33.87 | 26.89 | 118 | 0.29 |
| 168 | 4.19 | 33.92 | 0.87 | 26.93 | 200 | 4.03 | 33.97 | 26.99 | 109 | 0.35 |
| 192 | 4.05 | 33.96 | 0.59 | 26.98 | 250 | 3.93 | 34.06 | 27.06 | 103 | 0.40 |
| 216 | 4.01 | 34.00 | 0.50 | 27.01 | 300 | 3.83 | 34.11 | 27.12 | 98 | 0.45 |
| 240 | 3.95 | 34.04 | 0.43 | 27.05 | 400 | 3.68 | 34.17 | 27.18 | 93 | 0.55 |
| 288 | 3.85 | 34.09 | 0.41 | 27.10 | 500 | 3.53 | 34.23 | 27.24 | 87 | 0.64 |
| 390 | 3.69 | 34.16 | 0.47 | 27.17 | 600 | 3.37 | 34.29 | 27.30 | 82 | 0.73 |
| 489 | 3.55 | 34.22 | 0.49 | 27.24 | 700 | 3.18 | 34.33 | 27.36 | 78 | 0.81 |
| 587 | 3.39 | 34.28 | 0.50 | 27.30 | 800 | 2.97 | 34.37 | 27.41 | 74 | 0.88 |
| 784 | 3.00 | 34.36 | 0.53 | 27.40 | 1000 | 2.66 | 34.42 | 27.47 | 68 | 1.03 |
| 981 | 2.69 | 34.42 | 0.64 | 27.47 | 1200 | 2.41 | 34.47 | 27.54 | 62 | 1.16 |
| 1474 | 2.17 | 34.54 | 1.02 | 27.61 | 1500 | 2.15 | 34.54 | 27.62 | 55 | 1.34 |
| 1968 | 1.87 | 34.60 | 1.61 | 27.68 | | | | | | |
| 84 | CNAV WHITETHROAT; August 7, 1958; 0400 GCT; 52°00'N, 161°00'W; sounding, missing; wind, 270°, 17 kt; weather, overcast; sea, rough. | | | | | | | | | |
| 0 | 10.00 | 32.69 | - | 25.17 | 0 | 10.00 | 32.69 | 25.17 | 280 | 0.00 |
| 10 | 9.49 | 32.64 | 6.88 | 25.22 | 10 | 9.49 | 32.64 | 25.22 | 276 | 0.03 |
| 24 | 9.45 | 32.64 | 6.83 | 25.22 | 20 | 9.38 | 32.63 | 25.23 | 275 | 0.06 |
| 48 | 5.53 | 32.81 | 7.09 | 25.91 | 30 | 8.93 | 32.66 | 25.32 | 267 | 0.08 |
| 73 | 4.62 | 32.97 | 6.20 | 26.13 | 50 | 5.34 | 32.83 | 25.94 | 208 | 0.13 |
| 98 | 4.01 | 33.61 | 3.25 | 26.70 | 75 | 4.56 | 33.00 | 26.16 | 187 | 0.18 |
| 123 | 4.09 | 33.89 | 1.05 | 26.92 | 100 | 3.99 | 33.64 | 26.73 | 133 | 0.22 |
| 147 | 4.05 | 33.97 | 0.75 | 26.98 | 150 | 4.05 | 33.97 | 26.99 | 109 | 0.28 |
| 172 | 4.02 | 33.98 | 0.53 | 27.00 | 200 | 3.96 | 34.04 | 27.05 | 104 | 0.34 |
| 196 | 3.97 | 34.03 | 0.52 | 27.04 | 250 | 3.89 | 34.07 | 27.08 | 101 | 0.39 |
| 221 | 3.93 | 34.05 | 0.49 | 27.06 | 300 | 3.76 | 34.14 | 27.15 | 95 | 0.44 |
| 246 | 3.90 | 34.07 | 0.49 | 27.08 | 400 | 3.57 | 34.20 | 27.22 | 89 | 0.53 |
| 295 | 3.77 | 34.13 | 0.47 | 27.14 | 500 | 3.41 | 34.24 | 27.27 | 85 | 0.62 |
| 390 | 3.59 | 34.19 | 0.53 | 27.21 | 600 | 3.26 | 34.28 | 27.31 | 82 | 0.70 |
| 486 | 3.43 | 34.24 | 0.54 | 27.26 | 700 | 3.10 | 34.32 | 27.36 | 78 | 0.78 |
| 580 | 3.29 | 34.27 | 0.50 | 27.30 | 800 | 2.95 | 34.37 | 27.41 | 73 | 0.86 |
| 772 | 2.99 | 34.36 | 0.81 | 27.40 | 1000 | 2.62 | 34.43 | 27.49 | 66 | 1.00 |
| 962 | 2.68 | 34.42 | 1.29 | 27.48 | 1200 | 2.37 | 34.49 | 27.56 | 60 | 1.13 |
| 1456 | 2.13 | 34.54 | 1.46 | 27.62 | 1500 | 2.09 | 34.55 | 27.63 | 54 | 1.30 |
| 1952 | 1.85 | 34.61 | 1.85 | 27.70 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CNAV WHITETHROAT; August 8, 1958; 1331 GCT; 52°08'N, 158°34'W; sounding, missing; wind, 240°, 15 kt; weather, fog; sea, slight. 85

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.40 | 32.75 | - | 25.32 | 0 | 9.40 | 32.75 | 25.32 | 266 | 0.00 |
| 10 | 9.30 | 32.69 | 6.69 | 25.29 | 10 | 9.30 | 32.69 | 25.29 | 270 | 0.03 |
| 25 | 9.30 | 32.67 | 6.79 | 25.27 | 20 | 9.28 | 32.67 | 25.27 | 271 | 0.05 |
| 50 | 5.45 | 32.79 | 7.19 | 25.90 | 30 | 8.91 | 32.68 | 25.34 | 265 | 0.08 |
| 75 | 4.30 | 32.95 | 6.72 | 26.15 | 50 | 5.45 | 32.79 | 25.90 | 212 | 0.13 |
| 100 | 3.96 | 33.65 | 2.64 | 26.74 | 75 | 4.30 | 32.95 | 26.15 | 188 | 0.18 |
| 125 | 3.99 | 33.84 | 1.48 | 26.89 | 100 | 3.96 | 33.65 | 26.74 | 132 | 0.22 |
| 150 | 3.96 | 33.91 | 0.91 | 26.95 | 150 | 3.96 | 33.91 | 26.95 | 113 | 0.28 |
| 175 | 3.97 | 33.98 | 0.59 | 27.00 | 200 | 3.89 | 34.00 | 27.03 | 106 | 0.34 |
| 200 | 3.89 | 34.00 | 0.49 | 27.03 | 250 | 3.85 | 34.05 | 27.07 | 102 | 0.39 |
| 225 | 3.89 | 34.03 | 0.46 | 27.05 | 300 | 3.79 | 34.09 | 27.11 | 99 | 0.44 |
| 250 | 3.85 | 34.05 | 0.44 | 27.07 | 400 | 3.64 | 34.18 | 27.19 | 92 | 0.54 |
| 300 | 3.79 | 34.09 | 0.39 | 27.11 | 500 | 3.46 | 34.23 | 27.25 | 86 | 0.63 |
| 396 | 3.65 | 34.17 | 0.38 | 27.19 | 600 | 3.31 | 34.27 | 27.30 | 83 | 0.71 |
| 495 | 3.47 | 34.23 | 0.44 | 27.25 | 700 | 3.14 | 34.32 | 27.35 | 78 | 0.79 |
| 594 | 3.32 | 34.27 | 0.43 | 27.30 | 800 | 2.96 | 34.36 | 27.40 | 74 | 0.87 |
| 792 | 2.97 | 34.36 | 0.53 | 27.40 | 1000 | 2.68 | 34.43 | 27.48 | 67 | 1.01 |
| 990 | 2.69 | 34.42 | 0.58 | 27.48 | 1200 | 2.44 | 34.48 | 27.54 | 62 | 1.14 |
| 1485 | 2.16 | 34.53 | 0.95 | 27.61 | 1500 | 2.15 | 34.53 | 27.61 | 56 | 1.32 |
| 1980 | 1.90 | 34.60 | 1.53 | 27.68 | | | | | | |

CNAV WHITETHROAT; August 9, 1958; 0205 GCT; 52°12'N, 156°11'W; sounding, missing; wind, 240°, 10 kt; weather, fog; sea, slight. 86

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.90 | 32.61 | - | 25.12 | 0 | 9.90 | 32.61 | 25.12 | 285 | 0.00 |
| 9 | 9.56 | 32.69 | 6.81 | 25.24 | 10 | 9.54 | 32.69 | 25.25 | 273 | 0.03 |
| 23 | 9.51 | 32.68 | 6.70 | 25.24 | 20 | 9.47 | 32.69 | 25.26 | 272 | 0.06 |
| 47 | 6.47 | 32.85 | 7.29 | 25.82 | 30 | 9.01 | 32.71 | 25.35 | 264 | 0.08 |
| 71 | 5.00 | 32.88 | 7.18 | 26.02 | 50 | 6.20 | 32.86 | 25.86 | 215 | 0.13 |
| 94 | 4.22 | 33.00 | 6.48 | 26.20 | 75 | 4.82 | 32.89 | 26.05 | 198 | 0.18 |
| 117 | 3.97 | 33.66 | 2.84 | 26.75 | 100 | 4.10 | 33.13 | 26.31 | 173 | 0.23 |
| 140 | 3.95 | 33.81 | 1.78 | 26.87 | 150 | 3.93 | 33.85 | 26.90 | 117 | 0.30 |
| 163 | 3.88 | 33.88 | 1.44 | 26.93 | 200 | 3.81 | 33.94 | 26.99 | 110 | 0.36 |
| 186 | 3.82 | 33.91 | 1.16 | 26.96 | 250 | 3.81 | 34.00 | 27.03 | 106 | 0.41 |
| 210 | 3.81 | 33.97 | 0.94 | 27.01 | 300 | 3.74 | 34.07 | 27.10 | 100 | 0.47 |
| 233 | 3.82 | 33.98 | 0.76 | 27.02 | 400 | 3.66 | 34.16 | 27.18 | 93 | 0.56 |
| 280 | 3.76 | 34.05 | 0.53 | 27.08 | 500 | 3.47 | 34.23 | 27.25 | 87 | 0.65 |
| 364 | 3.71 | 34.13 | 0.52 | 27.15 | 600 | 3.28 | 34.27 | 27.30 | 82 | 0.74 |
| 454 | 3.55 | 34.20 | 0.50 | 27.22 | 700 | 3.12 | 34.32 | 27.36 | 78 | 0.82 |
| 546 | 3.38 | 34.25 | 0.55 | 27.27 | 800 | 2.95 | 34.37 | 27.41 | 74 | 0.90 |
| 735 | 3.06 | 34.34 | 0.59 | 27.38 | 1000 | 2.63 | 34.43 | 27.48 | 67 | 1.04 |
| 930 | 2.73 | 34.41 | 0.84 | 27.46 | 1200 | 2.40 | 34.48 | 27.54 | 62 | 1.17 |
| 1419 | 2.23 | 34.52 | 1.20 | 27.59 | 1500 | 2.17 | 34.53 | 27.61 | 56 | 1.35 |
| 1910 | 1.92 | 34.59 | 1.52 | 27.67 | | | | | | |

CNAV WHITETHROAT; August 9, 1958; 1236 GCT; 52°15'N, 153°00'W; sounding, missing; wind, 270°, 20 kt; weather, overcast; sea, slight. 87

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.20 | 32.72 | - | 25.16 | 0 | 10.20 | 32.72 | 25.16 | 282 | 0.00 |
| 10 | 10.06 | 32.69 | 6.48 | 25.17 | 10 | 10.06 | 32.69 | 25.17 | 281 | 0.03 |
| 25 | 10.07 | 32.69 | 6.56 | 25.16 | 20 | 10.04 | 32.69 | 25.17 | 281 | 0.06 |
| 50 | 7.37 | 32.77 | 7.01 | 25.63 | 30 | 9.80 | 32.70 | 25.21 | 277 | 0.08 |
| 75 | 4.53 | 32.89 | 6.79 | 26.08 | 50 | 7.37 | 32.77 | 25.63 | 237 | 0.14 |
| 100 | 4.00 | 33.39 | 4.00 | 26.53 | 75 | 4.53 | 32.89 | 26.08 | 195 | 0.19 |
| 125 | 3.88 | 33.66 | 2.59 | 26.76 | 100 | 4.00 | 33.39 | 26.53 | 152 | 0.23 |
| 150 | 3.97 | 33.81 | 1.69 | 26.87 | 150 | 3.97 | 33.81 | 26.87 | 121 | 0.30 |
| 175 | 3.90 | 33.88 | 1.19 | 26.93 | 200 | 3.88 | 33.93 | 26.97 | 111 | 0.36 |
| 200 | 3.88 | 33.93 | 0.87 | 26.97 | 250 | 3.85 | 33.98 | 27.02 | 107 | 0.42 |
| 225 | 3.86 | 33.97 | 0.67 | 27.00 | 300 | 3.76 | 34.05 | 27.08 | 102 | 0.47 |
| 250 | 3.85 | 33.98 | 0.63 | 27.02 | 400 | 3.67 | 34.14 | 27.16 | 95 | 0.57 |
| 300 | 3.76 | 34.05 | 0.50 | 27.08 | 500 | 3.47 | 34.19 | 27.22 | 90 | 0.66 |
| 400 | 3.67 | 34.14 | 0.44 | 27.16 | 600 | 3.33 | 34.25 | 27.28 | 84 | 0.75 |
| 500 | 3.47 | 34.19 | 0.45 | 27.22 | 700 | 3.16 | 34.30 | 27.34 | 80 | 0.83 |
| 600 | 3.33 | 34.25 | 0.47 | 27.28 | 800 | 2.97 | 34.35 | 27.39 | 75 | 0.91 |
| 800 | 2.97 | 34.35 | 0.55 | 27.39 | 1000 | 2.69 | 34.41 | 27.46 | 69 | 1.06 |
| 1000 | 2.69 | 34.41 | 0.65 | 27.46 | 1200 | 2.44 | 34.46 | 27.53 | 63 | 1.19 |
| 1500 | 2.10 | 34.54 | 0.88 | 27.61 | 1500 | 2.10 | 34.54 | 27.61 | 55 | 1.37 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **88** | CNAV WHITETHROAT; August 9, 1958; 2358 GCT; 51°57'N, 150°52'W; sounding, missing; wind, 270°, 20 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | 11.20 | 32.70 | - | 24.98 | 0 | 11.20 | 32.70 | 24.98 | 299 | 0.00 |
| 10 | 10.98 | 32.63 | 6.61 | 24.96 | 10 | 10.98 | 32.63 | 24.96 | 301 | 0.03 |
| 25 | 10.92 | 32.64 | 6.52 | 24.97 | 20 | 10.90 | 32.62 | 24.96 | 301 | 0.06 |
| 50 | 6.65 | 32.80 | 6.61 | 25.76 | 30 | 10.48 | 32.65 | 25.06 | 291 | 0.09 |
| 75 | 5.74 | 32.83 | 7.04 | 25.90 | 50 | 6.65 | 32.80 | 25.76 | 225 | 0.14 |
| 100 | 5.02 | 32.88 | 6.89 | 26.01 | 75 | 5.74 | 32.83 | 25.90 | 212 | 0.20 |
| 125 | 4.13 | 33.40 | 4.93 | 26.53 | 100 | 5.02 | 32.88 | 26.01 | 201 | 0.25 |
| 150 | 3.73 | 33.62 | 4.01 | 26.74 | 150 | 3.73 | 33.62 | 26.74 | 132 | 0.33 |
| 175 | 3.65 | 33.71 | 3.38 | 26.82 | 200 | 3.60 | 33.78 | 26.88 | 119 | 0.40 |
| 200 | 3.60 | 33.78 | 2.69 | 26.88 | 250 | 3.64 | 33.90 | 26.97 | 112 | 0.46 |
| 225 | 3.64 | 33.86 | 2.15 | 26.94 | 300 | 3.65 | 33.98 | 27.03 | 106 | 0.51 |
| 250 | 3.64 | 33.90 | 1.71 | 26.97 | 400 | 3.69 | 34.09 | 27.12 | 99 | 0.61 |
| 300 | 3.65 | 33.98 | 1.30 | 27.03 | 500 | 3.60 | 34.18 | 27.20 | 92 | 0.71 |
| 396 | 3.69 | 34.09 | 0.91 | 27.11 | 600 | 3.36 | 34.25 | 27.27 | 85 | 0.80 |
| 494 | 3.61 | 34.17 | 0.81 | 27.19 | 700 | 3.17 | 34.29 | 27.33 | 80 | 0.88 |
| 593 | 3.37 | 34.24 | 0.73 | 27.27 | 800 | 3.04 | 34.33 | 27.37 | 77 | 0.96 |
| 790 | 3.06 | 34.33 | 0.66 | 27.36 | 1000 | 2.75 | 34.40 | 27.45 | 70 | 1.11 |
| 987 | 2.77 | 34.40 | 0.77 | 27.45 | 1200 | 2.51 | 34.46 | 27.52 | 64 | 1.25 |
| 1481 | 2.27 | 34.51 | 0.91 | 27.58 | 1500 | 2.25 | 34.51 | 27.58 | 59 | 1.43 |
| 1974 | 1.91 | 34.58 | 1.81 | 27.66 | | | | | | |
| **89** | CNAV WHITETHROAT; August 10, 1958; 1731 GCT; 51°32'N, 148°29'W; sounding, missing; wind, 270°, 17 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | 12.00 | (33.49)a) | - | (25.43) | 0 | 12.00 | 33.49 | 25.43 | 255 | 0.00 |
| 10 | 11.99 | (33.32)b) | 6.24 | (25.31) | 10 | 11.99 | 33.32 | 25.31 | 268 | 0.03 |
| 25 | 12.10 | (33.11)b) | 6.32 | (25.13) | 20 | 12.05 | 33.17 | 25.18 | 280 | 0.05 |
| 49 | 8.20 | (32.88)b) | 7.20 | (25.60) | 30 | 11.70 | 33.05 | 25.15 | 283 | 0.08 |
| 73 | 6.37 | 32.78 | 7.18 | 25.78 | 50 | 8.08 | 32.88 | 25.62 | 239 | 0.14 |
| 97 | 5.75 | 32.81 | 6.89 | 25.88 | 75 | 6.27 | 32.78 | 25.79 | 223 | 0.19 |
| 121 | 5.31 | 32.96 | 6.43 | 26.05 | 100 | 5.69 | 32.82 | 25.89 | 213 | 0.25 |
| 146 | 4.58 | 33.31 | 5.23 | 26.41 | 150 | 4.49 | 33.36 | 26.46 | 160 | 0.34 |
| 170 | 4.11 | 33.55 | 4.30 | 26.65 | 200 | 3.85 | 33.73 | 26.81 | 126 | 0.41 |
| 194 | 3.87 | 33.70 | 3.32 | 26.79 | 250 | 3.91 | 33.87 | 26.92 | 116 | 0.47 |
| 218 | 3.89 | 33.79 | 2.60 | 26.86 | 300 | 3.85 | 33.94 | 26.98 | 111 | 0.53 |
| 242 | 3.91 | 33.85 | 2.07 | 26.91 | 400 | 3.76 | 34.09 | 27.11 | 100 | 0.64 |
| 291 | 3.86 | 33.92 | 1.43 | 26.97 | 500 | 3.64 | 34.18 | 27.19 | 92 | 0.74 |
| 374 | 3.79 | 34.06 | 0.82 | 27.08 | 600 | 3.46 | 34.23 | 27.25 | 88 | 0.82 |
| 464 | 3.69 | (34.16)b) | 0.55 | (27.17) | 700 | 3.27 | 34.28 | 27.31 | 82 | 0.91 |
| 558 | 3.53 | 34.21 | 0.53 | 27.23 | 800 | 3.09 | 34.33 | 27.36 | 78 | 0.99 |
| 754 | 3.17 | 34.31 | 0.50 | 27.34 | | | | | | |
| 950 | 2.87 | 34.39 | 0.50 | 27.43 | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

90

CNAV WHITETHROAT; August 11, 1958; 0230 GCT; 51°13'N, 146°40'W; sounding, missing; wind, 320°, 15 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.00 | 32.63 | - | 24.58 | 0 | 13.00 | 32.63 | 24.58 | 336 | 0.00 |
| 10 | 12.64 | 32.61 | 6.23 | 24.63 | 10 | 12.64 | 32.61 | 24.63 | 332 | 0.03 |
| 25 | 12.50 | 32.60 | 6.40 | 24.65 | 20 | 12.49 | 32.60 | 24.65 | 330 | 0.07 |
| 50 | 7.04 | 32.76 | 7.30 | 25.67 | 30 | 11.93 | 32.62 | 24.77 | 319 | 0.10 |
| 75 | 6.07 | 32.80 | 6.78 | 25.83 | 50 | 7.04 | 32.76 | 25.67 | 233 | 0.16 |
| 100 | 5.67 | 32.85 | 6.53 | 25.92 | 75 | 6.07 | 32.80 | 25.83 | 219 | 0.21 |
| 125 | 5.20 | 33.27 | 6.45 | 26.30 | 100 | 5.67 | 32.85 | 25.92 | 210 | 0.27 |
| 150 | 4.67 | 33.68 | 4.74 | 26.69 | 150 | 4.67 | 33.68 | 26.69 | 137 | 0.35 |
| 175 | 4.28 | 33.72 | 3.88 | 26.77 | 200 | 4.00 | 33.77 | 26.83 | 125 | 0.42 |
| 200 | 4.00 | 33.77 | 3.38 | 26.83 | 250 | 3.59 | 33.83 | 26.92 | 116 | 0.48 |
| 225 | 3.82 | 33.80 | 3.20 | 26.87 | 300 | 3.67 | 33.91 | 26.98 | 111 | 0.54 |
| 250 | 3.59 | 33.83 | 3.11 | 26.92 | 400 | 3.70 | 34.03 | 27.07 | 103 | 0.65 |
| 300 | 3.67 | 33.91 | 1.83 | 26.98 | 500 | 3.65 | 34.14 | 27.16 | 95 | 0.75 |
| 395 | 3.70 | 34.03 | 1.14 | 27.07 | 600 | 3.50 | 34.21 | 27.23 | 90 | 0.84 |
| 495 | 3.65 | 34.14 | 0.76 | 27.16 | 700 | 3.33 | 34.27 | 27.29 | 84 | 0.93 |
| 594 | 3.51 | 34.20 | 0.65 | 27.22 | 800 | 3.13 | 34.32 | 27.35 | 79 | 1.01 |
| 792 | 3.14 | 34.32 | 0.54 | 27.35 | 1000 | 2.83 | 34.38 | 27.43 | 72 | 1.16 |
| 990 | 2.84 | 34.38 | 0.62 | 27.43 | 1200 | 2.58 | 34.44 | 27.50 | 66 | 1.30 |
| 1485 | 2.32 | 34.50 | 0.72 | 27.57 | 1500 | 2.31 | 34.50 | 27.57 | 60 | 1.50 |
| 1980 | 1.96 | 34.58 | 1.31 | 27.66 | | | | | | |

91

CNAV WHITETHROAT; August 12, 1958; 1355 GCT; 50°54'N, 144°21'W; sounding, missing; wind, 140°, 10 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.80 | 32.65 | - | 24.44 | 0 | 13.80 | 32.65 | 24.44 | 350 | 0.00 |
| 10 | 13.83 | 32.61 | 5.97 | 24.40 | 10 | 13.83 | 32.61 | 24.40 | 354 | 0.04 |
| 25 | 13.66 | 32.65 | 6.05 | 24.46 | 20 | 13.75 | 32.62 | 24.42 | 352 | 0.07 |
| 50 | 7.41 | 32.72 | 7.06 | 25.59 | 30 | 13.01 | 32.66 | 24.60 | 335 | 0.10 |
| 75 | 6.99 | 32.83 | 7.00 | 25.74 | 50 | 7.41 | 32.72 | 25.59 | 241 | 0.16 |
| 100 | 6.34 | 32.86 | 6.72 | 25.84 | 75 | 6.99 | 32.83 | 25.74 | 228 | 0.22 |
| 125 | 5.76 | 33.23 | 5.78 | 26.21 | 100 | 6.34 | 32.86 | 25.84 | 218 | 0.28 |
| 150 | 5.03 | 33.48 | 5.00 | 26.49 | 150 | 5.03 | 33.48 | 26.49 | 156 | 0.37 |
| 175 | 4.66 | 33.64 | 4.50 | 26.66 | 200 | 4.57 | 33.74 | 26.75 | 133 | 0.44 |
| 200 | 4.57 | 33.74 | 3.92 | 26.75 | 250 | 4.19 | 33.81 | 26.85 | 123 | 0.51 |
| 225 | 4.32 | 33.80 | 3.36 | 26.82 | 300 | 4.10 | 33.89 | 26.92 | 117 | 0.57 |
| 250 | 4.19 | 33.81 | 2.98 | 26.85 | 400 | 4.01 | 34.01 | 27.02 | 108 | 0.68 |
| 300 | 4.10 | 33.89 | 2.11 | 26.92 | 500 | 3.88 | 34.09 | 27.10 | 101 | 0.79 |
| 392 | 4.02 | 34.00 | 1.52 | 27.02 | 600 | 3.69 | 34.18 | 27.19 | 94 | 0.89 |
| 490 | 3.90 | 34.09 | 1.03 | 27.09 | 700 | 3.49 | 34.25 | 27.26 | 87 | 0.98 |
| 590 | 3.71 | 34.17 | 0.71 | 27.18 | 800 | 3.28 | 34.29 | 27.32 | 82 | 1.07 |
| 788 | 3.30 | 34.29 | 0.59 | 27.31 | 1000 | 2.93 | 34.38 | 27.42 | 73 | 1.22 |
| 986 | 2.95 | 34.38 | 0.55 | 27.41 | 1200 | 2.64 | 34.45 | 27.50 | 66 | 1.36 |
| 1483 | 2.33 | 34.51 | 0.80 | 27.57 | 1500 | 2.31 | 34.51 | 27.58 | 60 | 1.56 |
| 1980 | 1.95 | 34.58 | 1.42 | 27.66 | | | | | | |

92 CNAV WHITETHROAT; August 11, 1958; 0052 GCT; 50°31'N, 142°10'W; sounding, missing; wind, 040°, 10 kt; weather, cloudy; sea, missing.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 13.90 | 32.44 | | 24.26 | 0 | 13.90 | 32.44 | 24.26 | 367 | 0.00 |
| 10 | 14.71 | 32.44 | | 24.08 | 10 | 14.71 | 32.44 | 24.08 | 384 | 0.04 |
| 25 | 14.67 | 32.49 | | 24.13 | 20 | 14.85 | 32.46 | 24.07 | 386 | 0.08 |
| 49 | 8.71 | 32.71 | | 25.39 | 30 | 14.03 | 32.52 | 24.29 | 365 | 0.11 |
| 73 | 7.45 | 32.77 | | 25.62 | 50 | 8.56 | 32.72 | 25.42 | 257 | 0.18 |
| 98 | 6.84 | 32.77 | | 25.71 | 75 | 7.37 | 32.77 | 25.63 | 238 | 0.24 |
| 123 | 6.47 | 32.86 | | 25.83 | 100 | 6.80 | 32.78 | 25.72 | 230 | 0.30 |
| 147 | 5.99 | 33.20 | | 26.15 | 150 | 5.91 | 33.24 | 26.20 | 185 | 0.40 |
| 172 | 5.13 | 33.55 | | 26.54 | 200 | 4.64 | 33.67 | 26.69 | 138 | 0.48 |
| 196 | 4.68 | 33.66 | | 26.67 | 250 | 4.44 | 33.81 | 26.82 | 126 | 0.55 |
| 220 | 4.57 | 33.73 | | 26.74 | 300 | 4.19 | 33.90 | 26.91 | 117 | 0.61 |
| 245 | 4.46 | - | | 26.81 | 400 | 3.99 | 34.02 | 27.03 | 107 | 0.72 |
| 294 | 4.21 | 33.89 | | 26.90 | 500 | 3.79 | 34.11 | 27.12 | 99 | 0.83 |
| 400 | 3.99 | 34.02 | | 27.03 | 600 | 3.65 | 34.19 | 27.20 | 92 | 0.93 |
| 500 | 3.79 | 34.11 | | 27.12 | 700 | 3.46 | 34.26 | 27.27 | 86 | 1.02 |
| 600 | 3.65 | 34.19 | | 27.20 | 800 | 3.21 | 34.31 | 27.34 | 80 | 1.10 |
| 800 | 3.21 | 34.31 | | 27.34 | 1000 | 2.91 | 34.38 | 27.42 | 73 | 1.26 |
| 1000 | 2.91 | 34.38 | | 27.42 | 1200 | 2.64 | 34.44 | 27.49 | 67 | 1.40 |
| 1500 | 2.30 | 34.50 | | 27.57 | 1500 | 2.30 | 34.50 | 27.57 | 60 | 1.59 |
| 2000 | 1.90 | (34.54)a) | | (27.63) | 2000 | 1.90 | 34.54 | 27.63 | 55 | 1.88 |

93 CNAV WHITETHROAT; August 12, 1958; 1155 GCT; 50°14'N, 139°42'W; sounding, missing; wind, 180°, 10 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 32.64 | - | 24.13 | 0 | 15.20 | 32.64 | 24.13 | 379 | 0.00 |
| 10 | 15.23 | 32.53 | 5.96 | 24.04 | 10 | 15.23 | 32.53 | 24.04 | 388 | 0.04 |
| 25 | 15.22 | 32.53 | 6.00 | 24.04 | 20 | 15.23 | 32.51 | 24.02 | 390 | 0.08 |
| 50 | 8.23 | 32.69 | 6.96 | 25.45 | 30 | 14.52 | 32.54 | 24.20 | 373 | 0.12 |
| 75 | 7.28 | 32.73 | 6.80 | 25.62 | 50 | 8.23 | 32.69 | 25.45 | 255 | 0.18 |
| 100 | 6.58 | 32.74 | 6.68 | 25.72 | 75 | 7.28 | 32.73 | 25.62 | 239 | 0.24 |
| 125 | 6.36 | 33.13 | 6.04 | 26.05 | 100 | 6.58 | 32.74 | 25.72 | 230 | 0.30 |
| 150 | 5.74 | 33.45 | 5.64 | 26.38 | 150 | 5.74 | 33.45 | 26.38 | 167 | 0.40 |
| 175 | 5.27 | 33.60 | 5.32 | 26.56 | 200 | 5.04 | 33.72 | 26.68 | 139 | 0.48 |
| 200 | 5.04 | 33.72 | 4.68 | 26.68 | 250 | 4.91 | 33.84 | 26.79 | 129 | 0.54 |
| 225 | 4.98 | 33.80 | 4.10 | 26.75 | 300 | 4.52 | 33.91 | 26.88 | 121 | 0.61 |
| 250 | 4.91 | 33.84 | 3.62 | 26.79 | 400 | 4.15 | 34.00 | 27.00 | 110 | 0.72 |
| 300 | 4.52 | 33.91 | 2.70 | 26.88 | 500 | 3.89 | 34.10 | 27.10 | 101 | 0.83 |
| 382 | 4.21 | 33.99 | 1.76 | 26.98 | 600 | 3.71 | 34.16 | 27.17 | 95 | 0.93 |
| 478 | 3.94 | 34.08 | 1.11 | 27.08 | 700 | 3.51 | 34.23 | 27.24 | 89 | 1.02 |
| 574 | 3.76 | 34.15 | 0.73 | 27.15 | 800 | 3.31 | 34.28 | 27.30 | 84 | 1.11 |
| 764 | 3.38 | 34.26 | 0.58 | 27.28 | 1000 | 2.97 | 34.36 | 27.40 | 75 | 1.27 |
| 956 | 3.04 | 34.35 | 0.50 | 27.38 | 1200 | 2.67 | 34.43 | 27.48 | 68 | 1.42 |
| 1444 | 2.37 | 34.50 | 0.63 | 27.56 | 1500 | 2.31 | 34.51 | 27.58 | 60 | 1.61 |
| 1936 | 1.99 | 34.57 | 1.23 | 27.65 | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CNAV WHITETHROAT; August 12, 1958; 2225 GCT; 50°05'N, 137°22'W; sounding, missing; wind, 140°, 15 kt; weather, partly cloudy; sea, smooth. 94

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.30 | 32.50 | - | 23.78 | 0 | 16.30 | 32.50 | 23.78 | 413 | 0.00 |
| 9 | 16.42 | 32.50 | 5.91 | 23.75 | 10 | 16.43 | 32.50 | 23.75 | 416 | 0.04 |
| 23 | 16.43 | 32.49 | 5.99 | 23.75 | 20 | 16.45 | 32.50 | 23.74 | 417 | 0.08 |
| 45 | 11.17 | 32.48 | 6.68 | 24.81 | 30 | 15.46 | 32.49 | 23.96 | 396 | 0.12 |
| 68 | 8.59 | 32.52 | 6.97 | 25.26 | 50 | 10.36 | 32.49 | 24.95 | 302 | 0.19 |
| 90 | 7.60 | 32.61 | 5.57 | 25.48 | 75 | 8.12 | 32.54 | 25.35 | 265 | 0.27 |
| 114 | 6.79 | 32.78 | 6.08 | 25.72 | 100 | 7.23 | 32.67 | 25.58 | 243 | 0.33 |
| 135 | 6.12 | 33.09 | 5.78 | 26.06 | 150 | 5.73 | 33.34 | 26.30 | 175 | 0.44 |
| 157 | 5.57 | 33.46 | 5.06 | 26.41 | 200 | 5.37 | 33.77 | 26.68 | 139 | 0.51 |
| 179 | 5.43 | 33.63 | 4.67 | 26.56 | 250 | 5.21 | 33.87 | 26.78 | 130 | 0.58 |
| 201 | 5.37 | 33.78 | 4.26 | 26.68 | 300 | 4.88 | 33.95 | 26.88 | 121 | 0.65 |
| 224 | 5.30 | 33.81 | 4.03 | 26.72 | 400 | 4.35 | 34.00 | 26.98 | 112 | 0.76 |
| 269 | 5.13 | 33.92 | 2.37 | 26.82 | 500 | 4.19 | 34.09 | 27.06 | 105 | 0.87 |
| 331 | 4.52 | 33.95 | 1.74 | 26.92 | 600 | 4.02 | 34.14 | 27.12 | 101 | 0.98 |
| 408 | 4.37 | 34.01 | 1.38 | 26.98 | 700 | 3.56 | 34.28 | 27.28 | 85 | 1.07 |
| 480 | 4.23 | 34.07 | 1.01 | 27.05 | 800 | 3.15 | 34.42 | 27.43 | 72 | 1.15 |
| 628 | 3.97 | 34.14 | 0.67 | 27.13 | 1000 | 2.90 | 34.45 | 27.48 | 68 | 1.29 |
| 673 | 3.70 | 34.24 | 0.46 | 27.23 | 1200 | 2.74 | 34.44 | 27.48 | 68 | 1.43 |
| 1068 | 2.99 | 34.39 | 0.38 | 27.42 | | | | | | |
| 1360 | 2.44 | 34.48 | 0.59 | 27.55 | | | | | | |

CNAV WHITETHROAT; August 13, 1958; 0824 GCT; 50°03'N, 135°09'W; sounding, missing; wind, 180°, 20 kt; weather, overcast; sea, slight. 95

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.10 | 32.01 | - | 23.45 | 0 | 16.10 | 32.01 | 23.45 | 445 | 0.00 |
| 10 | 16.12 | 31.99 | 5.66 | 23.43 | 10 | 16.12 | 31.99 | 23.43 | 447 | 0.04 |
| 25 | 16.05 | 31.97 | 5.79 | 23.43 | 20 | 16.09 | 31.98 | 23.43 | 447 | 0.09 |
| 49 | 11.01 | 32.51 | 6.80 | 24.86 | 30 | 15.50 | 32.03 | 23.60 | 431 | 0.13 |
| 74 | 8.71 | 32.55 | 6.76 | 25.27 | 50 | 10.86 | 32.52 | 24.90 | 308 | 0.21 |
| 98 | 7.42 | 32.66 | 6.22 | 25.54 | 75 | 8.64 | 32.55 | 25.28 | 271 | 0.28 |
| 123 | 7.44 | 33.09 | 4.49 | 25.88 | 100 | 7.37 | 32.68 | 25.57 | 244 | 0.35 |
| 148 | 6.95 | 33.45 | 3.86 | 26.22 | 150 | 6.92 | 33.47 | 26.25 | 180 | 0.45 |
| 172 | 6.71 | 33.72 | 3.17 | 26.47 | 200 | 6.40 | 33.85 | 26.62 | 146 | 0.54 |
| 197 | 6.43 | 33.84 | 2.71 | 26.60 | 250 | 5.88 | 33.93 | 26.75 | 134 | 0.60 |
| 221 | 6.16 | 33.90 | 2.45 | 26.69 | 300 | 5.38 | 33.99 | 26.85 | 124 | 0.67 |
| 246 | 5.92 | 33.93 | 2.18 | 26.74 | 400 | 4.90 | 34.06 | 26.96 | 115 | 0.79 |
| 295 | 5.42 | 33.98 | 1.77 | 26.84 | 500 | 4.47 | 34.13 | 27.07 | 105 | 0.90 |
| 370 | 5.04 | 34.03 | 1.21 | 26.93 | 600 | 4.15 | 34.20 | 27.16 | 97 | 1.00 |
| 462 | 4.61 | 34.11 | 0.76 | 27.03 | 700 | 3.85 | 34.26 | 27.23 | 91 | 1.10 |
| 555 | 4.29 | 34.17 | 0.66 | 27.12 | 800 | 3.60 | 34.30 | 27.29 | 85 | 1.19 |
| 740 | 3.74 | 34.28 | 0.46 | 27.26 | 1000 | 3.24 | 34.37 | 27.39 | 77 | 1.35 |
| 925 | 3.39 | 34.35 | 0.40 | 27.35 | 1200 | 2.81 | 34.45 | 27.48 | 68 | 1.50 |
| 1410 | 2.33 | 34.52 | 0.74 | 27.58 | 1500 | 2.20 | 34.54 | 27.61 | 56 | 1.69 |
| 1898 | 1.91 | 34.59 | 1.34 | 27.67 | | | | | | |

CNAV WHITETHROAT; August 13, 1958; 1923 GCT; 50°30'N, 130°50'W; sounding, missing; wind, 140°, 10 kt; weather, overcast; sea, missing. 96

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.60 | 32.05 | - | 23.37 | 0 | 16.60 | 32.05 | 23.37 | 452 | 0.00 |
| 10 | 16.49 | 32.03 | 5.73 | 23.37 | 10 | 16.49 | 32.03 | 23.37 | 452 | 0.04 |
| 25 | 12.30 | 32.12 | 5.91 | 24.32 | 20 | 14.23 | 32.07 | 23.90 | 402 | 0.09 |
| 50 | 9.28 | 32.41 | 5.85 | 25.07 | 30 | 11.30 | 32.17 | 24.54 | 341 | 0.13 |
| 74 | 8.09 | 32.69 | 5.39 | 25.47 | 50 | 9.28 | 32.41 | 25.07 | 290 | 0.19 |
| 99 | 7.53 | 32.99 | 4.80 | 25.79 | 75 | 8.05 | 32.70 | 25.49 | 252 | 0.26 |
| 123 | 7.21 | 33.43 | 3.92 | 26.17 | 100 | 7.51 | 33.01 | 25.80 | 222 | 0.32 |
| 148 | 7.01 | 33.70 | 3.33 | 26.41 | 150 | 7.00 | 33.71 | 26.43 | 163 | 0.41 |
| 173 | 7.01 | 33.81 | 2.91 | 26.50 | 200 | 6.66 | 33.88 | 26.60 | 147 | 0.49 |
| 197 | 6.70 | 33.87 | 2.90 | 26.59 | 250 | 6.08 | 33.92 | 26.71 | 137 | 0.56 |
| 222 | 6.37 | 33.90 | 2.68 | 26.66 | 300 | 5.64 | 33.95 | 26.79 | 130 | 0.63 |
| 246 | 6.12 | 33.92 | 2.50 | 26.71 | 400 | 5.05 | 34.01 | 26.91 | 120 | 0.76 |
| 296 | 5.67 | 33.95 | 2.17 | 26.79 | 500 | 4.63 | 34.09 | 27.02 | 110 | 0.87 |
| 400 | 5.05 | 34.01 | 1.33 | 26.91 | 600 | 4.36 | 34.17 | 27.11 | 102 | 0.98 |
| 500 | 4.63 | 34.09 | 0.86 | 27.02 | 700 | 4.10 | 34.24 | 27.19 | 95 | 1.08 |
| 600 | 4.36 | 34.17 | 0.68 | 27.11 | 800 | 3.85 | 34.29 | 27.26 | 89 | 1.17 |
| 800 | 3.85 | 34.29 | 0.38 | 27.26 | 1000 | 3.37 | 34.38 | 27.38 | 78 | 1.34 |
| 1000 | 3.37 | 34.38 | 0.44 | 27.38 | | | | | | |

97

CNAV WHITETHROAT; August 14, 1958; 0350 GCT; 50°41'N, 129°08'W; sounding, missing; wind, 270°, force missing; weather, missing; sea, missing.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 15.60 | 31.88 | - | 23.46 | 0 | 15.60 | 31.88 | 23.46 | 443 | 0.00 |
| 10 | 15.39 | 31.86 | 6.08 | 23.49 | 10 | 15.39 | 31.86 | 23.49 | 441 | 0.04 |
| 25 | 11.25 | 32.39 | 5.90 | 24.72 | 20 | 13.14 | 32.14 | 24.17 | 376 | 0.08 |
| 49 | 8.88 | 32.49 | 5.76 | 25.19 | 30 | 10.32 | 32.49 | 24.96 | 301 | 0.12 |
| 74 | 7.99 | 32.94 | 4.46 | 25.68 | 50 | 8.81 | 32.50 | 25.21 | 277 | 0.18 |
| 98 | 7.17 | 33.42 | 3.67 | 26.17 | 75 | 7.96 | 32.96 | 25.70 | 232 | 0.24 |
| 123 | 6.94 | 33.69 | 3.18 | 26.41 | 100 | 7.13 | 33.45 | 26.20 | 184 | 0.29 |
| 147 | 6.62 | 33.84 | 2.78 | 26.58 | 150 | 6.59 | 33.85 | 26.59 | 148 | 0.38 |
| 171 | 6.43 | 33.89 | 2.51 | 26.64 | | | | | | |
| 195 | 6.36 | 33.89 | 2.42 | 26.66 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

HMCS OSHAWA; July 23, 1958; 0353 GCT;[a] 48°53.5'N, 125°33'W; sounding, 59 fm; wind, 300°, 15 kt; weather, partly cloudy; sea, slight. 1

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.60 | 30.95 | - | 22.97 | 0 | 14.60 | 30.95 | 22.97 | 491 | 0.00 |
| 10 | 14.39 | 30.97 | 6.54 | 23.02 | 10 | 14.39 | 30.97 | 23.02 | 486 | 0.05 |
| 20 | 10.95 | 31.58 | 4.87 | 24.15 | 20 | 10.95 | 31.58 | 24.15 | 378 | 0.09 |
| 30 | 10.27 | 31.84 | 3.55 | 24.47 | 30 | 10.27 | 31.84 | 24.47 | 348 | 0.13 |
| 40 | 9.63 | 32.01 | 3.54 | 24.70 | 50 | 9.34 | 32.22 | 24.91 | 306 | 0.20 |
| 50 | 9.34 | 32.22 | 3.68 | 24.91 | 75 | 8.58 | 32.77 | 25.46 | 254 | 0.26 |
| 75 | 8.58 | 32.77 | 3.40 | 25.46 | | | | | | |

HMCS OSHAWA; July 23, 1958; 0555 GCT; 48°45'N, 125°45'W; sounding, 65 fm; wind, 300°, 10 kt; weather, partly cloudy; sea, moderate. 2

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.20 | 31.27 | 7.10 | 23.29 | 0 | 14.20 | 31.27 | 23.29 | 460 | 0.00 |
| 10 | 14.27 | 31.22 | 7.41 | 23.24 | 10 | 14.27 | 31.22 | 23.24 | 465 | 0.05 |
| 20 | 10.28 | 31.59 | 4.82 | 24.27 | 20 | 10.28 | 31.59 | 24.27 | 367 | 0.09 |
| 30 | 9.40 | 32.16 | 3.57 | 24.86 | 30 | 9.40 | 32.16 | 24.86 | 311 | 0.12 |
| 50 | 9.00 | 32.36 | 3.34 | 25.07 | 50 | 9.00 | 32.36 | 25.07 | 290 | 0.18 |
| 75 | 8.34 | 32.85 | 2.93 | 25.56 | 75 | 8.34 | 32.85 | 25.56 | 245 | 0.25 |
| 100 | 8.05 | 33.01 | 2.84 | 25.73 | 100 | 8.05 | 33.01 | 25.73 | 229 | 0.31 |

HMCS OSHAWA; July 23, 1958; 0810 GCT; 48°35.5'N, 126°00'W; sounding, 58 fm; wind, 300°, 15 kt; weather, clear; sea, moderate. 3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.80 | 30.92 | | 23.30 | 0 | 12.80 | 30.92 | 23.30 | 458 | 0.00 |
| 10 | 12.97 | 30.92 | | 23.27 | 10 | 12.97 | 30.92 | 23.27 | 462 | 0.05 |
| 19 | 12.43 | 31.10 | | 23.51 | 20 | 12.30 | 31.16 | 23.58 | 432 | 0.09 |
| 29 | 10.42 | 32.04 | | 24.60 | 30 | 10.26 | 32.12 | 24.68 | 327 | 0.13 |
| 49 | 8.48 | 32.85 | | 25.54 | 50 | 8.41 | 32.89 | 25.58 | 243 | 0.19 |
| 78 | 7.28 | 33.53 | | 26.24 | 75 | 7.32 | 33.49 | 26.21 | 183 | 0.24 |

HMCS OSHAWA; July 23, 1958; 1205 GCT; 48°17'N, 126°30'W; sounding, missing; wind, 340°, 15 kt; weather, partly cloudy; sea, moderate. 4

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.50 | 32.39 | - | 24.49 | 0 | 12.50 | 32.39 | 24.49 | 345 | 0.00 |
| 10 | 12.63 | 32.32 | 6.57 | 24.41 | 10 | 12.63 | 32.32 | 24.41 | 353 | 0.04 |
| 20 | 12.65 | 32.31 | 6.44 | 24.40 | 20 | 12.65 | 32.31 | 24.40 | 354 | 0.07 |
| 30 | 9.84 | 32.37 | 6.51 | 24.95 | 30 | 9.84 | 32.37 | 24.95 | 302 | 0.10 |
| 50 | 8.42 | 32.51 | 6.22 | 24.28 | 50 | 8.42 | 32.51 | 25.28 | 271 | 0.16 |
| 75 | 7.72 | 33.15 | 5.04 | 25.88 | 75 | 7.72 | 33.15 | 25.88 | 214 | 0.22 |
| 100 | 7.47 | 33.42 | 4.41 | 26.13 | 100 | 7.47 | 33.42 | 26.13 | 191 | 0.27 |
| 125 | 7.35 | 33.68 | 3.88 | 26.35 | 150 | 7.25 | 33.82 | 26.48 | 159 | 0.36 |
| 149 | 7.26 | 33.82 | 3.34 | 26.47 | | | | | | |
| 174 | 7.10 | 33.89 | 2.98 | 26.56 | | | | | | |
| 199 | 7.05 | 33.96 | 2.78 | 26.61 | | | | | | |

HMCS OSHAWA; July 23, 1958; 1838 GCT; 47°50'N, 127°21'W; sounding, 1400 fm; wind, 310°, 25 kt; weather, missing; sea, moderate. 5

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 32.30 | - | 23.87 | 0 | 15.20 | 32.30 | 23.87 | 404 | 0.00 |
| 10 | 15.50 | 32.30 | - | 23.81 | 10 | 15.50 | 32.30 | 23.81 | 411 | 0.04 |
| 20 | 15.51 | 32.30 | 5.71 | 23.80 | 20 | 15.51 | 32.30 | 23.80 | 411 | 0.08 |
| 30 | 15.54 | 32.30 | 5.99 | 23.80 | 30 | 15.54 | 32.30 | 23.80 | 412 | 0.12 |
| 50 | 10.44 | 32.45 | 7.18 | 24.91 | 50 | 10.44 | 32.45 | 24.91 | 306 | 0.20 |
| 75 | 8.74 | 32.49 | 6.47 | 25.22 | 75 | 8.74 | 32.49 | 25.22 | 277 | 0.27 |
| 100 | 7.43 | 33.08 | 5.17 | 25.87 | 100 | 7.43 | 33.08 | 25.87 | 215 | 0.33 |
| 125 | 7.05 | 33.44 | 5.05 | 26.20 | 150 | 7.06 | 33.67 | 26.39 | 167 | 0.43 |
| 149 | 7.06 | 33.66 | 4.30 | 26.38 | 200 | 6.49 | 33.90 | 26.64 | 143 | 0.50 |
| 174 | 7.09 | 33.86 | 3.63 | 26.53 | 250 | 5.94 | 33.93 | 26.74 | 134 | 0.58 |
| 199 | 6.51 | 33.90 | 3.94 | 26.64 | 300 | 5.56 | 33.94 | 26.79 | 130 | 0.64 |
| 249 | 5.95 | 33.93 | 3.16 | 26.74 | 400 | 5.01 | 34.02 | 26.92 | 119 | 0.77 |
| 299 | 5.57 | 33.94 | 2.52 | 26.79 | 500 | 4.67 | 34.10 | 27.03 | 109 | 0.88 |
| 348 | 5.22 | 33.97 | 1.74 | 26.85 | 600 | 4.36 | 34.21 | 27.14 | 99 | 0.99 |
| 398 | 5.02 | 34.02 | 1.22 | 26.92 | 700 | 4.10 | 34.28 | 27.23 | 92 | 1.08 |
| 497 | 4.68 | 34.10 | 0.71 | 27.02 | 800 | 3.88 | 34.32 | 27.28 | 87 | 1.18 |
| 597 | 4.37 | 34.21 | 0.39 | 27.14 | 1000 | 3.48 | 34.41 | 27.39 | 78 | 1.34 |
| 796 | 3.89 | 34.31 | 0.26 | 27.27 | | | | | | |
| 1045 | 3.40 | 34.42 | 0.25 | 27.41 | | | | | | |



a) Although not indicated in the tabulation, generally two casts were made at a station, the shallow cast to 200 meters and the deep cast to a maximum depth of 1200 meters. The time reported is the time of the messenger release of the shallow cast which was made 30 to 40 minutes after the deep cast.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 6 | HMCS OSHAWA; July 24, 1958; 0202 GCT; 47°14'N, 128°02'W; sounding, 1480 fm; wind, 340°, 25 kt; weather, partly cloudy; sea, high. | | | | | | | | | |
| 0 | 15.80 | 32.15 | - | 23.63 | 0 | 15.80 | 32.15 | 23.63 | 428 | 0.00 |
| 10 | 15.79 | 32.13 | 5.35 | 23.61 | 10 | 15.79 | 32.13 | 23.61 | 429 | 0.04 |
| 20 | 15.78 | 32.13 | 5.88 | 23.62 | 20 | 15.78 | 32.13 | 23.62 | 429 | 0.09 |
| 30 | 15.68 | 32.12 | 5.85 | 23.63 | 30 | 15.68 | 32.12 | 23.63 | 428 | 0.13 |
| 50 | 10.50 | 32.40 | 6.04 | 24.86 | 50 | 10.50 | 32.40 | 24.86 | 311 | 0.20 |
| 75 | 8.75 | 32.47 | 6.27 | 25.20 | 75 | 8.75 | 32.47 | 25.20 | 279 | 0.28 |
| 100 | 7.54 | 32.84 | 5.62 | 25.67 | 100 | 7.54 | 32.84 | 25.67 | 234 | 0.34 |
| 125 | 6.96 | 33.28 | 4.82 | 26.10 | 150 | 6.71 | 33.55 | 26.34 | 171 | 0.44 |
| 149 | 6.72 | 33.54 | 4.47 | 26.33 | 200 | 6.42 | 33.86 | 26.62 | 146 | 0.52 |
| 174 | 6.68 | 33.76 | 3.89 | 26.51 | 250 | 6.09 | 33.93 | 26.72 | 136 | 0.60 |
| 199 | 6.43 | 33.86 | 3.51 | 26.62 | 300 | 5.51 | 33.93 | 26.79 | 130 | 0.66 |
| 227 | 6.31 | 33.92 | 3.08 | 26.68 | 400 | 4.89 | 34.00 | 26.92 | 119 | 0.79 |
| 274 | 5.73 | 33.92 | 2.72 | 26.75 | 500 | 4.69 | 34.09 | 27.01 | 111 | 0.90 |
| 320 | 5.40 | 33.94 | 1.95 | 26.81 | 600 | 4.41 | 34.18 | 27.11 | 102 | 1.01 |
| 368 | 5.04 | 33.97 | 1.64 | 26.88 | 700 | 4.12 | 34.26 | 27.20 | 94 | 1.11 |
| 465 | 4.78 | 34.06 | 0.99 | 26.97 | 800 | 3.83 | 34.32 | 27.28 | 87 | 1.20 |
| 558 | 4.53 | 34.15 | 0.66 | 27.07 | | | | | | |
| 744 | 3.98 | 34.28 | 0.35 | 27.24 | | | | | | |
| 976 | 3.43 | 34.41 | 0.37 | 27.40 | | | | | | |
| 7 | HMCS OSHAWA; July 24, 1958; 0944 GCT; 46°39'N, 129°00'W; sounding, 1450 fm; wind, 340°, 15 kt; weather, overcast; sea, rough. | | | | | | | | | |
| 0 | 16.10 | 32.12 | - | 23.53 | 0 | 16.10 | 32.12 | 23.53 | 437 | 0.00 |
| 10 | (16.34)a) | 32.10 | 5.76 | (23.47) | 10 | 16.34 | 32.10 | 23.47 | 443 | 0.04 |
| 20 | 16.44 | 32.11 | 5.40 | 23.45 | 20 | 16.44 | 32.11 | 23.45 | 445 | 0.09 |
| 30 | 16.41 | 32.12 | 5.58 | 23.47 | 30 | 16.41 | 32.12 | 23.47 | 444 | 0.13 |
| 50 | 10.51 | 32.50 | 6.76 | 24.94 | 50 | 10.51 | 32.50 | 24.94 | 303 | 0.21 |
| 75 | 9.43 | 32.48 | 6.59 | 25.11 | 75 | 9.43 | 32.48 | 25.11 | 288 | 0.28 |
| 100 | 8.32 | 32.69 | 5.78 | 25.44 | 100 | 8.32 | 32.69 | 25.44 | 257 | 0.35 |
| 125 | 7.37 | 33.05 | 5.79 | 25.86 | 150 | 6.97 | 33.25 | 26.07 | 197 | 0.46 |
| 149 | 6.98 | 33.24 | 5.63 | 26.06 | 200 | 6.90 | 33.80 | 26.51 | 156 | 0.55 |
| 174 | 7.04 | 33.56 | 4.80 | 26.30 | 250 | 6.43 | 33.89 | 26.64 | 144 | 0.63 |
| 199 | 6.91 | 33.79 | 4.75 | 26.50 | 300 | 5.92 | 33.91 | 26.73 | 136 | 0.70 |
| 249 | 6.44 | 33.89 | 4.09 | 26.64 | 400 | 4.82 | 33.96 | 26.89 | 121 | 0.83 |
| 299 | (5.93)a) | 33.91 | 3.00 | (26.72) | 500 | 4.37 | 34.05 | 27.02 | 110 | 0.95 |
| 348 | 5.40 | 33.93 | 2.67 | 26.80 | 600 | 4.15 | 34.17 | 27.13 | 100 | 1.05 |
| 398 | 4.84 | 33.96 | 1.87 | 26.89 | 700 | 4.02 | 34.25 | 27.21 | 93 | 1.15 |
| 497 | 4.38 | 34.05 | 1.08 | 27.01 | 800 | 3.97 | 34.32 | 27.27 | 88 | 1.24 |
| 597 | 4.16 | 34.16 | 0.58 | 27.13 | 1000 | 3.58 | 34.42 | 27.39 | 78 | 1.41 |
| 796 | 3.98 | 34.32 | 0.30 | 27.27 | | | | | | |
| 1044 | 3.47 | 34.43 | 0.35 | 27.41 | | | | | | |
| 8 | HMCS OSHAWA; July 25, 1958; 0041 GCT; 47°50'N, 131°20'W; sounding, 1550 fm; wind, 320°, 12 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 16.70 | 32.36 | - | 23.58 | 0 | 16.70 | 32.36 | 23.58 | 432 | 0.00 |
| 10 | (16.71)a) | 32.33 | 5.60 | (23.56) | 10 | 16.71 | 32.33 | 23.56 | 434 | 0.04 |
| 20 | 16.67 | 32.36 | 5.60 | 23.59 | 20 | 16.67 | 32.36 | 23.59 | 432 | 0.09 |
| 30 | 16.57 | 32.36 | 5.59 | 23.61 | 30 | 16.57 | 32.36 | 23.61 | 430 | 0.13 |
| 50 | 13.71 | 32.43 | 6.57 | 24.29 | 50 | 13.71 | 32.43 | 24.29 | 366 | 0.21 |
| 75 | 9.62 | 32.46 | 6.75 | 25.06 | 75 | 9.62 | 32.46 | 25.06 | 293 | 0.29 |
| 100 | 8.32 | 32.58 | 5.94 | 25.35 | 100 | 8.32 | 32.58 | 25.35 | 264 | 0.36 |
| 125 | 6.91 | 33.06 | 5.43 | 25.92 | 150 | 6.51 | 33.43 | 26.27 | 178 | 0.47 |
| 150 | 6.51 | 33.43 | 4.94 | 26.27 | 200 | 6.33 | 33.84 | 26.61 | 146 | 0.56 |
| 175 | 6.61 | 33.72 | 4.17 | 26.49 | 250 | 5.92 | 33.89 | 26.71 | 138 | 0.63 |
| 200 | 6.33 | 33.84 | 3.66 | 26.61 | 300 | 5.48 | 33.92 | 26.78 | 131 | 0.70 |
| 248 | 5.94 | 33.89 | 3.08 | 26.71 | 400 | 4.80 | 34.00 | 26.92 | 118 | 0.82 |
| 298 | 5.50 | 33.92 | 2.43 | 26.78 | 500 | 4.48 | 34.10 | 27.04 | 108 | 0.93 |
| 348 | 5.17 | 33.95 | 1.88 | 26.84 | 600 | 4.42 | 34.19 | 27.12 | 101 | 1.04 |
| 397 | 4.82 | 33.99 | 1.50 | 26.92 | 700 | 4.18 | 34.26 | 27.20 | 94 | 1.14 |
| 496 | 4.49 | 34.09 | 0.81 | 27.04 | 800 | 3.78 | 34.32 | 27.29 | 86 | 1.23 |
| 596 | 4.43 | 34.19 | 0.52 | 27.12 | 1000 | 3.33 | 34.39 | 27.39 | 77 | 1.39 |
| 794 | 3.80 | 34.31 | 0.27 | 27.28 | | | | | | |
| 1040 | 3.26 | 34.41 | 0.29 | 27.41 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

9

HMCS OSHAWA; July 25, 1958; 0739 GCT; 48°26.5'N, 130°25'W; sounding, 1520 fm; wind, 290°, 8 kt; weather, fog in patches; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.00 | 32.26 | - | 23.67 | 0 | 16.00 | 32.26 | 23.67 | 424 | 0.00 |
| 10 | 16.19 | 32.25 | 5.85 | 23.61 | 10 | 16.19 | 32.25 | 23.61 | 429 | 0.04 |
| 20 | 16.08 | 32.33 | 5.84 | 23.70 | 20 | 16.08 | 32.33 | 23.70 | 421 | 0.09 |
| 30 | 15.26 | 32.35 | 6.03 | 23.89 | 30 | 15.26 | 32.35 | 23.89 | 403 | 0.13 |
| 49 | 10.01 | 32.45 | 6.53 | 24.99 | 50 | 9.84 | 32.46 | 25.02 | 296 | 0.20 |
| 74 | 8.72 | 32.50 | 6.35 | 25.23 | 75 | 8.67 | 32.51 | 25.24 | 275 | 0.27 |
| 99 | 7.47 | 32.84 | 5.78 | 25.68 | 100 | 7.44 | 32.86 | 25.70 | 232 | 0.33 |
| 123 | 7.14 | 33.31 | 4.75 | 26.09 | 150 | 7.11 | 33.68 | 26.39 | 167 | 0.43 |
| 148 | 7.11 | 33.66 | 3.47 | 26.37 | 200 | 6.92 | 33.91 | 26.60 | 148 | 0.51 |
| 173 | 7.18 | 33.85 | 2.50 | 26.51 | 250 | 6.36 | 33.97 | 26.72 | 137 | 0.58 |
| 197 | 6.95 | 33.91 | 2.11 | 26.59 | 300 | 6.02 | 34.00 | 26.78 | 132 | 0.65 |
| 249 | 6.37 | 33.97 | 1.69 | 26.71 | 400 | 5.53 | 34.05 | 26.88 | 122 | 0.78 |
| 299 | 6.03 | 34.00 | 1.49 | 26.78 | 500 | 5.13 | 34.09 | 26.96 | 116 | 0.90 |
| 349 | 5.77 | 34.03 | 1.27 | 26.84 | 600 | 4.65 | 34.16 | 27.07 | 106 | 1.01 |
| 398 | 5.54 | 34.05 | 1.13 | 26.88 | 700 | 4.28 | 34.22 | 27.16 | 98 | 1.12 |
| 498 | 5.14 | 34.09 | 0.84 | 26.96 | 800 | 4.02 | 34.29 | 27.24 | 91 | 1.21 |
| 597 | 4.66 | 34.16 | 0.59 | 27.07 | 1000 | 3.53 | 34.38 | 27.36 | 80 | 1.38 |
| 795 | 4.03 | 34.28 | 0.32 | 27.24 | | | | | | |
| 1036 | 3.46 | 34.39 | 0.28 | 27.38 | | | | | | |

10

HMCS OSHAWA; July 25, 1958; 1402 GCT; 49°02'N, 129°38'W; sounding, 1200 fm; wind, 290°, 10 kt; weather, fog; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.10 | 32.39 | - | 23.74 | 0 | 16.10 | 32.39 | 23.74 | 417 | 0.00 |
| 10 | 16.13 | 32.37 | 5.71 | 23.72 | 10 | 16.13 | 32.37 | 23.72 | 419 | 0.04 |
| 20 | 16.15 | 32.39 | 5.59 | 23.73 | 20 | 16.15 | 32.39 | 23.73 | 418 | 0.08 |
| 30 | 16.01 | 32.39 | 5.68 | 23.76 | 30 | 16.01 | 32.39 | 23.76 | 416 | 0.13 |
| 50 | 10.96 | 32.45 | 6.63 | 24.82 | 50 | 10.96 | 32.45 | 24.82 | 314 | 0.20 |
| 75 | 8.84 | 32.50 | 6.51 | 25.21 | 75 | 8.84 | 32.50 | 25.21 | 278 | 0.27 |
| 100 | 7.42 | 32.68 | 6.03 | 25.56 | 100 | 7.42 | 32.68 | 25.56 | 245 | 0.34 |
| 125 | 6.69 | 33.10 | 5.40 | 25.98 | 150 | 6.71 | 33.38 | 26.21 | 184 | 0.45 |
| 150 | 6.71 | 33.38 | 4.87 | 26.21 | 200 | 6.44 | 33.76 | 26.54 | 153 | 0.53 |
| 175 | 6.60 | 33.63 | 4.33 | 26.41 | 250 | 5.94 | 33.89 | 26.71 | 138 | 0.61 |
| 200 | 6.44 | 33.76 | 3.91 | 26.54 | 300 | 5.41 | 33.94 | 26.81 | 129 | 0.67 |
| 249 | 5.95 | 33.89 | 3.11 | 26.70 | 400 | 4.84 | 34.01 | 26.93 | 117 | 0.80 |
| 299 | 5.42 | 33.94 | 1.93 | 26.80 | 500 | 4.48 | 34.15 | 27.08 | 104 | 0.91 |
| 348 | 5.17 | 33.98 | 1.77 | 26.87 | 600 | 4.19 | 34.16 | 27.12 | 101 | 1.01 |
| 398 | 4.85 | 34.01 | 1.23 | 26.93 | 700 | 3.98 | 34.22 | 27.19 | 94 | 1.11 |
| 498 | 4.49 | 34.15 | 0.81 | 27.08 | 800 | 3.84 | 34.33 | 27.29 | 86 | 1.20 |
| 597 | 4.20 | 34.16 | 0.57 | 27.12 | 1000 | 3.40 | 34.41 | 27.40 | 76 | 1.37 |
| 796 | 3.85 | 34.33 | 0.30 | 27.29 | | | | | | |
| 1042 | 3.30 | 34.42 | 0.32 | 27.42 | | | | | | |

11

HMCS OSHAWA; July 25, 1958; 1958 GCT; 49°31'N, 128°52.5'W; sounding, 1240 fm; wind, 290°, 5 kt; weather, fog; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.30 | 31.90 | - | 23.76 | 0 | 14.30 | 31.90 | 23.76 | 415 | 0.00 |
| 10 | 13.52 | 31.90 | 6.57 | 23.91 | 10 | 13.52 | 31.90 | 23.91 | 400 | 0.04 |
| 20 | 10.88 | 32.05 | 5.71 | 24.53 | 20 | 10.88 | 32.05 | 24.53 | 342 | 0.08 |
| 30 | 9.54 | 32.36 | 5.59 | 24.99 | 30 | 9.54 | 32.36 | 24.99 | 298 | 0.11 |
| 50 | 8.31 | 32.48 | 4.97 | 25.28 | 50 | 8.31 | 32.48 | 25.28 | 271 | 0.17 |
| 75 | 7.45 | 33.36 | 4.75 | 26.08 | 75 | 7.45 | 33.36 | 26.08 | 195 | 0.23 |
| 100 | 7.12 | 33.59 | 3.70 | 26.31 | 100 | 7.12 | 33.59 | 26.31 | 174 | 0.27 |
| 124 | 6.98 | 33.78 | 3.06 | 26.48 | 150 | 6.69 | 33.86 | 26.59 | 148 | 0.35 |
| 149 | 6.70 | 33.86 | 2.90 | 26.58 | 200 | 6.35 | 33.92 | 26.68 | 140 | 0.43 |
| 174 | 6.55 | 33.90 | 2.50 | 26.63 | 250 | 5.96 | 33.96 | 26.76 | 132 | 0.50 |
| 199 | 6.36 | 33.92 | 2.24 | 26.68 | 300 | 5.65 | 34.00 | 26.83 | 127 | 0.56 |
| 249 | 5.97 | 33.96 | 2.09 | 26.76 | 400 | 5.00 | 34.06 | 26.96 | 115 | 0.68 |
| 298 | 5.66 | 34.00 | 1.66 | 26.83 | 500 | 4.69 | 34.11 | 27.03 | 109 | 0.80 |
| 348 | 5.40 | 34.02 | 1.32 | 26.87 | 600 | 4.41 | 34.18 | 27.11 | 102 | 0.90 |
| 398 | 5.01 | 34.06 | 1.10 | 26.95 | 700 | 4.14 | 34.24 | 27.19 | 95 | 1.00 |
| 498 | 4.70 | 34.11 | 0.75 | 27.03 | 800 | 3.89 | 34.28 | 27.25 | 90 | 1.10 |
| 597 | 4.42 | 34.18 | 0.59 | 27.11 | 1000 | 3.44 | 34.37 | 27.36 | 80 | 1.27 |
| 797 | 3.90 | 34.28 | 0.43 | 27.25 | | | | | | |
| 1044 | 3.35 | 34.38 | 0.43 | 27.38 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 12 | HMCS OSHAWA; July 25, 1958; 2337 GCT; 49°45'N, 128°29.5'W; sounding, 1000 fm; wind, 310°, 15 kt; weather, fog; sea, moderate. | | | | | | | | | |
| 0 | 13.50 | 32.14 | - | 24.11 | 0 | 13.50 | 32.14 | 24.11 | 382 | 0.00 |
| 10 | (12.70)a) | 32.14 | 6.65 | (24.26) | 10 | 12.70 | 32.14 | 24.26 | 368 | 0.04 |
| 20 | 11.77 | 32.17 | 6.65 | 24.45 | 20 | 11.77 | 32.17 | 24.45 | 349 | 0.07 |
| 30 | (10.70)a) | 32.42 | 5.63 | (24.85) | 30 | 10.70 | 32.42 | 24.85 | 312 | 0.11 |
| 50 | 8.14 | 32.63 | 5.63 | 25.42 | 50 | 8.14 | 32.63 | 25.42 | 258 | 0.16 |
| 75 | 7.37 | 33.15 | 4.68 | 25.94 | 75 | 7.37 | 33.15 | 25.94 | 209 | 0.22 |
| 100 | 7.06 | 33.56 | 3.81 | 26.30 | 100 | 7.06 | 33.56 | 26.30 | 175 | 0.27 |
| 125 | 6.83 | 33.72 | 3.51 | 26.46 | 150 | 6.77 | 33.82 | 26.54 | 152 | 0.35 |
| 150 | 6.77 | 33.82 | 3.04 | 26.54 | 200 | 6.50 | 33.94 | 26.67 | 141 | 0.43 |
| 175 | 6.72 | 33.90 | 2.71 | 26.61 | 250 | 5.73 | 33.99 | 26.81 | 128 | 0.50 |
| 200 | 6.50 | 33.94 | 2.48 | 26.67 | 300 | 5.61 | 34.02 | 26.85 | 125 | 0.56 |
| 250 | 5.73 | (33.99)a) | 2.18 | (26.81) | 400 | 5.16 | 34.06 | 26.94 | 117 | 0.68 |
| 300 | 5.61 | (34.02)a) | 1.53 | (26.85) | 500 | 4.69 | 34.12 | 27.03 | 109 | 0.80 |
| 350 | 5.38 | 34.01 | 1.36 | 26.87 | 600 | 4.29 | 34.20 | 27.14 | 99 | 0.90 |
| 400 | 5.16 | 34.06 | 1.11 | 26.94 | 700 | 4.00 | 34.26 | 27.22 | 92 | 1.00 |
| 500 | 4.69 | 34.12 | 0.74 | 27.03 | 800 | 3.82 | 34.31 | 27.28 | 87 | 1.09 |
| 600 | 4.29 | 34.20 | 0.52 | 27.14 | 1000 | 3.42 | 34.40 | 27.39 | 77 | 1.25 |
| 798 | 3.82 | 34.31 | 0.28 | 27.28 | | | | | | |
| 1047 | 3.34 | 34.42 | 0.39 | 27.41 | | | | | | |
| 13 | HMCS OSHAWA; July 26, 1958; 0309 GCT; 49°59'N, 128°07'W; sounding, 510 fm; wind, 330°, 12 kt; weather, fog; sea, moderate. | | | | | | | | | |
| 0 | 12.70 | 32.19 | - | 24.30 | 0 | 12.70 | 32.19 | 24.30 | 363 | 0.00 |
| 10 | (11.10)a) | 32.20 | 7.01 | (24.60) | 10 | 11.10 | 32.20 | 24.60 | 334 | 0.04 |
| 20 | 9.79 | 32.29 | 5.11 | 24.90 | 20 | 9.79 | 32.29 | 24.90 | 307 | 0.07 |
| 30 | 8.76 | 32.48 | 5.12 | 25.21 | 30 | 8.76 | 32.48 | 25.21 | 277 | 0.10 |
| 50 | 7.80 | 32.96 | 4.32 | 25.72 | 50 | 7.80 | 32.96 | 25.72 | 229 | 0.15 |
| 75 | 7.28 | 33.37 | 3.86 | 26.12 | 75 | 7.28 | 33.37 | 26.12 | 192 | 0.20 |
| 100 | 6.98 | 33.73 | 3.37 | 26.44 | 100 | 6.98 | 33.73 | 26.44 | 161 | 0.24 |
| 125 | 6.71 | 33.80 | 3.49 | 26.54 | 150 | 6.55 | 33.87 | 26.61 | 146 | 0.32 |
| 150 | 6.55 | 33.87 | 3.12 | 26.61 | 200 | 6.10 | 33.94 | 26.72 | 136 | 0.39 |
| 175 | 6.17 | 33.91 | 2.69 | 26.69 | 250 | 5.83 | 33.97 | 26.78 | 130 | 0.46 |
| 200 | 6.10 | 33.94 | 2.50 | 26.72 | 300 | 5.45 | 33.99 | 26.85 | 125 | 0.52 |
| 250 | 5.83 | 33.97 | 2.02 | 26.78 | 400 | 4.98 | 34.07 | 26.96 | 115 | 0.64 |
| 300 | 5.45 | 33.99 | 1.57 | 26.85 | 500 | 4.65 | 34.13 | 27.05 | 107 | 0.76 |
| 350 | 5.20 | 34.04 | 1.12 | 26.91 | 600 | 4.43 | 34.17 | 27.10 | 103 | 0.86 |
| 400 | 4.98 | 34.07 | 0.93 | 26.96 | 700 | 4.16 | 34.23 | 27.18 | 96 | 0.96 |
| 500 | 4.65 | 34.13 | 0.69 | 27.05 | 800 | 3.85 | 34.30 | 27.27 | 88 | 1.06 |
| 600 | 4.43 | 34.17 | 0.60 | 27.10 | | | | | | |
| 800 | 3.85 | 34.30 | 0.37 | 27.27 | | | | | | |
| 14 | HMCS OSHAWA; July 26, 1958; 0437 GCT; 50°07'N, 127°57'W; sounding, 50 fm; wind, 310°, 15 kt; weather, fog; sea, slight. | | | | | | | | | |
| 0 | 11.30 | 32.16 | - | 24.53 | 0 | 11.30 | 32.16 | 24.53 | 341 | 0.00 |
| 10 | (11.21)a) | 32.65 | 7.72 | (24.93) | 10 | 11.21 | 32.65 | 24.93 | 303 | 0.03 |
| 19 | 10.37 | 32.69 | 6.27 | 25.11 | 20 | 10.23 | 32.70 | 25.14 | 284 | 0.06 |
| 29 | 8.59 | 32.89 | 4.28 | 25.56 | 30 | 8.46 | 32.92 | 25.59 | 241 | 0.09 |
| 48 | 7.39 | 33.40 | 3.53 | 26.12 | 50 | 7.30 | 33.44 | 26.17 | 186 | 0.13 |
| 73 | 6.87 | 33.76 | 2.97 | 26.48 | | | | | | |
| 15 | HMCS OSHAWA; July 26, 1958; 1311 GCT; 51°00'N, 129°00'W; sounding, 40 fm; wind, 340°, 10 kt; weather, shallow fog in patches; sea, smooth. | | | | | | | | | |
| 0 | 13.30 | 31.58 | - | 23.71 | 0 | 13.30 | 31.58 | 23.71 | 420 | 0.00 |
| 10 | 12.28 | 31.42 | 6.38 | 23.79 | 10 | 12.28 | 31.42 | 23.79 | 412 | 0.04 |
| 20 | 10.22 | 31.98 | 5.41 | 24.58 | 20 | 10.22 | 31.98 | 24.58 | 337 | 0.08 |
| 30 | 9.08 | 32.29 | 4.67 | 25.01 | 30 | 9.08 | 32.29 | 25.01 | 296 | 0.11 |
| 40 | 8.52 | 32.53 | 4.44 | 25.28 | 50 | 8.36 | 32.62 | 25.38 | 262 | 0.17 |
| 50 | 8.36 | 32.62 | 4.23 | 25.38 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

16

HMCS OSHAWA; July 26, 1958; 1751 GCT; 50°40.5'N, 129°30.5'W; sounding, 1040 fm; wind, 330°, 15 kt; weather, missing; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.40 | 31.77 | - | 23.42 | 0 | 15.40 | 31.77 | 23.42 | 447 | 0.00 |
| 10 | 15.35 | 31.76 | 6.14 | 23.43 | 10 | 15.35 | 31.76 | 23.43 | 447 | 0.04 |
| 20 | 12.00 | 32.11 | 6.10 | 24.37 | 20 | 12.00 | 32.11 | 24.37 | 357 | 0.08 |
| 30 | 10.13 | 32.31 | 6.08 | 24.85 | 30 | 10.13 | 32.31 | 24.85 | 311 | 0.12 |
| 50 | 8.59 | 32.50 | 6.03 | 25.25 | 50 | 8.59 | 32.50 | 25.25 | 274 | 0.18 |
| 75 | 7.81 | 32.81 | 5.34 | 25.60 | 75 | 7.81 | 32.81 | 25.60 | 240 | 0.24 |
| 100 | 7.06 | 33.35 | 3.57 | 26.13 | 100 | 7.06 | 33.35 | 26.13 | 191 | 0.30 |
| 121 | 6.77 | 33.65 | 3.27 | 26.41 | 150 | 6.63 | 33.84 | 26.58 | 149 | 0.38 |
| 145 | 6.64 | 33.82 | 2.99 | 26.56 | 200 | 6.20 | 33.91 | 26.69 | 139 | 0.46 |
| 169 | 6.65 | 33.87 | 3.23 | 26.60 | 250 | 5.90 | 33.93 | 26.74 | 134 | 0.52 |
| 193 | 6.28 | 33.90 | 2.99 | 26.67 | 300 | 5.57 | 33.98 | 26.82 | 127 | 0.59 |
| 242 | 5.95 | 33.92 | 2.62 | 26.73 | 400 | 4.97 | 34.05 | 26.95 | 116 | 0.71 |
| 290 | (5.64)a) | 33.97 | 1.92 | (26.81) | 500 | 4.61 | 34.12 | 27.04 | 108 | 0.82 |
| 338 | 5.33 | 34.00 | 1.50 | 26.87 | 600 | 4.28 | 34.21 | 27.15 | 98 | 0.93 |
| 387 | 5.04 | 34.04 | 1.20 | 26.93 | 700 | 4.05 | 34.26 | 27.22 | 92 | 1.03 |
| 484 | 4.67 | 34.10 | 0.78 | 27.02 | | | | | | |
| 580 | 4.34 | 34.19 | 0.52 | 27.13 | | | | | | |
| 773 | 3.95 | 34.29 | 0.36 | 27.25 | | | | | | |

17

HMCS OSHAWA; July 26, 1958; 2217 GCT; 50°21'N, 130°00'W; sounding, 1090 fm; wind, 320°, 20 kt; weather, partly cloudy; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.90 | 31.89 | - | 23.40 | 0 | 15.90 | 31.89 | 23.40 | 449 | 0.00 |
| 9 | 16.07 | 31.86 | 5.94 | 23.34 | 10 | 16.08 | 31.86 | 23.34 | 455 | 0.04 |
| 19 | 16.03 | 31.88 | 5.87 | 23.36 | 20 | 16.01 | 31.88 | 23.37 | 452 | 0.09 |
| 28 | 15.82 | 31.94 | 5.91 | 23.46 | 30 | 15.57 | 31.97 | 23.54 | 437 | 0.14 |
| 47 | 10.34 | 32.38 | 6.26 | 24.87 | 50 | 9.79 | 32.43 | 25.00 | 298 | 0.21 |
| 71 | 8.38 | 32.61 | 5.92 | 25.36 | 75 | 8.16 | 32.65 | 25.43 | 257 | 0.28 |
| 94 | 7.49 | 32.90 | 5.45 | 25.72 | 100 | 7.36 | 32.98 | 25.80 | 222 | 0.34 |
| 118 | 7.25 | 33.21 | 4.79 | 25.99 | 150 | 6.68 | 33.58 | 26.36 | 169 | 0.44 |
| 141 | 6.80 | 33.50 | 4.44 | 26.28 | 200 | 6.27 | 33.87 | 26.65 | 143 | 0.52 |
| 165 | 6.55 | 33.66 | 4.31 | 26.45 | 250 | 5.90 | 33.89 | 26.71 | 138 | 0.59 |
| 188 | 6.36 | 33.82 | 3.72 | 26.60 | 300 | 5.53 | 33.91 | 26.78 | 132 | 0.66 |
| 233 | 6.04 | 33.87 | 3.45 | 26.68 | 400 | 4.83 | 34.00 | 26.92 | 118 | 0.78 |
| 280 | 5.64 | 33.90 | 2.93 | 26.75 | 500 | 4.56 | 34.09 | 27.03 | 109 | 0.90 |
| 326 | 5.43 | 33.94 | 2.23 | 26.80 | 600 | 4.26 | 34.16 | 27.11 | 102 | 1.00 |
| 373 | 5.00 | 33.97 | 1.62 | 26.89 | 700 | 4.02 | 34.24 | 27.20 | 94 | 1.10 |
| 466 | 4.67 | 34.06 | 1.05 | 26.99 | 800 | 3.81 | 34.31 | 27.28 | 87 | 1.19 |
| 559 | 4.37 | 34.13 | 0.67 | 27.08 | | | | | | |
| 745 | 3.94 | 34.28 | 0.35 | 27.24 | | | | | | |
| 978 | 3.40 | 34.39 | 0.36 | 27.38 | | | | | | |

18

HMCS OSHAWA; July 27, 1958; 1756 GCT; 51°00'N, 129°00'W; sounding, 47 fm; wind, 310°, 20 kt; weather, fog; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.40 | 31.48 | - | 23.81 | 0 | 12.40 | 31.48 | 23.81 | 410 | 0.00 |
| 10 | 12.58 | 31.53 | 6.08 | 23.81 | 10 | 12.58 | 31.53 | 23.81 | 410 | 0.04 |
| 19 | 12.26 | 31.47 | 6.08 | 23.83 | 20 | 12.16 | 31.49 | 23.86 | 406 | 0.08 |
| 29 | 10.72 | 31.83 | 5.52 | 24.38 | 30 | 10.55 | 31.87 | 24.44 | 351 | 0.12 |
| 39 | 8.90 | 32.29 | 4.72 | 25.04 | 50 | 8.20 | 32.67 | 25.44 | 256 | 0.18 |
| 48 | 8.30 | 32.62 | 4.33 | 25.38 | | | | | | |
| 68 | 7.92 | 32.84 | 4.05 | 25.62 | | | | | | |

a) Value interpolated by three-point parabolic method.

19 HMCS OSHAWA; July 27, 1958; 2010 GCT; 51°09'N, 129°23'W; sounding, 150 fm; wind, 340°, 25 kt; weather, partly cloudy; sea, very rough.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 14.90 | 31.77 | - | 23.53 | 0 | 14.90 | 31.77 | 23.53 | 437 | 0.00 |
| 10 | 14.79 | 31.75 | 6.14 | 23.54 | 10 | 14.79 | 31.75 | 23.54 | 436 | 0.04 |
| 20 | 14.64 | 31.78 | 6.04 | 23.59 | 20 | 14.64 | 31.78 | 23.59 | 432 | 0.09 |
| 30 | 11.23 | 32.09 | 5.72 | 24.50 | 30 | 11.23 | 32.09 | 24.50 | 345 | 0.13 |
| 50 | 8.46 | 32.58 | 5.36 | 25.33 | 50 | 8.46 | 32.58 | 25.33 | 266 | 0.19 |
| 74 | 7.25 | 33.19 | 4.40 | 25.98 | 75 | 7.21 | 33.21 | 26.00 | 202 | 0.25 |
| 99 | 6.73 | 33.58 | - | 26.36 | 100 | 6.72 | 33.59 | 26.37 | 168 | 0.29 |
| 124 | 6.67 | 33.74 | 3.61 | 26.49 | 150 | 6.48 | 33.80 | 26.57 | 150 | 0.37 |
| 148 | 6.49 | 33.80 | 3.10 | 26.56 | 200 | 5.99 | 33.94 | 26.74 | 134 | 0.44 |
| 173 | 6.43 | 33.86 | 2.71 | 26.62 | | | | | | |
| 193 | 6.09 | 33.92 | 2.45 | 26.71 | | | | | | |
| 248 | 5.62 | 33.96 | 1.88 | 26.80 | | | | | | |

20 HMCS OSHAWA; July 27, 1958; 2308 GCT; 51°21'N, 129°48'W; sounding, 130 fm; wind, 340°, 25 kt; weather, partly cloudy; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.50 | 31.81 | - | 23.65 | 0 | 14.50 | 31.81 | 23.65 | 426 | 0.00 |
| 10 | 14.28 | 31.81 | 6.25 | 23.69 | 10 | 14.28 | 31.81 | 23.69 | 422 | 0.04 |
| 20 | 14.20 | 31.85 | 6.19 | 23.74 | 20 | 14.20 | 31.85 | 23.74 | 418 | 0.08 |
| 30 | 13.03 | 31.86 | 6.07 | 23.98 | 30 | 13.03 | 31.86 | 23.98 | 395 | 0.12 |
| 50 | 8.55 | 32.56 | 4.86 | 25.30 | 50 | 8.55 | 32.56 | 25.30 | 269 | 0.19 |
| 75 | 7.32 | 33.23 | 3.61 | 26.00 | 75 | 7.32 | 33.23 | 26.00 | 202 | 0.25 |
| 100 | 6.84 | 33.53 | 3.32 | 26.30 | 100 | 6.84 | 33.53 | 26.30 | 174 | 0.30 |
| 125 | 6.60 | 33.73 | 3.24 | 26.49 | 150 | 6.23 | 33.88 | 26.66 | 141 | 0.38 |
| 150 | 6.23 | 33.88 | 2.78 | 26.66 | 200 | 5.65 | 33.96 | 26.80 | 128 | 0.45 |
| 175 | 5.98 | 33.94 | 2.20 | 26.74 | | | | | | |
| 200 | 5.65 | 33.96 | 2.04 | 26.80 | | | | | | |

21 HMCS OSHAWA; July 28, 1958; 0209 GCT; 51°35'N, 130°19'W; sounding, 225 fm; wind, 310°, 20 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.50 | 31.90 | - | 23.92 | 0 | 13.50 | 31.90 | 23.92 | 400 | 0.00 |
| 10 | 13.16 | 31.89 | 6.34 | 23.97 | 10 | 13.16 | 31.89 | 23.97 | 395 | 0.04 |
| 20 | 11.53 | 31.96 | 5.88 | 24.34 | 20 | 11.53 | 31.96 | 24.34 | 360 | 0.08 |
| 30 | 9.99 | 32.17 | 5.06 | 24.77 | 30 | 9.99 | 32.17 | 24.77 | 319 | 0.11 |
| 50 | 8.55 | 32.45 | 4.44 | 25.22 | 50 | 8.55 | 32.45 | 25.22 | 277 | 0.17 |
| 75 | 7.87 | 32.86 | 3.92 | 25.64 | 75 | 7.87 | 32.86 | 25.64 | 237 | 0.24 |
| 100 | 7.06 | 33.35 | 3.72 | 26.14 | 100 | 7.06 | 33.35 | 26.14 | 190 | 0.29 |
| 125 | 6.79 | 33.58 | 3.56 | 26.36 | 150 | 6.53 | 33.79 | 26.55 | 151 | 0.38 |
| 150 | 6.53 | 33.79 | 3.24 | 26.55 | 200 | 5.97 | 33.93 | 26.73 | 135 | 0.45 |
| 175 | 6.37 | 33.92 | 2.64 | 26.67 | 250 | 5.64 | 33.96 | 26.80 | 129 | 0.52 |
| 200 | 5.97 | 33.93 | 2.18 | 26.73 | 300 | 5.46 | 33.99 | 26.84 | 125 | 0.58 |
| 250 | 5.64 | 33.96 | 1.84 | 26.80 | | | | | | |
| 300 | 5.46 | 33.99 | 1.69 | 26.84 | | | | | | |
| 350 | 5.15 | (34.01)a) | 1.32 | (26.89) | | | | | | |

22 HMCS OSHAWA; July 28, 1958; 0432 GCT; 51°49'N, 130°48'W; sounding, 115 fm; wind, 320°, 15 kt; weather, clear; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.40 | 31.83 | - | 23.88 | 0 | 13.40 | 31.83 | 23.88 | 403 | 0.00 |
| 10 | 13.36 | (31.91)b) | 6.36 | (23.95) | 10 | 13.36 | 31.91 | 23.95 | 397 | 0.04 |
| 20 | 10.81 | (31.99)b) | 5.43 | (24.49) | 20 | 10.81 | 31.99 | 24.49 | 345 | 0.08 |
| 30 | 9.67 | (32.09)b) | 4.80 | (24.75) | 30 | 9.67 | 32.09 | 24.75 | 320 | 0.11 |
| 50 | 9.75 | 32.29 | 4.73 | 24.90 | 50 | 9.75 | 32.29 | 24.90 | 307 | 0.17 |
| 75 | 8.49 | 32.59 | 4.33 | 25.33 | 75 | 8.49 | 32.59 | 25.33 | 266 | 0.25 |
| 100 | 7.67 | 32.98 | 4.12 | 25.76 | 100 | 7.67 | 32.98 | 25.76 | 226 | 0.31 |
| 125 | 6.73 | 33.54 | 3.11 | 26.33 | 150 | 6.14 | 33.86 | 26.66 | 141 | 0.40 |
| 150 | 6.14 | 33.86 | 2.48 | 26.66 | | | | | | |
| 175 | 5.88 | 33.93 | 2.14 | 26.74 | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

23

HMCS OSHAWA; July 28, 1958; 1239 GCT; 52°00'N, 132°35'W; sounding, 1900 fm; wind, 340°, 20 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.40 | 32.27 | - | 23.80 | 0 | 15.40 | 32.27 | 23.80 | 411 | 0.00 |
| 10 | 15.49 | 32.26 | 5.77 | 23.78 | 10 | 15.49 | 32.26 | 23.78 | 413 | 0.04 |
| 20 | 15.48 | 32.27 | 5.95 | 23.79 | 20 | 15.48 | 32.27 | 23.79 | 413 | 0.08 |
| 30 | 13.72 | 32.36 | 6.37 | 24.23 | 30 | 13.72 | 32.36 | 24.23 | 371 | 0.12 |
| 50 | 9.65 | 32.44 | 6.45 | 25.03 | 50 | 9.65 | 32.44 | 25.03 | 294 | 0.19 |
| 74 | 8.04 | 32.54 | 6.60 | 25.36 | 75 | 8.00 | 32.55 | 25.38 | 262 | 0.26 |
| 99 | 7.56 | 32.79 | 5.36 | 25.62 | 100 | 7.55 | 32.80 | 25.64 | 238 | 0.32 |
| 124 | 7.31 | 33.16 | 4.45 | 25.95 | 150 | 7.14 | 33.48 | 26.23 | 182 | 0.43 |
| 149 | 7.15 | 33.47 | 3.67 | 26.22 | 200 | 6.63 | 33.85 | 26.59 | 149 | 0.51 |
| 173 | 7.01 | 33.69 | 3.07 | 26.40 | 250 | 5.82 | 33.98 | 26.79 | 130 | 0.58 |
| 198 | 6.66 | 33.84 | 2.34 | 26.58 | 300 | 5.15 | 34.05 | 26.93 | 117 | 0.64 |
| 248 | 5.85 | 33.97 | 1.71 | 26.78 | 400 | 4.60 | 34.13 | 27.06 | 105 | 0.76 |
| 298 | 5.17 | 34.05 | 1.13 | 26.92 | 500 | 4.33 | 34.19 | 27.13 | 99 | 0.86 |
| 347 | 4.90 | 34.09 | 0.96 | 26.99 | 600 | 4.07 | 34.24 | 27.19 | 94 | 0.96 |
| 397 | 4.61 | 34.13 | 0.74 | 27.05 | 700 | 3.84 | 34.28 | 27.25 | 89 | 1.05 |
| 496 | 4.34 | 34.19 | 0.57 | 27.13 | 800 | 3.64 | 34.32 | 27.30 | 84 | 1.14 |
| 595 | 4.08 | 34.23 | 0.40 | 27.19 | 1000 | 3.25 | 34.40 | 27.40 | 76 | 1.30 |
| 794 | 3.65 | 34.32 | 0.38 | 27.30 | | | | | | |
| 1042 | 3.17 | 34.41 | 0.36 | 27.42 | | | | | | |

24

HMCS OSHAWA; July 28, 1958; 2138 GCT; 52°00'N, 135°00'W; sounding, missing; wind, 320°, 5 kt; weather, cloudy; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.70 | 32.40 | - | 23.61 | 0 | 16.70 | 32.40 | 23.61 | 429 | 0.00 |
| 10 | 16.30 | 32.39 | 5.96 | 23.70 | 10 | 16.30 | 32.39 | 23.70 | 421 | 0.04 |
| 20 | 15.69 | 32.42 | 6.10 | 23.86 | 20 | 15.69 | 32.42 | 23.86 | 406 | 0.08 |
| 30 | 12.15 | 32.45 | 7.30 | 24.61 | 30 | 12.15 | 32.45 | 24.61 | 335 | 0.12 |
| 50 | 9.51 | 32.50 | 7.02 | 25.10 | 50 | 9.51 | 32.50 | 25.10 | 288 | 0.18 |
| 75 | 7.82 | 32.55 | 6.61 | 25.40 | 75 | 7.82 | 32.55 | 25.40 | 260 | 0.25 |
| 100 | 7.04 | 32.70 | 6.22 | 25.63 | 100 | 7.04 | 32.70 | 25.63 | 239 | 0.32 |
| 125 | 6.70 | 33.11 | 5.15 | 25.99 | 150 | 6.67 | 33.45 | 26.27 | 178 | 0.42 |
| 149 | 6.69 | 33.44 | 4.29 | 26.26 | 200 | 5.94 | 33.77 | 26.61 | 146 | 0.50 |
| 174 | 5.86 | 33.50 | 5.12 | 26.41 | 250 | 5.51 | 33.88 | 26.75 | 133 | 0.57 |
| 199 | 5.94 | 33.76 | 4.44 | 26.61 | 300 | 5.12 | 33.92 | 26.83 | 126 | 0.64 |
| 247 | 5.53 | 33.87 | 3.27 | 26.74 | 400 | 4.45 | 33.98 | 26.95 | 115 | 0.76 |
| 296 | (5.15)a) | 33.92 | 2.39 | (26.82) | 500 | 4.34 | 34.09 | 27.05 | 106 | 0.87 |
| 346 | 4.81 | 33.94 | 1.94 | 26.88 | 600 | 4.10 | 34.19 | 27.16 | 97 | 0.98 |
| 395 | 4.47 | 33.97 | 1.50 | 26.94 | 700 | 3.84 | 34.26 | 27.23 | 90 | 1.07 |
| 494 | 4.35 | 34.09 | 1.52 | 27.05 | 800 | 3.55 | 34.29 | 27.29 | 86 | 1.16 |
| 593 | 4.12 | 34.19 | 0.87 | 27.15 | 1000 | 3.18 | 34.37 | 27.39 | 77 | 1.32 |
| 790 | 3.57 | 34.28 | 0.54 | 27.28 | | | | | | |
| 1037 | 3.13 | 34.39 | 0.38 | 27.41 | | | | | | |

25

HMCS OSHAWA; July 29, 1958; 0620 GCT; 52°00'N, 137°00'W; sounding, missing; wind, 210°, 10 kt; weather, intermittent moderate rain; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.90 | 32.46 | - | 23.84 | 0 | 15.90 | 32.46 | 23.84 | 408 | 0.00 |
| 10 | 15.95 | 32.44 | 5.97 | 23.81 | 10 | 15.95 | 32.44 | 23.81 | 410 | 0.04 |
| 19 | 15.47 | 32.43 | 6.05 | 23.91 | 20 | 15.26 | 32.43 | 23.96 | 396 | 0.08 |
| 29 | 11.91 | 32.49 | 7.52 | 24.68 | 30 | 11.63 | 32.49 | 24.73 | 323 | 0.12 |
| 49 | 8.78 | 32.47 | 6.80 | 25.19 | 50 | 8.67 | 32.47 | 25.21 | 278 | 0.18 |
| 73 | 7.60 | 32.56 | 6.33 | 25.44 | 75 | 7.54 | 32.57 | 25.45 | 255 | 0.24 |
| 98 | 7.27 | 32.76 | 5.79 | 25.64 | 100 | 7.25 | 32.78 | 25.66 | 236 | 0.31 |
| 124 | 7.20 | 33.11 | 4.64 | 25.93 | 150 | 7.13 | 33.56 | 26.29 | 176 | 0.41 |
| 148 | 7.13 | 33.54 | 3.46 | 26.27 | 200 | 6.87 | 33.80 | 26.52 | 156 | 0.49 |
| 173 | 7.16 | 33.72 | 3.00 | 26.41 | 250 | 6.33 | 33.90 | 26.67 | 142 | 0.57 |
| 198 | 6.89 | 33.80 | 2.82 | 26.51 | 300 | 5.84 | 33.95 | 26.77 | 133 | 0.64 |
| 248 | 6.35 | 33.90 | 2.53 | 26.66 | 400 | 5.25 | 33.99 | 26.87 | 123 | 0.77 |
| 297 | 5.86 | 33.95 | 2.16 | 26.76 | 500 | 4.69 | 34.06 | 26.99 | 113 | 0.89 |
| 347 | 5.55 | 33.95 | 1.86 | 26.80 | 600 | 4.31 | 34.12 | 27.08 | 105 | 1.00 |
| 396 | 5.27 | 33.99 | 1.53 | 26.87 | 700 | 3.98 | 34.19 | 27.17 | 97 | 1.10 |
| 495 | 4.71 | 34.06 | 1.09 | 26.98 | 800 | 3.71 | 34.26 | 27.25 | 90 | 1.19 |
| 594 | 4.33 | 34.12 | 0.71 | 27.07 | 1000 | 3.21 | 34.35 | 27.37 | 79 | 1.36 |
| 792 | 3.73 | 34.25 | 0.45 | 27.24 | | | | | | |
| 1037 | 3.13 | 34.36 | 0.45 | 27.38 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 34 | HMCS OSHAWA; July 29, 1958; 1738 GCT; 54°02.5'N, 136°57'W; sounding, missing; wind, 220°, 10 kt; weather, fog in patches; sea, smooth. | | | | | | | | | |
| 0 | 15.70 | 31.98 | - | 23.51 | 0 | 15.70 | 31.98 | 23.51 | 438 | 0.00 |
| 10 | 15.72 | 31.96 | 5.85 | 23.50 | 10 | 15.72 | 31.96 | 23.50 | 440 | 0.04 |
| 20 | 15.20 | 31.98 | 5.86 | 23.62 | 20 | 15.20 | 31.98 | 23.62 | 428 | 0.09 |
| 30 | 12.79 | 31.98 | 6.45 | 24.12 | 30 | 12.79 | 31.98 | 24.12 | 381 | 0.13 |
| 49 | 8.69 | 32.08 | 5.87 | 24.91 | 50 | 8.55 | 32.09 | 24.93 | 304 | 0.20 |
| 74 | 7.52 | 32.36 | 5.62 | 25.29 | 75 | 7.49 | 32.37 | 25.31 | 269 | 0.27 |
| 99 | 7.04 | 32.54 | 5.51 | 25.50 | 100 | 7.02 | 32.55 | 25.51 | 249 | 0.33 |
| 123 | 6.66 | 32.80 | 4.95 | 25.76 | 150 | 6.55 | 33.15 | 26.04 | 200 | 0.45 |
| 148 | 6.55 | 33.12 | 4.20 | 26.02 | 200 | 6.42 | 33.60 | 26.42 | 165 | 0.54 |
| 172 | 6.66 | 33.37 | 3.74 | 26.21 | 250 | 6.15 | 33.85 | 26.65 | 143 | 0.62 |
| 192 | 6.48 | 33.54 | 3.49 | 26.36 | 300 | 5.49 | 33.87 | 26.74 | 134 | 0.69 |
| 241 | 6.24 | 33.83 | 3.05 | 26.62 | 400 | 4.68 | 33.96 | 26.91 | 119 | 0.82 |
| 289 | 5.61 | 33.86 | 2.74 | 26.72 | 500 | 4.37 | 34.03 | 27.00 | 112 | 0.93 |
| 337 | 5.16 | 33.90 | 2.22 | 26.81 | 600 | 4.13 | 34.09 | 27.07 | 105 | 1.04 |
| 385 | 4.77 | 33.95 | 1.71 | 26.89 | 700 | 3.88 | 34.17 | 27.16 | 98 | 1.14 |
| 481 | 4.43 | 34.02 | 1.12 | 26.98 | 800 | 3.63 | 34.25 | 27.25 | 90 | 1.24 |
| 578 | 4.19 | 34.07 | 0.84 | 27.05 | 1000 | 3.26 | 34.34 | 27.36 | 80 | 1.41 |
| 770 | 3.70 | 34.23 | 0.46 | 27.22 | | | | | | |
| 1004 | 3.25 | 34.35 | 0.38 | 27.36 | | | | | | |
| 35 | HMCS OSHAWA; July 29, 1958; 2308 GCT; 54°00'N, 135°36'W; sounding, missing; wind, 240°, 15 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 15.30 | 31.91 | - | 23.55 | 0 | 15.30 | 31.91 | 23.55 | 435 | 0.00 |
| 10 | 15.02 | 31.90 | 6.24 | 23.60 | 10 | 15.02 | 31.90 | 23.60 | 430 | 0.04 |
| 20 | 13.48 | 32.14 | 6.50 | 24.11 | 20 | 13.48 | 32.14 | 24.11 | 382 | 0.08 |
| 30 | 10.83 | 32.36 | 6.62 | 24.77 | 30 | 10.83 | 32.36 | 24.77 | 319 | 0.12 |
| 50 | 8.67 | 32.49 | 6.14 | 25.23 | 50 | 8.67 | 32.49 | 25.23 | 276 | 0.18 |
| 75 | 7.34 | 32.64 | 6.16 | 25.54 | 75 | 7.34 | 32.64 | 25.54 | 246 | 0.24 |
| 100 | 6.73 | 32.97 | 5.44 | 25.88 | 100 | 6.73 | 32.97 | 25.88 | 214 | 0.30 |
| 125 | 6.49 | 33.33 | 4.46 | 26.19 | 150 | 6.70 | 33.52 | 26.31 | 174 | 0.40 |
| 149 | 6.69 | 33.51 | 3.84 | 26.31 | 200 | 6.50 | 33.79 | 26.56 | 152 | 0.48 |
| 174 | 6.80 | 33.70 | 3.33 | 26.44 | 250 | 5.77 | 33.93 | 26.76 | 133 | 0.55 |
| 199 | 6.51 | 33.79 | 3.04 | 26.55 | 300 | 5.28 | 33.96 | 26.84 | 126 | 0.62 |
| 249 | 5.78 | 33.92 | 2.45 | 26.75 | 400 | 4.61 | 34.03 | 26.97 | 113 | 0.74 |
| 299 | 5.29 | 33.95 | 2.11 | 26.84 | 500 | 4.28 | 34.10 | 27.06 | 106 | 0.85 |
| 349 | 4.95 | 33.98 | 1.56 | 26.90 | 600 | 3.99 | 34.14 | 27.13 | 100 | 0.95 |
| 398 | 4.62 | 34.03 | 1.13 | 26.97 | 700 | 3.75 | 34.19 | 27.19 | 94 | 1.05 |
| 498 | 4.29 | 34.09 | 0.86 | 27.06 | | | | | | |
| 597 | 4.00 | 34.14 | 0.66 | 27.12 | | | | | | |
| 797 | 3.57 | 34.26 | 0.53 | 27.26 | | | | | | |
| 36 | HMCS OSHAWA; July 30, 1958; 0216 GCT; 54°00'N, 134°50'W; sounding, 1500 fm; wind, 230°, 10 kt; weather, overcast; sea, smooth. | | | | | | | | | |
| 0 | 15.20 | 31.93 | - | 23.59 | 0 | 15.20 | 31.93 | 23.59 | 431 | 0.00 |
| 10 | 15.32 | 31.91 | 5.98 | 23.54 | 10 | 15.32 | 31.91 | 23.54 | 436 | 0.04 |
| 20 | (12.87)a) | 31.97 | 6.34 | (24.10) | 20 | 12.87 | 31.97 | 24.10 | 383 | 0.08 |
| 30 | 10.98 | 32.04 | 6.03 | 24.50 | 30 | 10.98 | 32.04 | 24.50 | 345 | 0.12 |
| 50 | 8.92 | 32.22 | 5.36 | 24.98 | 50 | 8.92 | 32.22 | 24.98 | 300 | 0.19 |
| 75 | 8.07 | 32.56 | 5.26 | 25.37 | 75 | 8.07 | 32.56 | 25.37 | 262 | 0.26 |
| 100 | 6.83 | 32.81 | 5.41 | 25.74 | 100 | 6.83 | 32.81 | 25.74 | 228 | 0.32 |
| 125 | 6.35 | 33.36 | 4.29 | 26.24 | 150 | 6.27 | 33.55 | 26.40 | 166 | 0.42 |
| 150 | 6.27 | 33.55 | 3.85 | 26.40 | 200 | 5.87 | 33.80 | 26.65 | 143 | 0.49 |
| 175 | 6.35 | 33.73 | 3.19 | 26.52 | 250 | 5.43 | 33.90 | 26.78 | 131 | 0.56 |
| 199 | 5.89 | 33.80 | 3.09 | 26.64 | 300 | 4.99 | 33.91 | 26.83 | 126 | 0.63 |
| 248 | 5.45 | 33.90 | 2.42 | 26.77 | 400 | 4.57 | 33.98 | 26.94 | 116 | 0.75 |
| 298 | 5.00 | 33.91 | 2.24 | 26.83 | 500 | 4.28 | 34.08 | 27.04 | 107 | 0.86 |
| 348 | 4.83 | 33.93 | 1.87 | 26.87 | 600 | 3.98 | 34.16 | 27.14 | 99 | 0.97 |
| 398 | 4.58 | 33.98 | 1.41 | 26.94 | 700 | 3.75 | 34.22 | 27.21 | 92 | 1.06 |
| 497 | 4.29 | 34.07 | 0.84 | 27.04 | 800 | 3.59 | 34.26 | 27.26 | 88 | 1.16 |
| 596 | 3.99 | 34.15 | 0.58 | 27.14 | 1000 | 3.20 | 34.36 | 27.37 | 78 | 1.32 |
| 795 | 3.60 | 34.26 | 0.43 | 27.26 | | | | | | |
| 1042 | 3.12 | 34.37 | 0.38 | 27.40 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

37

HMCS OSHAWA; July 30, 1958; 0459 GCT; 54°00'N, 134°20'W; sounding, 1500 fm; wind, 240°, 12 kt; weather, overcast; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.70 | 32.29 | - | 23.76 | 0 | 15.70 | 32.29 | 23.76 | 415 | 0.00 |
| 10 | 16.06 | 32.27 | 5.70 | 23.66 | 10 | 16.06 | 32.27 | 23.66 | 425 | 0.04 |
| 20 | (15.03)a) | 32.34 | 6.13 | (23.94) | 20 | 15.03 | 32.34 | 23.94 | 398 | 0.08 |
| 30 | 13.58 | 32.32 | 6.24 | 24.22 | 30 | 13.58 | 32.32 | 24.22 | 372 | 0.12 |
| 50 | 9.42 | 32.36 | 6.53 | 25.01 | 50 | 9.42 | 32.36 | 25.01 | 296 | 0.19 |
| 75 | 7.28 | 32.59 | 6.33 | 25.51 | 75 | 7.28 | 32.59 | 25.51 | 250 | 0.26 |
| 100 | 6.65 | 32.84 | 5.54 | 25.79 | 100 | 6.65 | 32.84 | 25.79 | 223 | 0.32 |
| 122 | 6.76 | 33.27 | 4.23 | 26.11 | 150 | 6.73 | 33.62 | 26.39 | 166 | 0.42 |
| 146 | 6.74 | 33.58 | 3.38 | 26.36 | 200 | 6.42 | 33.81 | 26.59 | 149 | 0.50 |
| 171 | 6.69 | 33.78 | 2.93 | 26.52 | 250 | 5.76 | 33.91 | 26.74 | 134 | 0.57 |
| 195 | 6.47 | 33.81 | 2.98 | 26.57 | 300 | 5.29 | 33.93 | 26.82 | 128 | 0.63 |
| 244 | 5.83 | 33.90 | 2.58 | 26.73 | 400 | 4.83 | 34.02 | 26.94 | 117 | 0.76 |
| 292 | 5.34 | 33.92 | 2.20 | 26.81 | 500 | 4.26 | 34.07 | 27.04 | 107 | 0.87 |
| 341 | 5.13 | 33.97 | 1.62 | 26.87 | 600 | 4.13 | 34.18 | 27.14 | 98 | 0.97 |
| 390 | 4.88 | 34.01 | 1.27 | 26.93 | 700 | 3.87 | 34.26 | 27.23 | 91 | 1.07 |
| 488 | 4.30 | 34.06 | 0.65 | 27.03 | 800 | 3.55 | 34.30 | 27.30 | 85 | 1.16 |
| 585 | 4.16 | 34.17 | 0.56 | 27.13 | 1000 | 3.15 | 34.38 | 27.40 | 76 | 1.32 |
| 780 | 3.60 | 34.29 | 0.40 | 27.29 | | | | | | |
| 1022 | 3.12 | 34.38 | 0.37 | 27.40 | | | | | | |

38

HMCS OSHAWA; July 30, 1958; 0801 GCT; 53°58'N, 133°46'W; sounding, 650 fm; wind, 200°, 10 kt; weather, drizzle; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.80 | 31.95 | - | 23.69 | 0 | 14.80 | 31.95 | 23.69 | 422 | 0.00 |
| 10 | 14.90 | 31.94 | 6.46 | 23.66 | 10 | 14.90 | 31.94 | 23.66 | 425 | 0.04 |
| 19 | 11.13 | 32.31 | 6.85 | 24.68 | 20 | 10.85 | 32.33 | 24.75 | 321 | 0.08 |
| 29 | 9.50 | 32.42 | 6.29 | 25.04 | 30 | 9.37 | 32.43 | 25.07 | 290 | 0.11 |
| 48 | 8.25 | 32.69 | 5.66 | 25.45 | 50 | 8.13 | 32.71 | 25.48 | 252 | 0.16 |
| 72 | 6.90 | 32.91 | 5.28 | 25.81 | 75 | 6.80 | 32.95 | 25.86 | 216 | 0.22 |
| 97 | 6.50 | 33.36 | 4.45 | 26.21 | 100 | 6.50 | 33.40 | 26.25 | 180 | 0.27 |
| 121 | 6.72 | 33.64 | 3.34 | 26.41 | 150 | 6.56 | 33.80 | 26.56 | 151 | 0.36 |
| 145 | 6.59 | 33.78 | 2.99 | 26.54 | 200 | 5.89 | 33.91 | 26.73 | 135 | 0.43 |
| 169 | 6.46 | 33.85 | 2.62 | 26.61 | 250 | 5.65 | 33.94 | 26.78 | 131 | 0.50 |
| 193 | 5.99 | 33.90 | 2.32 | 26.71 | 300 | 5.41 | 33.95 | 26.82 | 127 | 0.56 |
| 248 | 5.66 | 33.94 | 1.97 | 26.78 | 400 | 4.88 | 34.02 | 26.93 | 117 | 0.68 |
| 297 | 5.42 | 33.95 | 1.83 | 26.82 | 500 | 4.49 | 34.10 | 27.04 | 108 | 0.80 |
| 347 | 5.23 | 33.98 | 1.52 | 26.86 | 600 | 4.10 | 34.18 | 27.15 | 98 | 0.90 |
| 396 | 4.90 | 34.02 | 1.23 | 26.93 | 700 | 3.83 | 34.24 | 27.22 | 92 | 1.00 |
| 496 | 4.51 | 34.10 | 0.72 | 27.04 | 800 | 3.68 | 34.28 | 27.27 | 88 | 1.09 |
| 595 | 4.12 | 34.18 | 0.50 | 27.14 | 1000 | 3.26 | 34.36 | 27.37 | 79 | 1.26 |
| 793 | 3.69 | 34.28 | 0.35 | 27.26 | | | | | | |
| 1040 | 3.18 | 34.37 | 0.36 | 27.39 | | | | | | |

39

HMCS OSHAWA; July 30, 1958; 0926 GCT; 53°59.5'N, 133°31'W; sounding, 95 fm; wind, 210°, 10 kt; weather, moderate rain; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.00 | 32.05 | - | 23.93 | 0 | 14.00 | 32.05 | 23.93 | 398 | 0.00 |
| 10 | 14.03 | 32.08 | 6.35 | 23.95 | 10 | 14.03 | 32.08 | 23.95 | 397 | 0.04 |
| 19 | 12.00 | 32.27 | 6.31 | 24.49 | 20 | 11.82 | 32.28 | 24.54 | 341 | 0.08 |
| 29 | 10.60 | 32.33 | 6.54 | 24.79 | 30 | 10.46 | 32.34 | 24.82 | 314 | 0.11 |
| 48 | 8.17 | 32.53 | 5.40 | 25.33 | 50 | 7.99 | 32.55 | 25.37 | 262 | 0.17 |
| 72 | 7.04 | 32.82 | 5.52 | 25.72 | 75 | 6.94 | 32.86 | 25.76 | 225 | 0.23 |
| 97 | 6.42 | 33.14 | 4.93 | 26.05 | 100 | 6.38 | 33.18 | 26.09 | 194 | 0.28 |
| 121 | 6.34 | 33.50 | 3.74 | 26.35 | | | | | | |
| 145 | 6.54 | 33.68 | 2.95 | 26.46 | | | | | | |

40

HMCS OSHAWA; July 30, 1958; 1034 GCT; 53°57'N, 133°18.5'W; sounding, 37 fm; wind, 210°, 8 kt; weather, overcast; sea, smooth.

| | | | |
|---|---|---|---|
| 0 | 13.10 | 32.118 | - |
| 10 | 12.23 | 32.229 | 6.60 |
| 19 | 11.36 | 32.343 | 6.69 |
| 29 | 10.66 | 32.417 | 6.54 |
| 39 | 8.99 | 32.637 | 5.82 |
| 48 | 7.90 | 32.801 | 5.38 |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 41 | HMCS OSHAWA; August 1, 1958; 0828 GCT; 54°20'N, 133°00'W; sounding, 250 fm; wind, 070°, 5 kt; weather, overcast; sea, smooth. | | | | | | | | | |
| 0 | 11.40 | 31.45 | - | 23.97 | 0 | 11.40 | 31.45 | 23.97 | 395 | 0.00 |
| 10 | 11.34 | 32.14 | 6.29 | 24.51 | 10 | 11.34 | 32.14 | 24.51 | 344 | 0.04 |
| 20 | (10.71)a) | 32.37 | 5.82 | (24.80) | 20 | 10.71 | 32.37 | 24.80 | 316 | 0.07 |
| 30 | 9.82 | 32.49 | 5.63 | 25.04 | 30 | 9.82 | 32.49 | 25.04 | 293 | 0.10 |
| 50 | 7.25 | 32.94 | 4.13 | 25.79 | 50 | 7.25 | 32.94 | 25.79 | 222 | 0.15 |
| 75 | 6.82 | 33.19 | 3.82 | 26.04 | 75 | 6.82 | 33.19 | 26.04 | 199 | 0.21 |
| 100 | 6.66 | 33.27 | 3.60 | 26.12 | 100 | 6.66 | 33.27 | 26.12 | 191 | 0.26 |
| 125 | 6.59 | 33.31 | 3.49 | 26.17 | 150 | 6.39 | 33.43 | 26.28 | 177 | 0.35 |
| 150 | 6.39 | 33.43 | 3.29 | 26.28 | 200 | 6.14 | 33.55 | 26.41 | 165 | 0.43 |
| 175 | 6.40 | 33.50 | 3.06 | 26.34 | 250 | 5.78 | 33.73 | 26.60 | 148 | 0.51 |
| 200 | 6.14 | 33.55 | 3.01 | 26.41 | 300 | 5.67 | 33.78 | 26.65 | 143 | 0.59 |
| 246 | 5.80 | 33.72 | 2.72 | 26.59 | | | | | | |
| 296 | 5.68 | 33.78 | 2.54 | 26.65 | | | | | | |
| 345 | 5.58 | 33.83 | 2.30 | 26.70 | | | | | | |
| 42 | HMCS OSHAWA; August 1, 1958; 1131 GCT; 54°40'N, 133°30'W; sounding, 170 fm; wind, 190°, 8 kt; weather, cloudy; sea, missing. | | | | | | | | | |
| 0 | 12.60 | 32.08 | - | 24.23 | 0 | 12.60 | 32.08 | 24.23 | 370 | 0.00 |
| 10 | 11.08 | 32.22 | 5.91 | 24.62 | 10 | 11.08 | 32.22 | 24.62 | 333 | 0.04 |
| 20 | 9.68 | 32.34 | 5.49 | 24.95 | 20 | 9.68 | 32.34 | 24.95 | 302 | 0.07 |
| 30 | 9.41 | 32.41 | 5.05 | 25.05 | 30 | 9.41 | 32.41 | 25.05 | 293 | 0.10 |
| 50 | 8.73 | 32.60 | 5.17 | 25.30 | 50 | 8.73 | 32.60 | 25.30 | 269 | 0.15 |
| 75 | 7.15 | 32.68 | 5.84 | 25.60 | 75 | 7.15 | 32.68 | 25.60 | 241 | 0.22 |
| 100 | 6.78 | 32.99 | 4.97 | 25.89 | 100 | 6.78 | 32.99 | 25.89 | 214 | 0.28 |
| 125 | 6.67 | 33.14 | 4.58 | 26.02 | 150 | 6.35 | 33.44 | 26.30 | 175 | 0.37 |
| 150 | 6.35 | 33.44 | 3.70 | 26.30 | 200 | 5.93 | 33.67 | 26.53 | 154 | 0.46 |
| 175 | 6.28 | 33.55 | 3.27 | 26.40 | 250 | 5.52 | 33.83 | 26.71 | 137 | 0.53 |
| 200 | 5.93 | 33.67 | 2.97 | 26.53 | | | | | | |
| 250 | 5.52 | 33.83 | 2.37 | 26.71 | | | | | | |
| 43 | HMCS OSHAWA; August 1, 1958; 1511 GCT; 55°00'N, 134°00'W; sounding, 82 fm; wind, 190°, 12 kt; weather, moderate rain showers; sea, smooth. | | | | | | | | | |
| 0 | 15.50 | 32.02 | - | 23.59 | 0 | 15.50 | 32.02 | 23.59 | 431 | 0.00 |
| 10 | 15.62 | 32.06 | 5.82 | 23.60 | 10 | 15.62 | 32.06 | 23.60 | 431 | 0.04 |
| 20 | 15.67 | 32.06 | 5.82 | 23.58 | 20 | 15.67 | 32.06 | 23.58 | 432 | 0.09 |
| 30 | 14.82 | 32.08 | 5.97 | 23.78 | 30 | 14.82 | 32.08 | 23.78 | 414 | 0.13 |
| 50 | 9.46 | 32.33 | 5.98 | 24.98 | 50 | 9.46 | 32.33 | 24.98 | 299 | 0.20 |
| 75 | 7.12 | 32.59 | 6.29 | 25.53 | 75 | 7.12 | 32.59 | 25.53 | 247 | 0.27 |
| 100 | 6.90 | 32.87 | 4.95 | 25.78 | 100 | 6.90 | 32.87 | 25.78 | 224 | 0.33 |
| 125 | 6.49 | 33.17 | 4.11 | 26.07 | | | | | | |
| 44 | HMCS OSHAWA; August 1, 1958; 1912 GCT; 55°00.5'N, 135°02.5'W; sounding, missing; wind, 220°, 5 kt; weather, cloudy; sea, calm. | | | | | | | | | |
| 0 | 15.20 | 32.04 | - | 23.67 | 0 | 15.20 | 32.04 | 23.67 | 424 | 0.00 |
| 10 | 15.32 | 32.04 | 5.95 | 23.65 | 10 | 15.32 | 32.04 | 23.65 | 426 | 0.04 |
| 20 | 14.46 | 32.08 | 6.17 | 23.86 | 20 | 14.46 | 32.08 | 23.86 | 406 | 0.08 |
| 30 | 12.22 | 32.15 | 6.62 | 24.36 | 30 | 12.22 | 32.15 | 24.36 | 358 | 0.12 |
| 50 | 8.17 | 32.39 | 5.68 | 25.22 | 50 | 8.17 | 32.39 | 25.22 | 276 | 0.19 |
| 75 | 7.26 | 32.64 | 5.63 | 25.55 | 75 | 7.26 | 32.64 | 25.55 | 246 | 0.25 |
| 100 | 6.96 | 32.90 | 4.98 | 25.79 | 100 | 6.96 | 32.90 | 25.79 | 223 | 0.31 |
| 125 | 6.87 | 33.17 | 4.33 | 26.01 | 150 | 6.85 | 33.44 | 26.24 | 181 | 0.41 |
| 150 | 6.85 | 33.44 | 3.63 | 26.24 | 200 | 6.64 | 33.73 | 26.49 | 158 | 0.50 |
| 175 | 6.80 | 33.67 | 3.05 | 26.42 | 250 | 6.31 | 32.84 | 25.83 | 220 | 0.59 |
| 198 | 6.65 | 33.73 | 2.81 | 26.49 | 300 | 5.79 | 33.92 | 26.75 | 134 | 0.68 |
| 248 | 6.33 | 32.84 | 2.58 | 25.83 | 400 | 4.76 | 33.96 | 26.90 | 120 | 0.81 |
| 297 | 5.82 | 33.89 | 2.52 | 26.72 | 500 | 4.31 | 34.03 | 27.01 | 111 | 0.93 |
| 347 | 5.33 | 33.92 | 2.17 | 26.80 | 600 | 3.98 | 34.14 | 27.12 | 100 | 1.04 |
| 396 | 4.79 | 33.95 | 1.69 | 26.89 | 700 | 3.74 | 34.21 | 27.21 | 93 | 1.13 |
| 496 | 4.33 | 34.03 | 1.11 | 27.00 | 800 | 3.61 | 34.25 | 27.25 | 89 | 1.22 |
| 595 | 3.99 | 34.13 | 0.66 | 27.12 | 1000 | 3.68 | 34.35 | 27.32 | 84 | 1.40 |
| 793 | 3.62 | 34.25 | 0.53 | 27.25 | | | | | | |
| 1040 | (3.74)b) | 34.36 | 0.44 | (27.33) | | | | | | |



a) Value interpolated by three-point parabolic method.

b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

45

HMCS OSHAWA; August 1, 1958; 2318 GCT; 55°00.5'N, 136°00'W; sounding, missing; wind, 220°, 5 kt; weather, cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.60 | 32.11 | - | 23.64 | 0 | 15.60 | 32.11 | 23.64 | 426 | 0.00 |
| 10 | 15.52 | 32.06 | 5.98 | 23.62 | 10 | 15.52 | 32.06 | 23.62 | 428 | 0.04 |
| 20 | 15.40 | 32.07 | 6.00 | 23.65 | 20 | 15.40 | 32.07 | 23.65 | 426 | 0.09 |
| 30 | 14.95 | 32.09 | 6.03 | 23.77 | 30 | 14.95 | 32.09 | 23.77 | 415 | 0.13 |
| 50 | 10.45 | 32.31 | 6.33 | 24.80 | 50 | 10.45 | 32.31 | 24.80 | 316 | 0.20 |
| 75 | 8.52 | 32.43 | 6.08 | 25.21 | 75 | 8.52 | 32.43 | 25.21 | 278 | 0.28 |
| 100 | 7.09 | 32.61 | 5.97 | 25.55 | 100 | 7.09 | 32.61 | 25.55 | 246 | 0.34 |
| 125 | 6.55 | 32.75 | 5.69 | 25.73 | 150 | 6.46 | 33.05 | 25.97 | 206 | 0.46 |
| 149 | 6.46 | 33.04 | 4.87 | 25.97 | 200 | 6.21 | 33.40 | 26.28 | 177 | 0.55 |
| 174 | 6.46 | 33.23 | 4.29 | 26.12 | 250 | 5.62 | 33.75 | 26.64 | 144 | 0.63 |
| 199 | 6.22 | 33.39 | 3.83 | 26.28 | 300 | 4.81 | 33.97 | 26.91 | 119 | 0.70 |
| 242 | 5.73 | 33.70 | 2.82 | 26.58 | 400 | 4.22 | 34.08 | 27.05 | 105 | 0.81 |
| 291 | 4.92 | 33.95 | 1.74 | 26.87 | 500 | 3.98 | 34.16 | 27.14 | 98 | 0.92 |
| 339 | 4.44 | 34.04 | 1.01 | 27.00 | 600 | 3.76 | 34.21 | 27.20 | 92 | 1.01 |
| 388 | 4.26 | 34.07 | 0.84 | 27.04 | 700 | 3.55 | 34.26 | 27.27 | 87 | 1.10 |
| 485 | 4.02 | 34.15 | 0.62 | 27.13 | 800 | 3.34 | 34.32 | 27.33 | 81 | 1.19 |
| 582 | 3.80 | 34.20 | 0.52 | 27.19 | 1000 | 2.99 | 34.40 | 27.43 | 72 | 1.34 |
| 776 | 3.39 | 34.31 | 0.41 | 27.32 | | | | | | |
| 1019 | 2.96 | 34.41 | 0.43 | 27.44 | | | | | | |

46

HMCS OSHAWA; August 2, 1958; 0206 GCT; 55°17'N, 136°17'W; sounding, 1500 fm; wind, 130°, 8 kt; weather, cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 31.92 | - | 23.58 | 0 | 15.20 | 31.92 | 23.58 | 432 | 0.00 |
| 10 | 14.94 | 31.90 | 5.85 | 23.62 | 10 | 14.94 | 31.90 | 23.62 | 428 | 0.04 |
| 20 | 12.79 | 32.03 | 6.19 | 24.16 | 20 | 12.79 | 32.03 | 24.16 | 377 | 0.08 |
| 30 | 10.66 | 32.24 | 6.42 | 24.71 | 30 | 10.66 | 32.24 | 24.71 | 325 | 0.12 |
| 50 | 8.04 | 32.33 | 5.72 | 25.20 | 50 | 8.04 | 32.33 | 25.20 | 278 | 0.18 |
| 75 | 7.04 | 32.50 | 5.92 | 25.47 | 75 | 7.04 | 32.50 | 25.47 | 253 | 0.25 |
| 100 | 6.54 | 32.65 | 5.98 | 25.65 | 100 | 6.54 | 32.65 | 25.65 | 236 | 0.31 |
| 125 | 6.19 | 33.05 | 4.85 | 26.01 | 150 | 6.25 | 33.41 | 26.29 | 176 | 0.41 |
| 150 | 6.25 | 33.41 | 4.16 | 26.29 | 200 | 6.28 | 33.83 | 26.61 | 146 | 0.49 |
| 175 | 6.36 | 33.64 | 3.63 | 26.46 | 250 | 5.41 | 33.84 | 26.73 | 135 | 0.56 |
| 200 | 6.28 | 33.83 | 2.91 | 26.61 | 300 | 5.05 | 33.91 | 26.82 | 127 | 0.63 |
| 250 | 5.41 | 33.84 | 2.84 | 26.73 | 400 | 4.36 | 33.98 | 26.96 | 114 | 0.75 |
| 299 | 5.06 | 33.90 | 2.26 | 26.82 | 500 | 4.22 | 34.08 | 27.05 | 106 | 0.86 |
| 349 | 4.66 | 33.94 | 1.69 | 26.90 | 600 | 3.94 | 34.16 | 27.14 | 98 | 0.96 |
| 399 | 4.36 | 33.98 | 1.38 | 26.96 | 700 | 3.70 | 34.22 | 27.22 | 92 | 1.06 |
| 499 | 4.22 | 34.08 | 0.86 | 27.05 | 800 | 3.50 | 34.28 | 27.28 | 86 | 1.15 |
| 599 | 3.94 | 34.16 | 0.59 | 27.14 | 1000 | 3.13 | 34.36 | 27.39 | 77 | 1.32 |
| 798 | 3.50 | 34.28 | 0.43 | 27.28 | | | | | | |
| 1048 | 3.06 | 34.38 | 0.38 | 27.41 | | | | | | |

47

HMCS OSHAWA; August 2, 1958; 0733 GCT; 56°00'N, 137°00'W; sounding, 1270 fm; wind, calm; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.30 | 31.90 | - | 23.55 | 0 | 15.30 | 31.90 | 23.55 | 435 | 0.00 |
| 10 | 15.12 | 31.88 | 5.94 | 23.57 | 10 | 15.12 | 31.88 | 23.57 | 434 | 0.04 |
| 20 | 10.82 | 32.06 | 6.73 | 24.54 | 20 | 10.82 | 32.06 | 24.54 | 341 | 0.08 |
| 30 | (8.18)a) | 32.15 | 5.84 | (25.03) | 30 | 8.18 | 32.15 | 25.03 | 294 | 0.11 |
| 50 | 7.88 | 32.36 | 5.69 | 25.24 | 50 | 7.88 | 32.36 | 25.24 | 274 | 0.17 |
| 75 | 7.12 | 32.54 | 5.90 | 25.49 | 75 | 7.12 | 32.54 | 25.49 | 251 | 0.24 |
| 100 | 6.46 | 32.71 | 5.61 | 25.71 | 100 | 6.46 | 32.71 | 25.71 | 231 | 0.30 |
| 125 | 6.20 | 33.02 | 4.83 | 25.99 | 150 | 6.13 | 33.36 | 26.27 | 178 | 0.40 |
| 150 | 6.13 | 33.36 | 4.04 | 26.27 | 200 | 5.79 | 33.78 | 26.63 | 144 | 0.48 |
| 175 | 6.03 | 33.62 | 3.54 | 26.48 | 250 | 5.30 | 33.87 | 26.77 | 131 | 0.55 |
| 200 | 5.79 | 33.78 | 3.08 | 26.63 | 300 | 5.00 | 33.92 | 26.85 | 124 | 0.62 |
| 250 | 5.30 | 33.87 | 2.56 | 26.77 | 400 | 4.39 | 33.98 | 26.96 | 114 | 0.74 |
| 300 | 5.00 | 33.92 | 1.95 | 26.85 | 500 | 4.18 | 34.10 | 27.07 | 104 | 0.85 |
| 350 | 4.59 | 33.93 | 1.70 | 26.90 | 600 | 3.88 | 34.17 | 27.16 | 96 | 0.95 |
| 400 | 4.39 | 33.98 | 1.28 | 26.96 | 700 | 3.65 | 34.23 | 27.23 | 90 | 1.04 |
| 500 | 4.18 | 34.10 | 0.72 | 27.07 | 800 | 3.49 | 34.28 | 27.29 | 86 | 1.13 |
| 599 | 3.88 | 34.17 | 0.54 | 27.16 | 1000 | 3.11 | 34.37 | 27.39 | 76 | 1.30 |
| 799 | 3.49 | 34.28 | 0.50 | 27.29 | | | | | | |
| 1049 | 3.02 | 34.39 | 0.44 | 27.42 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 48 | HMCS OSHAWA; August 2, 1958; 1135 GCT; 56°19'N, 136°10'W; sounding, missing; wind, 040°, 5 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | 14.80 | 31.88 | - | 23.63 | 0 | 14.80 | 31.88 | 23.63 | 427 | 0.00 |
| 10 | 15.08 | 31.86 | 5.89 | 23.56 | 10 | 15.08 | 31.86 | 23.56 | 434 | 0.04 |
| 20 | 14.13 | 31.89 | 6.29 | 23.78 | 20 | 14.13 | 31.89 | 23.78 | 413 | 0.09 |
| 30 | (12.57)a) | 32.15 | - | (24.29) | 30 | 12.57 | 32.15 | 24.29 | 365 | 0.12 |
| 50 | 7.64 | 32.39 | 5.76 | 25.30 | 50 | 7.64 | 32.39 | 25.30 | 269 | 0.19 |
| 75 | 7.16 | 32.53 | 6.05 | 25.48 | 75 | 7.16 | 32.53 | 25.48 | 252 | 0.25 |
| 100 | 6.45 | 32.69 | 5.64 | 25.70 | 100 | 6.45 | 32.69 | 25.70 | 232 | 0.32 |
| 125 | 6.14 | 32.97 | 5.00 | 25.95 | 150 | 6.11 | 33.29 | 26.21 | 183 | 0.42 |
| 150 | 6.11 | 33.29 | 4.23 | 26.21 | 200 | 5.77 | 33.74 | 26.61 | 146 | 0.50 |
| 174 | 6.06 | 33.58 | 3.63 | 26.45 | 250 | 5.39 | 33.87 | 26.76 | 133 | 0.57 |
| 199 | 5.78 | 33.73 | 3.21 | 26.60 | 300 | 5.02 | 33.92 | 26.84 | 125 | 0.64 |
| 245 | 5.43 | 33.86 | 2.60 | 26.74 | 400 | 4.47 | 34.02 | 26.98 | 113 | 0.76 |
| 294 | 5.06 | 33.91 | 1.99 | 26.83 | 500 | 4.16 | 34.10 | 27.07 | 104 | 0.87 |
| 343 | 4.75 | 33.96 | 1.48 | 26.90 | 600 | 3.86 | 34.17 | 27.16 | 96 | 0.97 |
| 392 | 4.50 | 34.01 | 1.14 | 26.97 | 700 | 3.62 | 34.24 | 27.24 | 89 | 1.06 |
| 490 | 4.19 | 34.09 | 0.81 | 27.07 | 800 | 3.45 | 34.30 | 27.31 | 84 | 1.15 |
| 588 | 3.89 | 34.16 | 0.55 | 27.15 | 1000 | 3.07 | 34.38 | 27.41 | 75 | 1.31 |
| 784 | 3.48 | 34.29 | 0.46 | 27.30 | | | | | | |
| 1030 | 3.02 | 34.39 | 0.40 | 27.42 | | | | | | |
| 49 | HMCS OSHAWA; August 2, 1958; 1334 GCT; 56°30'N, 135°40'W; sounding, 107 fm; wind, 180°, 5 kt; weather, cloudy; sea, calm. | | | | | | | | | |
| 0 | 13.20 | 31.26 | - | 23.48 | 0 | 13.20 | 31.26 | 23.48 | 442 | 0.00 |
| 10 | 13.54 | 31.28 | 6.53 | 23.43 | 10 | 13.54 | 31.28 | 23.43 | 446 | 0.04 |
| 20 | 11.84 | 31.42 | 6.36 | 23.86 | 20 | 11.84 | 31.42 | 23.86 | 405 | 0.09 |
| 30 | 9.64 | 31.74 | 5.86 | 24.49 | 30 | 9.64 | 31.74 | 24.49 | 346 | 0.12 |
| 50 | 8.15 | 32.26 | 5.06 | 25.13 | 50 | 8.15 | 32.26 | 25.13 | 286 | 0.19 |
| 75 | 7.11 | 32.58 | 5.21 | 25.52 | 75 | 7.11 | 32.58 | 25.52 | 248 | 0.26 |
| 100 | 6.70 | 32.79 | 4.16 | 25.74 | 100 | 6.70 | 32.79 | 25.74 | 227 | 0.32 |
| 125 | 5.77 | 33.37 | 3.14 | 26.32 | 150 | 5.48 | 33.53 | 26.47 | 158 | 0.41 |
| 150 | 5.48 | 33.53 | 2.64 | 26.47 | | | | | | |
| 50 | HMCS OSHAWA; August 2, 1958; 1515 GCT; 56°35'N, 135°26'W; sounding, 60 fm; wind, 360°, 8 kt; weather, cloudy; sea, calm. | | | | | | | | | |
| 0 | 13.70 | 31.62 | - | 23.66 | 0 | 13.70 | 31.62 | 23.66 | 424 | 0.00 |
| 10 | 13.64 | 31.62 | 6.24 | 23.67 | 10 | 13.64 | 31.62 | 23.67 | 423 | 0.04 |
| 20 | 9.65 | 31.72 | 5.82 | 24.47 | 20 | 9.65 | 31.72 | 24.47 | 347 | 0.08 |
| 30 | 8.58 | 32.06 | 5.25 | 24.90 | 30 | 8.58 | 32.06 | 24.90 | 306 | 0.11 |
| 50 | 8.11 | 32.26 | 4.93 | 25.13 | 50 | 8.11 | 32.26 | 25.13 | 285 | 0.17 |
| 75 | 7.01 | 32.55 | 4.93 | 25.51 | 75 | 7.01 | 32.55 | 25.51 | 249 | 0.24 |
| 51 | HMCS OSHAWA; August 4, 1958; 0000 GCT; 57°00'N, 137°00'W; sounding, 1200 fm; wind, 160°, 15 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 14.50 | 32.17 | - | 23.92 | 0 | 14.50 | 32.17 | 23.92 | 399 | 0.00 |
| 10 | 14.76 | 32.17 | 6.17 | 23.86 | 10 | 14.76 | 32.17 | 23.86 | 405 | 0.04 |
| 20 | 11.76 | 32.19 | 7.04 | 24.48 | 20 | 11.76 | 32.19 | 24.48 | 347 | 0.08 |
| 30 | 9.02 | 32.22 | 6.40 | 24.96 | 30 | 9.02 | 32.22 | 24.96 | 301 | 0.11 |
| 50 | 7.50 | 32.39 | 5.96 | 25.32 | 50 | 7.50 | 32.39 | 25.32 | 267 | 0.17 |
| 75 | 6.85 | 32.53 | 6.14 | 25.52 | 75 | 6.85 | 32.53 | 25.52 | 248 | 0.23 |
| 100 | 6.27 | 32.66 | 6.19 | 25.69 | 100 | 6.27 | 32.66 | 25.69 | 232 | 0.29 |
| 125 | 6.26 | 32.91 | 5.28 | 25.89 | 150 | 6.21 | 33.19 | 26.12 | 192 | 0.40 |
| 150 | 6.21 | 33.19 | 4.36 | 26.12 | 200 | 5.96 | 33.72 | 26.57 | 150 | 0.49 |
| 174 | 6.02 | 33.47 | 3.66 | 26.36 | 250 | 5.31 | 33.81 | 26.72 | 136 | 0.56 |
| 199 | 5.97 | 33.72 | 3.25 | 26.56 | 300 | 5.08 | 33.91 | 26.82 | 127 | 0.62 |
| 237 | 5.43 | 33.78 | 2.91 | 26.68 | 400 | 4.44 | 34.00 | 26.97 | 114 | 0.75 |
| 284 | 5.18 | 33.89 | 2.33 | 26.79 | 500 | 4.16 | 34.08 | 27.06 | 106 | 0.86 |
| 332 | 4.85 | 33.94 | 1.83 | 26.87 | 600 | 3.96 | 34.15 | 27.14 | 99 | 0.96 |
| 379 | 4.54 | 33.98 | 1.33 | 26.94 | 700 | 3.76 | 34.21 | 27.21 | 93 | 1.06 |
| 474 | 4.23 | 34.06 | 0.88 | 27.04 | 800 | 3.56 | 34.27 | 27.27 | 88 | 1.15 |
| 568 | 4.03 | 34.13 | 0.60 | 27.12 | | | | | | |
| 758 | 3.64 | 34.24 | 0.48 | 27.24 | | | | | | |
| 995 | 3.23 | 34.38 | 0.36 | 27.39 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

52

HMCS OSHAWA; August 4, 1958; 0754 GCT; 57°01.5'N, 138°59.5'W; sounding, 1750 fm; wind, 160°, 25 kt; weather, intermittent moderate rain; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.40 | 32.00 | - | 23.81 | 0 | 14.40 | 32.00 | 23.81 | 410 | 0.00 |
| 10 | 14.56 | 31.98 | 6.04 | 23.77 | 10 | 14.56 | 31.98 | 23.77 | 415 | 0.04 |
| 20 | 14.61 | 31.99 | 6.04 | 23.76 | 20 | 14.61 | 31.99 | 23.76 | 415 | 0.08 |
| 30 | 10.19 | 32.04 | 8.02 | 24.64 | 30 | 10.19 | 32.04 | 24.64 | 332 | 0.12 |
| 50 | 7.69 | 32.15 | 6.32 | 25.11 | 50 | 7.69 | 32.15 | 25.11 | 287 | 0.18 |
| 75 | 7.41 | 32.24 | 6.14 | 25.22 | 75 | 7.41 | 32.24 | 25.22 | 277 | 0.25 |
| 100 | 7.12 | 32.36 | 6.07 | 25.35 | 100 | 7.12 | 32.36 | 25.35 | 265 | 0.32 |
| 125 | 6.95 | 32.47 | 6.05 | 25.46 | 150 | 6.67 | 32.61 | 25.60 | 241 | 0.45 |
| 149 | 6.68 | 32.60 | 5.97 | 25.60 | 200 | 6.54 | 32.95 | 25.89 | 215 | 0.56 |
| 174 | 6.52 | 32.73 | 5.75 | 25.72 | 250 | 6.42 | 33.53 | 26.36 | 171 | 0.66 |
| 201 | 6.54 | 32.96 | 4.86 | 25.89 | 300 | 6.04 | 33.79 | 26.61 | 147 | 0.74 |
| 251 | 6.42 | 33.54 | 3.53 | 26.37 | 400 | 5.10 | 33.92 | 26.83 | 127 | 0.88 |
| 301 | 6.03 | 33.79 | 2.89 | 26.62 | 500 | 4.55 | 34.00 | 26.95 | 116 | 1.00 |
| 351 | 5.55 | 33.87 | 2.56 | 26.74 | 600 | 4.18 | 34.07 | 27.05 | 107 | 1.12 |
| 402 | 5.08 | 33.92 | 2.00 | 26.83 | 700 | 3.90 | 34.15 | 27.14 | 99 | 1.22 |
| 502 | 4.54 | 34.00 | 1.22 | 26.95 | 800 | 3.72 | 34.22 | 27.22 | 92 | 1.32 |
| 602 | 4.17 | 34.07 | - | 27.05 | 1000 | 3.35 | 34.32 | 27.33 | 82 | 1.49 |
| 803 | 3.72 | 34.22 | 0.49 | 27.22 | | | | | | |
| 1052 | 3.27 | 34.34 | 0.39 | 27.35 | | | | | | |

53

HMCS OSHAWA; August 4, 1958; 1524 GCT; 57°05'N, 140°53'W; sounding, 1750 fm; wind, 160°, 8 kt; weather, overcast; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.30 | 32.51 | - | 24.43 | 0 | 13.30 | 32.51 | 24.43 | 351 | 0.00 |
| 10 | 13.31 | 32.50 | 6.20 | 24.42 | 10 | 13.31 | 32.50 | 24.42 | 353 | 0.04 |
| 20 | 12.81 | 32.51 | 6.44 | 24.52 | 20 | 12.81 | 32.51 | 24.52 | 343 | 0.07 |
| 30 | 10.57 | 32.55 | 7.26 | 24.97 | 30 | 10.57 | 32.55 | 24.97 | 300 | 0.10 |
| 50 | 7.20 | 32.59 | 7.07 | 25.52 | 50 | 7.20 | 32.59 | 25.52 | 248 | 0.16 |
| 75 | 6.17 | 32.65 | 6.97 | 25.70 | 75 | 6.17 | 32.65 | 25.70 | 231 | 0.22 |
| 100 | 5.32 | 32.70 | 6.83 | 25.84 | 100 | 5.32 | 32.70 | 25.84 | 218 | 0.27 |
| 125 | 4.87 | 32.93 | 6.10 | 26.07 | 150 | 4.77 | 33.23 | 26.32 | 172 | 0.37 |
| 150 | 4.77 | 33.23 | 5.15 | 26.32 | 200 | 4.30 | 33.66 | 26.71 | 136 | 0.45 |
| 175 | 4.76 | 33.51 | 4.08 | 26.55 | 250 | 4.10 | 33.83 | 26.87 | 121 | 0.52 |
| 202 | 4.24 | 33.67 | 3.29 | 26.72 | 300 | 4.09 | 33.92 | 26.94 | 115 | 0.58 |
| 252 | 4.12 | 33.83 | 2.22 | 26.87 | 400 | 4.20 | 34.05 | 27.04 | 107 | 0.69 |
| 303 | 4.09 | 33.92 | 1.47 | 26.94 | 500 | 3.96 | 34.12 | 27.11 | 100 | 0.79 |
| 354 | 4.20 | 33.99 | 1.06 | 26.99 | 600 | 3.75 | 34.18 | 27.18 | 94 | 0.89 |
| 404 | 4.19 | 34.06 | 0.84 | 27.04 | 700 | 3.58 | 34.24 | 27.25 | 89 | 0.98 |
| 505 | 3.94 | 34.12 | 0.66 | 27.11 | 800 | 3.43 | 34.28 | 27.29 | 85 | 1.07 |
| 606 | 3.74 | 34.19 | 0.49 | 27.19 | 1000 | 3.13 | 34.35 | 27.38 | 78 | 1.23 |
| 808 | 3.42 | 34.28 | 0.39 | 27.30 | | | | | | |
| 1060 | 3.04 | 34.37 | 0.44 | 27.40 | | | | | | |

54

HMCS OSHAWA; August 4, 1958; 2031 GCT; 57°46'N, 140°59'W; sounding, 1800 fm; wind, 180°, 12 kt; weather, cloudy; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.10 | 31.86 | - | 23.76 | 0 | 14.10 | 31.86 | 23.76 | 415 | 0.00 |
| 10 | 14.17 | 31.82 | 6.22 | 23.72 | 10 | 14.17 | 31.82 | 23.72 | 419 | 0.04 |
| 20 | 13.27 | 32.11 | 6.61 | 24.13 | 20 | 13.27 | 32.11 | 24.13 | 380 | 0.08 |
| 30 | 8.26 | 32.28 | 6.13 | 25.12 | 30 | 8.26 | 32.28 | 25.12 | 286 | 0.12 |
| 50 | 7.16 | 32.43 | 6.04 | 25.40 | 50 | 7.16 | 32.43 | 25.40 | 260 | 0.17 |
| 75 | 6.47 | 32.60 | 6.66 | 25.62 | 75 | 6.47 | 32.60 | 25.62 | 239 | 0.23 |
| 100 | 5.68 | 32.67 | 6.59 | 25.77 | 100 | 5.68 | 32.67 | 25.77 | 224 | 0.29 |
| 125 | 6.09 | 33.03 | 5.03 | 26.01 | 150 | 5.69 | 33.30 | 26.27 | 178 | 0.39 |
| 150 | 5.69 | 33.30 | 4.59 | 26.27 | 200 | 5.57 | 33.75 | 26.64 | 143 | 0.47 |
| 175 | 5.51 | 33.53 | 4.04 | 26.48 | 250 | 5.02 | 33.87 | 26.80 | 128 | 0.54 |
| 202 | 5.59 | 33.76 | 3.06 | 26.65 | 300 | 4.74 | 33.93 | 26.88 | 121 | 0.60 |
| 252 | 4.98 | 33.87 | 2.70 | 26.80 | 400 | 4.39 | 34.02 | 26.99 | 111 | 0.72 |
| 302 | 4.74 | 33.94 | 1.71 | 26.88 | 500 | 4.07 | 34.12 | 27.10 | 101 | 0.83 |
| 353 | 4.60 | 33.98 | 1.32 | 26.94 | 600 | 3.81 | 34.18 | 27.18 | 95 | 0.93 |
| 404 | 4.37 | 34.03 | 1.06 | 27.00 | 700 | 3.59 | 34.23 | 27.24 | 90 | 1.02 |
| 504 | 4.06 | 34.13 | 0.69 | 27.11 | 800 | 3.40 | 34.28 | 27.30 | 84 | 1.11 |
| 605 | 3.80 | 34.18 | 0.52 | 27.18 | | | | | | |
| 807 | 3.39 | 34.28 | 0.44 | 27.30 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 55 | HMCS OSHAWA; August 5, 1958; 0152 GCT; 58°30'N, 141°00'W; sounding, 1815 fm; wind, 130°, 10 kt; weather, moderate rain showers; sea, moderate. | | | | | | | | | |
| 0 | 14.10 | 32.24 | - | 24.06 | 0 | 14.10 | 32.24 | 24.06 | 386 | 0.00 |
| 10 | 14.22 | 32.24 | 6.13 | 24.03 | 10 | 14.22 | 32.24 | 24.03 | 389 | 0.04 |
| 20 | 10.38 | 32.26 | 7.13 | 24.77 | 20 | 10.38 | 32.26 | 24.77 | 318 | 0.07 |
| 30 | 8.75 | 32.43 | 7.18 | 25.17 | 30 | 8.75 | 32.43 | 25.17 | 281 | 0.10 |
| 50 | 7.02 | 32.50 | 6.51 | 25.47 | 50 | 7.02 | 32.50 | 25.47 | 252 | 0.16 |
| 75 | 6.36 | 32.59 | 6.56 | 25.63 | 75 | 6.36 | 32.59 | 25.63 | 238 | 0.22 |
| 100 | 5.67 | 32.69 | 6.61 | 25.79 | 100 | 5.67 | 32.69 | 25.79 | 223 | 0.28 |
| 125 | 5.65 | 32.93 | 5.62 | 25.99 | 150 | 5.76 | 33.36 | 26.31 | 174 | 0.38 |
| 150 | 5.76 | 33.36 | 4.19 | 26.31 | 200 | 5.50 | 33.77 | 26.66 | 141 | 0.46 |
| 175 | 5.78 | 33.65 | 3.46 | 26.54 | 250 | 5.11 | 33.87 | 26.79 | 130 | 0.52 |
| 202 | 5.47 | 33.77 | 3.11 | 26.67 | 300 | 4.64 | 33.90 | 26.87 | 122 | 0.59 |
| 252 | 5.10 | 33.87 | 2.36 | 26.79 | 400 | 4.42 | 34.02 | 26.98 | 112 | 0.71 |
| 302 | 4.62 | 33.90 | 1.88 | 26.87 | 500 | 4.11 | 34.09 | 27.08 | 104 | 0.82 |
| 353 | 4.56 | 33.97 | 1.34 | 26.93 | 600 | 3.91 | 34.15 | 27.14 | 98 | 0.92 |
| 404 | 4.40 | 34.02 | 1.08 | 26.99 | 700 | 3.71 | 34.21 | 27.21 | 92 | 1.02 |
| 504 | 4.10 | 34.09 | 0.68 | 27.08 | 800 | 3.50 | 34.27 | 27.28 | 86 | 1.10 |
| 605 | 3.90 | 34.15 | 0.56 | 27.15 | 1000 | 3.15 | 34.36 | 27.38 | 77 | 1.27 |
| 807 | 3.48 | 34.28 | 0.40 | 27.28 | | | | | | |
| 1059 | 3.06 | 34.38 | 0.38 | 27.40 | | | | | | |
| 56 | HMCS OSHAWA; August 5, 1958; 0407 GCT; 58°42.5'N, 140°45'W; sounding, 150 fm; wind, 160°, 12 kt; weather, moderate rain showers; sea, slight. | | | | | | | | | |
| 0 | 14.20 | 32.05 | - | 23.89 | 0 | 14.20 | 32.05 | 23.89 | 403 | 0.00 |
| 10 | 14.32 | 32.03 | 6.13 | 23.85 | 10 | 14.32 | 32.03 | 23.85 | 406 | 0.04 |
| 20 | 10.71 | 32.17 | 7.35 | 24.65 | 20 | 10.71 | 32.17 | 24.65 | 331 | 0.08 |
| 30 | 9.10 | 32.34 | 6.62 | 25.04 | 30 | 9.10 | 32.34 | 25.04 | 293 | 0.11 |
| 49 | 7.05 | 32.48 | 5.96 | 25.45 | 50 | 6.98 | 32.49 | 25.47 | 253 | 0.16 |
| 74 | 6.31 | 32.62 | 6.55 | 25.66 | 75 | 6.29 | 32.63 | 25.67 | 234 | 0.22 |
| 99 | 5.88 | 32.72 | 6.27 | 25.79 | 100 | 5.87 | 32.73 | 25.80 | 222 | 0.28 |
| 123 | 5.71 | 33.10 | 5.05 | 26.11 | 150 | 5.62 | 33.46 | 26.40 | 165 | 0.38 |
| 148 | 5.62 | 33.43 | 4.00 | 26.38 | 200 | 5.37 | 33.84 | 26.74 | 134 | 0.46 |
| 172 | 5.67 | 33.73 | 3.09 | 26.61 | | | | | | |
| 197 | 5.40 | 33.83 | 2.77 | 26.73 | | | | | | |
| 246 | 4.90 | 33.89 | 2.15 | 26.83 | | | | | | |
| 57 | HMCS OSHAWA; August 5, 1958; 0615 GCT; 58°55'N, 140°30'W; sounding, 95 fm; wind, 100°, 15 kt; weather, drizzle; sea, moderate. | | | | | | | | | |
| 0 | 13.90 | 31.99 | - | 23.90 | 0 | 13.90 | 31.99 | 23.90 | 401 | 0.00 |
| 10 | 14.10 | 32.00 | 6.40 | 23.87 | 10 | 14.10 | 32.00 | 23.87 | 405 | 0.04 |
| 20 | 11.69 | 32.34 | 7.49 | 24.60 | 20 | 11.69 | 32.34 | 24.60 | 335 | 0.08 |
| 30 | 9.78 | 32.47 | 6.82 | 25.03 | 30 | 9.78 | 32.47 | 25.03 | 294 | 0.11 |
| 50 | 7.47 | 32.49 | 6.28 | 25.40 | 50 | 7.47 | 32.49 | 25.40 | 259 | 0.16 |
| 75 | 6.64 | 32.59 | 6.08 | 25.59 | 75 | 6.64 | 32.59 | 25.59 | 241 | 0.23 |
| 100 | 6.14 | 32.70 | 5.95 | 25.74 | 100 | 6.14 | 32.70 | 25.74 | 227 | 0.29 |
| 125 | 5.88 | 32.99 | 5.23 | 26.01 | 150 | 5.82 | 33.38 | 26.32 | 173 | 0.39 |
| 150 | 5.82 | 33.38 | 4.01 | 26.32 | | | | | | |
| 58 | HMCS OSHAWA; August 5, 1958; 0815 GCT; 59°07.5'N, 140°15'W; sounding, 65 fm; wind, 100°, 15 kt; weather, drizzle; sea, moderate. | | | | | | | | | |
| 0 | 13.60 | 31.86 | - | 23.87 | 0 | 13.60 | 31.86 | 23.87 | 405 | 0.00 |
| 10 | 13.77 | 31.86 | 6.31 | 23.84 | 10 | 13.77 | 31.86 | 23.84 | 408 | 0.04 |
| 20 | 13.74 | 31.91 | 6.38 | 23.88 | 20 | 13.74 | 31.91 | 23.88 | 404 | 0.08 |
| 30 | 7.52 | 32.12 | 5.81 | 25.10 | 30 | 7.52 | 32.12 | 25.10 | 287 | 0.12 |
| 50 | 7.21 | 32.27 | 5.68 | 25.27 | 50 | 7.21 | 32.27 | 25.27 | 272 | 0.17 |
| 75 | 7.00 | 32.45 | 5.76 | 25.44 | 75 | 7.00 | 32.45 | 25.44 | 256 | 0.24 |
| 100 | 6.50 | 32.61 | 5.97 | 25.63 | 100 | 6.50 | 32.61 | 25.63 | 238 | 0.30 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

59

HMCS OSHAWA; August 5, 1958; 0919 GCT; 59°16'N, 140°05'W; sounding, 68 fm; wind, 100°, 25 kt; weather, moderate rain; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.40 | 31.67 | - | 23.76 | 0 | 13.40 | 31.67 | 23.76 | 415 | 0.00 |
| 10 | 13.50 | 31.68 | 6.40 | 23.75 | 10 | 13.50 | 31.68 | 23.75 | 416 | 0.04 |
| 20 | 13.49 | 31.67 | 6.35 | 23.75 | 20 | 13.49 | 31.67 | 23.75 | 417 | 0.08 |
| 30 | 9.52 | 32.03 | 6.53 | 24.73 | 30 | 9.52 | 32.03 | 24.73 | 323 | 0.12 |
| 50 | 7.20 | 32.23 | 5.76 | 25.24 | 50 | 7.20 | 32.23 | 25.24 | 275 | 0.18 |
| 75 | 7.18 | 32.38 | 5.92 | 25.36 | 75 | 7.18 | 32.38 | 25.36 | 264 | 0.25 |
| 100 | 6.68 | 32.53 | 5.95 | 25.54 | 100 | 6.68 | 32.53 | 25.54 | 247 | 0.31 |

60

HMCS OSHAWA; August 5, 1958; 1059 GCT; 59°25'N, 139°54'W; sounding, 95 fm; wind, 110°, 25 kt; weather, moderate rain; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.50 | 30.14 | - | 22.56 | 0 | 13.50 | 30.14 | 22.56 | 530 | 0.00 |
| 10 | 13.24 | 30.95 | 6.19 | 23.24 | 10 | 13.24 | 30.95 | 23.24 | 465 | 0.05 |
| 20 | 13.28 | 31.48 | 6.28 | 23.64 | 20 | 13.28 | 31.48 | 23.64 | 427 | 0.10 |
| 30 | 10.11 | 31.60 | 6.04 | 24.31 | 30 | 10.11 | 31.60 | 24.31 | 363 | 0.13 |
| 50 | 7.99 | 32.16 | 5.96 | 25.07 | 50 | 7.99 | 32.16 | 25.07 | 291 | 0.20 |
| 75 | 7.46 | 32.34 | 5.96 | 25.29 | 75 | 7.46 | 32.34 | 25.29 | 270 | 0.27 |
| 100 | 6.98 | 32.46 | 5.98 | 25.45 | 100 | 6.98 | 32.46 | 25.45 | 255 | 0.34 |
| 125 | 6.38 | 32.61 | 6.12 | 25.65 | 150 | 6.06 | 32.82 | 25.85 | 218 | 0.46 |
| 150 | 6.06 | 32.82 | 5.14 | 25.85 | | | | | | |

61

HMCS OSHAWA; August 5, 1958; 1545 GCT; 59°46'N, 141°30'W; sounding, 22 fm; wind, 070°, 20 kt; weather, intermittent moderate rain; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.70 | 23.55 | - | 17.64 | 0 | 12.70 | 23.55 | 17.64 | 1002 | 0.00 |
| 10 | 12.60 | 25.28 | 6.50 | 18.99 | 10 | 12.60 | 25.28 | 18.99 | 872 | 0.09 |
| 20 | 13.34 | 29.71 | 6.19 | 22.26 | 20 | 13.34 | 29.71 | 22.26 | 558 | 0.16 |
| 30 | 7.01 | 31.36 | 6.17 | 24.58 | 30 | 7.01 | 31.36 | 24.58 | 337 | 0.21 |

62

HMCS OSHAWA; August 5, 1958; 1758 GCT; 59°31'N, 141°50.5'W; sounding, 90 fm; wind, 070°, 20 kt; weather, intermittent moderate rain; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.40 | 32.17 | - | 24.15 | 0 | 13.40 | 32.17 | 24.15 | 378 | 0.00 |
| 10 | 13.58 | 32.19 | 6.33 | 24.13 | 10 | 13.58 | 32.19 | 24.13 | 380 | 0.04 |
| 20 | 13.51 | 32.21 | 6.41 | 24.15 | 20 | 13.51 | 32.21 | 24.15 | 378 | 0.08 |
| 30 | 9.24 | 32.42 | 7.40 | 25.08 | 30 | 9.24 | 32.42 | 25.08 | 289 | 0.11 |
| 50 | 6.97 | 32.53 | 6.48 | 25.51 | 50 | 6.97 | 32.53 | 25.51 | 249 | 0.16 |
| 75 | 6.05 | 32.67 | 6.29 | 25.73 | 75 | 6.05 | 32.67 | 25.73 | 228 | 0.22 |
| 100 | 5.60 | 32.78 | 6.08 | 25.88 | 100 | 5.60 | 32.78 | 25.88 | 214 | 0.28 |
| 125 | 5.78 | 33.20 | 4.57 | 26.18 | 150 | 5.69 | 33.50 | 26.43 | 163 | 0.38 |
| 150 | 5.69 | 33.50 | 3.76 | 26.43 | | | | | | |

63

HMCS OSHAWA; August 5, 1958; 2052 GCT; 59°15.5'N, 142°10'W; sounding, 510 fm; wind, 090°, 30 kt; weather, internittent moderate rain; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.40 | 32.23 | - | 24.19 | 0 | 13.40 | 32.23 | 24.19 | 373 | 0.00 |
| 10 | 13.30 | 32.27 | 6.47 | 24.24 | 10 | 13.30 | 32.27 | 24.24 | 369 | 0.04 |
| 20 | 10.82 | 32.35 | 7.58 | 24.77 | 20 | 10.82 | 32.35 | 24.77 | 319 | 0.07 |
| 30 | 7.70 | 32.42 | 6.91 | 25.32 | 30 | 7.70 | 32.42 | 25.32 | 267 | 0.10 |
| 50 | 6.56 | 32.57 | 6.56 | 25.59 | 50 | 6.56 | 32.57 | 25.59 | 241 | 0.15 |
| 75 | 5.94 | 32.67 | 6.29 | 25.75 | 75 | 5.94 | 32.67 | 25.75 | 226 | 0.21 |
| 100 | 5.65 | 32.83 | 5.94 | 25.90 | 100 | 5.65 | 32.83 | 25.90 | 212 | 0.27 |
| 125 | 6.05 | 33.25 | 4.52 | 26.19 | 150 | 5.96 | 33.58 | 26.46 | 160 | 0.36 |
| 149 | 5.96 | 33.56 | 3.66 | 26.45 | 200 | 5.60 | 33.85 | 26.72 | 136 | 0.44 |
| 174 | 5.99 | 33.79 | 2.95 | 26.62 | 250 | 5.21 | 33.90 | 26.80 | 128 | 0.50 |
| 201 | 5.58 | 33.85 | 2.67 | 26.72 | 300 | 4.87 | 33.93 | 26.86 | 123 | 0.56 |
| 252 | 5.20 | 33.90 | 2.24 | 26.80 | 400 | 4.34 | 33.99 | 26.97 | 113 | 0.68 |
| 302 | 4.86 | 33.93 | 1.79 | 26.87 | 500 | 4.10 | 34.08 | 27.07 | 104 | 0.79 |
| 352 | 4.60 | 33.96 | 1.50 | 26.91 | 600 | 3.87 | 34.15 | 27.15 | 98 | 0.90 |
| 403 | 4.32 | 33.99 | 1.13 | 26.97 | 700 | 3.67 | 34.20 | 27.21 | 93 | 0.99 |
| 503 | 4.10 | 34.09 | 0.69 | 27.07 | 800 | 3.52 | 34.25 | 27.26 | 88 | 1.08 |
| 604 | 3.86 | 34.15 | 0.58 | 27.15 | | | | | | |
| 855 | 3.46 | 34.27 | 0.43 | 27.28 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 64 | HMCS OSHAWA; August 6, 1958; 0234 GCT; 58°38'N, 143°03'W; sounding, 1826 fm; wind, 110°, 10 kt; weather, moderate rain showers; sea, slight. | | | | | | | | | |
| 0 | 13.30 | 31.91 | - | 23.96 | 0 | 13.30 | 31.91 | 23.96 | 395 | 0.00 |
| 10 | 13.34 | 31.92 | 6.34 | 23.96 | 10 | 13.34 | 31.92 | 23.96 | 396 | 0.04 |
| 20 | 8.85 | 32.50 | 7.30 | 25.20 | 20 | 8.85 | 32.50 | 25.20 | 278 | 0.07 |
| 30 | 7.78 | 32.53 | 6.82 | 25.39 | 30 | 7.78 | 32.53 | 25.39 | 260 | 0.10 |
| 50 | 6.71 | 32.61 | 6.72 | 25.60 | 50 | 6.71 | 32.61 | 25.60 | 240 | 0.15 |
| 75 | 5.82 | 32.67 | 6.78 | 25.76 | 75 | 5.82 | 32.67 | 25.76 | 225 | 0.21 |
| 100 | 5.22 | 32.71 | 6.80 | 25.86 | 100 | 5.22 | 32.71 | 25.86 | 216 | 0.26 |
| 125 | 5.36 | 33.11 | 5.22 | 26.16 | 150 | 5.15 | 33.46 | 26.46 | 159 | 0.36 |
| 150 | 5.15 | 33.46 | 4.05 | 26.46 | 200 | 4.78 | 33.79 | 26.76 | 132 | 0.43 |
| 175 | 5.15 | 33.66 | 3.33 | 26.61 | 250 | 4.40 | 33.89 | 26.88 | 120 | 0.50 |
| 202 | 4.74 | 33.79 | 2.62 | 26.77 | 300 | 4.34 | 33.96 | 26.95 | 114 | 0.56 |
| 252 | 4.40 | 33.89 | 1.66 | 26.89 | 400 | 4.15 | 34.05 | 27.04 | 106 | 0.67 |
| 302 | 4.34 | 33.97 | 1.16 | 26.95 | 500 | 3.91 | 34.13 | 27.13 | 99 | 0.77 |
| 353 | 4.26 | 34.01 | 0.91 | 27.00 | 600 | 3.70 | 34.19 | 27.20 | 93 | 0.87 |
| 403 | 4.14 | 34.06 | 0.75 | 27.04 | 700 | 3.52 | 34.24 | 27.25 | 88 | 0.96 |
| 504 | 3.90 | 34.14 | 0.57 | 27.13 | 800 | 3.39 | 34.28 | 27.30 | 84 | 1.04 |
| 604 | 3.69 | 34.19 | 0.45 | 27.20 | | | | | | |
| 806 | 3.38 | 34.29 | 0.35 | 27.30 | | | | | | |
| 65 | HMCS OSHAWA; August 6, 1958; 0822 GCT; 58°00'N, 143°50'W; sounding, 1955 fm; wind, 150°, 5 kt; weather, overcast; sea, calm. | | | | | | | | | |
| 0 | 12.20 | 32.53 | - | 24.66 | 0 | 12.20 | 32.53 | 24.66 | 329 | 0.00 |
| 10 | 12.23 | 32.54 | 6.33 | 24.66 | 10 | 12.23 | 32.54 | 24.66 | 329 | 0.03 |
| 20 | 12.16 | 32.55 | 6.45 | 24.68 | 20 | 12.16 | 32.55 | 24.68 | 328 | 0.07 |
| 30 | 10.95 | 32.62 | 6.83 | 24.95 | 30 | 10.95 | 32.62 | 24.95 | 302 | 0.10 |
| 50 | 6.95 | 32.69 | 7.37 | 25.63 | 50 | 6.95 | 32.69 | 25.63 | 238 | 0.15 |
| 75 | 5.84 | 32.70 | 7.09 | 25.78 | 75 | 5.84 | 32.70 | 25.78 | 223 | 0.21 |
| 100 | 5.14 | 32.77 | 6.99 | 25.91 | 100 | 5.14 | 32.77 | 25.91 | 211 | 0.26 |
| 124 | 4.67 | 33.04 | 5.67 | 26.18 | 150 | 4.52 | 33.38 | 26.47 | 158 | 0.36 |
| 149 | 4.52 | 33.37 | 4.58 | 26.46 | 200 | 4.55 | 33.80 | 26.80 | 128 | 0.43 |
| 174 | 4.66 | 33.71 | 3.30 | 26.72 | 250 | 4.31 | 33.89 | 26.89 | 119 | 0.49 |
| 199 | 4.55 | 33.80 | 2.99 | 26.79 | 300 | 4.14 | 33.95 | 26.96 | 114 | 0.55 |
| 249 | 4.31 | 33.89 | 1.96 | 26.89 | 400 | 3.99 | 34.04 | 27.05 | 106 | 0.66 |
| 299 | 4.14 | 33.94 | 1.30 | 26.95 | 500 | 3.93 | 34.16 | 27.14 | 97 | 0.76 |
| 348 | 4.11 | 34.00 | 0.99 | 27.00 | 600 | 3.70 | 34.21 | 27.21 | 92 | 0.86 |
| 398 | 3.99 | 34.04 | 0.84 | 27.05 | 700 | 3.51 | 34.26 | 27.27 | 86 | 0.95 |
| 498 | 3.93 | 34.15 | 0.57 | 27.14 | 800 | 3.34 | 34.30 | 27.32 | 82 | 1.03 |
| 597 | 3.71 | 34.21 | 0.46 | 27.21 | 1000 | 2.99 | 34.38 | 27.41 | 74 | 1.19 |
| 796 | 3.35 | 34.30 | 0.38 | 27.32 | | | | | | |
| 1043 | 2.91 | 34.40 | 0.49 | 27.43 | | | | | | |
| 66 | HMCS OSHAWA; August 6, 1958; 1309 GCT; 58°00'N, 145°00'W; sounding, missing; wind, 080°, 5 kt; weather, overcast; sea, smooth. | | | | | | | | | |
| 0 | 13.00 | 32.06 | - | 24.14 | 0 | 13.00 | 32.06 | 24.14 | 378 | 0.00 |
| 10 | 13.44 | 32.06 | 6.24 | 24.05 | 10 | 13.44 | 32.06 | 24.05 | 387 | 0.04 |
| 20 | 12.38 | 32.49 | 7.19 | 24.59 | 20 | 12.38 | 32.49 | 24.59 | 336 | 0.08 |
| 30 | 10.42 | 32.63 | 6.81 | 25.05 | 30 | 10.42 | 32.63 | 25.05 | 292 | 0.11 |
| 50 | 6.86 | 32.65 | 7.17 | 25.61 | 50 | 6.86 | 32.65 | 25.61 | 240 | 0.16 |
| 75 | 5.66 | 32.68 | 7.04 | 25.79 | 75 | 5.66 | 32.68 | 25.79 | 223 | 0.22 |
| 100 | 5.16 | 32.74 | 6.85 | 25.89 | 100 | 5.16 | 32.74 | 25.89 | 213 | 0.27 |
| 125 | 4.70 | 32.92 | 6.37 | 26.09 | 150 | 4.86 | 33.27 | 26.34 | 170 | 0.37 |
| 150 | 4.86 | 33.27 | 4.96 | 26.34 | 200 | 4.11 | 33.57 | 26.66 | 140 | 0.45 |
| 175 | 4.66 | 33.41 | 4.45 | 26.47 | 250 | 3.95 | 33.85 | 26.90 | 118 | 0.51 |
| 200 | 4.11 | 33.57 | 3.57 | 26.66 | 300 | 3.97 | 33.92 | 26.95 | 114 | 0.57 |
| 252 | 3.97 | 33.86 | 1.83 | 26.90 | 400 | 3.91 | 34.04 | 27.05 | 105 | 0.68 |
| 302 | 3.97 | 33.92 | 1.12 | 26.95 | 500 | 3.77 | 34.12 | 27.13 | 98 | 0.78 |
| 353 | 3.98 | 33.99 | 0.72 | 27.01 | 600 | 3.66 | 34.19 | 27.20 | 92 | 0.88 |
| 403 | 3.90 | 34.04 | 0.60 | 27.05 | 700 | 3.50 | 34.26 | 27.27 | 87 | 0.97 |
| 504 | 3.77 | 34.12 | 0.48 | 27.13 | 800 | 3.30 | 34.31 | 27.33 | 82 | 1.06 |
| 605 | 3.65 | 34.20 | 0.47 | 27.21 | | | | | | |
| 806 | 3.29 | 34.31 | 0.39 | 27.33 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

67

HMCS OSHAWA; August 6, 1958; 1826 GCT; 58°27'N, 146°02'W; sounding, missing; wind, 080°, 10 kt; weather, overcast; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.80 | 31.83 | - | 24.01 | 0 | 12.80 | 31.83 | 24.01 | 391 | 0.00 |
| 10 | 12.94 | 31.82 | 6.20 | 23.96 | 10 | 12.94 | 31.82 | 23.96 | 396 | 0.04 |
| 20 | 11.58 | 32.00 | 7.39 | 24.36 | 20 | 11.58 | 32.00 | 24.36 | 358 | 0.08 |
| 30 | 7.42 | 32.22 | 6.19 | 25.20 | 30 | 7.42 | 32.22 | 25.20 | 278 | 0.11 |
| 50 | 6.91 | 32.33 | 6.24 | 25.35 | 50 | 6.91 | 32.33 | 25.35 | 264 | 0.16 |
| 75 | 6.58 | 32.50 | 6.26 | 25.53 | 75 | 6.58 | 32.50 | 25.53 | 247 | 0.23 |
| 100 | 5.98 | 32.63 | 6.34 | 25.71 | 100 | 5.98 | 32.63 | 25.71 | 231 | 0.29 |
| 125 | 5.69 | 32.81 | 5.89 | 25.89 | 150 | 5.99 | 33.20 | 26.16 | 188 | 0.39 |
| 150 | 5.99 | 33.20 | 4.52 | 26.16 | 200 | 5.92 | 33.72 | 26.58 | 149 | 0.48 |
| 175 | 6.31 | 33.56 | 3.34 | 26.40 | 250 | 5.40 | 33.86 | 26.75 | 133 | 0.55 |
| 201 | 5.89 | 33.73 | 2.99 | 26.58 | 300 | 4.86 | 33.91 | 26.85 | 124 | 0.62 |
| 251 | 5.39 | 33.86 | 2.48 | 26.75 | 400 | 4.23 | 33.96 | 26.96 | 114 | 0.74 |
| 301 | 4.85 | 33.91 | 1.99 | 26.85 | 500 | 4.13 | 34.08 | 27.06 | 105 | 0.85 |
| 351 | 4.57 | (33.94)a) | 1.67 | (26.90) | 600 | 3.90 | 34.15 | 27.14 | 98 | 0.95 |
| 402 | 4.21 | 33.96 | 1.27 | 26.96 | 700 | 3.67 | 34.21 | 27.22 | 92 | 1.04 |
| 502 | 4.14 | 34.08 | 0.71 | 27.06 | 800 | 3.47 | 34.27 | 27.28 | 86 | 1.14 |
| 602 | 3.89 | 34.15 | 0.53 | 27.14 | 1000 | 3.09 | 34.35 | 27.38 | 77 | 1.30 |
| 803 | 3.46 | 34.27 | 0.38 | 27.28 | | | | | | |
| 1052 | 3.00 | 34.37 | 0.44 | 27.41 | | | | | | |

68

HMCS OSHAWA; August 6, 1958; 2359 GCT; 58°55'N, 147°10'W; sounding, 1270 fm; wind, 040°, 10 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.20 | 32.51 | - | 24.64 | 0 | 12.20 | 32.51 | 24.64 | 331 | 0.00 |
| 10 | 11.86 | 32.56 | 6.42 | 24.74 | 10 | 11.86 | 32.56 | 24.74 | 321 | 0.03 |
| 20 | 10.92 | 32.64 | 6.52 | 24.97 | 20 | 10.92 | 32.64 | 24.97 | 300 | 0.06 |
| 30 | 9.66 | 32.66 | 6.78 | 25.20 | 30 | 9.66 | 32.66 | 25.20 | 278 | 0.09 |
| 50 | 6.36 | 32.71 | 7.13 | 25.72 | 50 | 6.36 | 32.71 | 25.72 | 228 | 0.14 |
| 75 | 5.18 | 32.77 | 6.87 | 25.91 | 75 | 5.18 | 32.77 | 25.91 | 211 | 0.20 |
| 100 | 4.48 | 33.03 | 5.82 | 26.20 | 100 | 4.48 | 33.03 | 26.20 | 184 | 0.25 |
| 124 | 4.40 | 33.41 | 4.28 | 26.51 | 150 | 4.52 | 33.70 | 26.72 | 135 | 0.33 |
| 149 | 4.52 | 33.69 | 3.16 | 26.71 | 200 | 4.61 | 33.92 | 26.88 | 120 | 0.39 |
| 174 | 4.56 | 33.82 | 2.32 | 26.81 | 250 | 4.30 | 33.92 | 26.92 | 117 | 0.45 |
| 198 | 4.61 | 33.91 | 1.85 | 26.88 | 300 | 4.19 | 33.96 | 26.96 | 113 | 0.51 |
| 252 | 4.28 | 33.91 | 1.52 | 26.92 | 400 | 4.05 | 34.06 | 27.05 | 105 | 0.62 |
| 302 | 4.19 | 33.96 | 1.08 | 26.96 | 500 | 3.81 | 34.13 | 27.13 | 98 | 0.72 |
| 352 | 4.15 | 34.02 | 0.81 | 27.01 | 600 | 3.64 | 34.19 | 27.20 | 92 | 0.82 |
| 403 | 4.04 | 34.06 | 0.68 | 27.06 | 700 | 3.49 | 34.25 | 27.26 | 87 | 0.91 |
| 503 | 3.80 | 34.13 | 0.39 | 27.14 | 800 | 3.33 | 34.29 | 27.31 | 83 | 1.00 |
| 604 | 3.64 | 34.19 | 0.38 | 27.20 | 1000 | 2.97 | 34.38 | 27.42 | 74 | 1.16 |
| 805 | 3.32 | 34.30 | 0.37 | 27.32 | | | | | | |
| 1057 | 2.86 | 34.41 | 0.43 | 27.45 | | | | | | |

69

HMCS OSHAWA; August 7, 1958; 0142 GCT; 59°05'N, 147°12'W; sounding, 750 fm; wind, 040°, 15 kt; weather, overcast, precipitation near ship; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.40 | 32.47 | - | 24.58 | 0 | 12.40 | 32.47 | 24.58 | 337 | 0.00 |
| 10 | 12.22 | 32.47 | 6.46 | 24.61 | 10 | 12.22 | 32.47 | 24.61 | 334 | 0.03 |
| 20 | 11.84 | 32.55 | 6.50 | 24.74 | 20 | 11.84 | 32.55 | 24.74 | 322 | 0.07 |
| 30 | 8.52 | 32.65 | 6.23 | 25.37 | 30 | 8.52 | 32.65 | 25.37 | 262 | 0.10 |
| 50 | 5.94 | 32.69 | 6.16 | 25.76 | 50 | 5.94 | 32.69 | 25.76 | 225 | 0.14 |
| 75 | 5.30 | 32.77 | 6.42 | 25.90 | 75 | 5.30 | 32.77 | 25.90 | 212 | 0.20 |
| 100 | 4.60 | 32.95 | 6.05 | 26.12 | 100 | 4.60 | 32.95 | 26.12 | 191 | 0.25 |
| 125 | 5.29 | 33.44 | 3.92 | 26.43 | 150 | 5.01 | 33.66 | 26.63 | 143 | 0.34 |
| 150 | 5.01 | 33.66 | 3.19 | 26.63 | 200 | 5.12 | 33.89 | 26.80 | 128 | 0.40 |
| 175 | 5.52 | 33.84 | 2.56 | 26.72 | 250 | 4.69 | 33.92 | 26.87 | 121 | 0.47 |
| 200 | 5.12 | 33.89 | 2.15 | 26.80 | 300 | 4.40 | 33.95 | 26.93 | 116 | 0.53 |
| 248 | 4.70 | 33.92 | 1.62 | 26.87 | 400 | 4.07 | 34.04 | 27.04 | 107 | 0.64 |
| 298 | 4.41 | 33.95 | 1.27 | 26.93 | 500 | 3.80 | 34.12 | 27.13 | 99 | 0.74 |
| 348 | 4.32 | 34.00 | 0.96 | 26.98 | 600 | 3.74 | 34.17 | 27.18 | 95 | 0.84 |
| 397 | 4.08 | 34.03 | 0.59 | 27.03 | 700 | 3.62 | 34.22 | 27.23 | 91 | 0.93 |
| 497 | 3.80 | 34.12 | 0.45 | 27.13 | 800 | 3.45 | 34.26 | 27.27 | 87 | 1.02 |
| 596 | 3.74 | 34.17 | 0.38 | 27.18 | 1000 | 3.16 | 34.34 | 27.37 | 79 | 1.19 |
| 795 | 3.46 | 34.25 | 0.35 | 27.27 | | | | | | |
| 1042 | 3.10 | 34.36 | 0.36 | 27.39 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **70** | HMCS OSHAWA; August 7, 1958; 0348 GCT; 59°12'N, 147°25.5'W; sounding, 220 fm; wind, 040°, 15 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 13.00 | 31.81 | - | 23.94 | 0 | 13.00 | 31.81 | 23.94 | 397 | 0.00 |
| 10 | 13.09 | 31.80 | 6.33 | 23.92 | 10 | 13.09 | 31.80 | 23.92 | 400 | 0.04 |
| 20 | 11.31 | 32.09 | 7.11 | 24.48 | 20 | 11.31 | 32.09 | 24.48 | 346 | 0.08 |
| 30 | 7.72 | 32.31 | 6.15 | 25.22 | 30 | 7.72 | 32.31 | 25.22 | 276 | 0.11 |
| 50 | 6.88 | 32.50 | 6.38 | 25.49 | 50 | 6.88 | 32.50 | 25.49 | 251 | 0.16 |
| 75 | 6.53 | 32.64 | 6.81 | 25.65 | 75 | 6.53 | 32.64 | 25.65 | 236 | 0.22 |
| 100 | 5.78 | 32.68 | 6.36 | 25.77 | 100 | 5.78 | 32.68 | 25.77 | 224 | 0.28 |
| 125 | 5.65 | 33.05 | 5.24 | 26.08 | 150 | 5.24 | 33.41 | 26.41 | 164 | 0.38 |
| 150 | 5.24 | 33.41 | 4.14 | 26.41 | 200 | 5.30 | 33.63 | 26.58 | 149 | 0.46 |
| 199 | 5.30 | 33.63 | 3.35 | 26.58 | 250 | 5.14 | 33.67 | 26.63 | 145 | 0.53 |
| 249 | 5.14 | 33.66 | 3.19 | 26.62 | 300 | 4.96 | 33.84 | 26.78 | 130 | 0.60 |
| 299 | 4.97 | 33.84 | 2.43 | 26.78 | | | | | | |
| 348 | 4.59 | 33.91 | 1.72 | 26.88 | | | | | | |
| **71** | HMCS OSHAWA; August 7, 1958; 0532 GCT; 59°23'N, 147°31.5'W; sounding, 64 fm; wind, 360°, 4 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | 12.60 | 31.90 | - | 24.09 | 0 | 12.60 | 31.90 | 24.09 | 383 | 0.00 |
| 10 | 12.41 | 31.91 | 6.48 | 24.14 | 10 | 12.41 | 31.91 | 24.14 | 379 | 0.04 |
| 20 | 11.12 | 32.17 | 7.08 | 24.57 | 20 | 11.12 | 32.17 | 24.57 | 338 | 0.07 |
| 30 | 8.11 | 32.14 | 6.14 | 25.04 | 30 | 8.11 | 32.14 | 25.04 | 294 | 0.11 |
| 50 | 6.64 | 32.44 | 6.06 | 25.47 | 50 | 6.64 | 32.44 | 25.47 | 252 | 0.16 |
| 75 | 6.15 | 32.66 | 5.80 | 25.71 | 75 | 6.15 | 32.66 | 25.71 | 230 | 0.22 |
| 100 | 5.86 | 32.83 | 5.49 | 25.88 | 100 | 5.86 | 32.83 | 25.88 | 214 | 0.28 |
| **72** | HMCS OSHAWA; August 7, 1958; 0654 GCT; 59°31'N, 147°40'W; sounding, 57 fm; wind, calm; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 12.20 | 31.31 | - | 23.71 | 0 | 12.20 | 31.31 | 23.71 | 419 | 0.00 |
| 10 | 11.60 | 31.33 | 6.85 | 23.84 | 10 | 11.60 | 31.33 | 23.84 | 408 | 0.04 |
| 20 | 8.60 | 32.03 | 6.48 | 24.88 | 20 | 8.60 | 32.03 | 24.88 | 308 | 0.08 |
| 30 | 7.40 | 32.14 | 6.17 | 25.14 | 30 | 7.40 | 32.14 | 25.14 | 284 | 0.11 |
| 50 | 6.70 | 32.39 | 6.25 | 25.42 | 50 | 6.70 | 32.39 | 25.42 | 257 | 0.16 |
| 75 | 6.39 | 32.51 | 5.97 | 25.56 | 75 | 6.39 | 32.51 | 25.56 | 244 | 0.22 |
| **73** | HMCS OSHAWA; August 7, 1958; 0819 GCT; 59°40'N, 147°50'W; sounding, 43 fm; wind, calm; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 11.70 | 30.68 | - | 23.32 | 0 | 11.70 | 30.68 | 23.32 | 457 | 0.00 |
| 10 | (11.75)a) | 30.89 | 6.31 | (23.47) | 10 | 11.75 | 30.89 | 23.47 | 443 | 0.04 |
| 20 | 11.76 | 31.28 | 6.46 | 23.77 | 20 | 11.76 | 31.28 | 23.77 | 414 | 0.09 |
| 30 | 11.73 | 31.58 | 6.56 | 24.01 | 30 | 11.73 | 31.58 | 24.01 | 392 | 0.13 |
| 50 | 7.47 | 32.08 | 5.85 | 25.08 | 50 | 7.47 | 32.08 | 25.08 | 290 | 0.20 |
| 70 | 6.68 | 32.24 | 5.73 | 25.31 | | | | | | |
| **74** | HMCS OSHAWA; August 7, 1958; 1111 GCT; 59°17.5'N, 148°25'W; sounding, missing; wind, calm; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 11.30 | 31.93 | | 24.36 | 0 | 11.30 | 31.93 | 24.36 | 358 | 0.00 |
| 10 | 11.13 | 31.94 | | 24.39 | 10 | 11.13 | 31.94 | 24.39 | 355 | 0.04 |
| 20 | 10.60 | 32.01 | | 24.54 | 20 | 10.60 | 32.01 | 24.54 | 341 | 0.07 |
| 30 | 10.05 | 32.11 | | 24.71 | 30 | 10.05 | 32.11 | 24.71 | 324 | 0.10 |
| 50 | 8.31 | 32.30 | | 25.13 | 50 | 8.31 | 32.30 | 25.13 | 285 | 0.16 |
| 75 | 6.93 | 32.53 | | 25.51 | 75 | 6.93 | 32.53 | 25.51 | 249 | 0.23 |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

75

HMCS OSHAWA; August 7, 1958; 1413 GCT; 58°55'N, 149°00'W; sounding, 140 fm; wind, 210°, 5 kt; weather, cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.10 | 32.20 | - | 24.42 | 0 | 12.10 | 32.20 | 24.42 | 352 | 0.00 |
| 10 | 12.18 | 32.23 | 7.06 | 24.43 | 10 | 12.18 | 32.23 | 24.43 | 352 | 0.04 |
| 20 | 9.88 | 32.37 | 6.89 | 24.94 | 20 | 9.88 | 32.37 | 24.94 | 303 | 0.07 |
| 30 | 8.24 | 32.45 | 6.59 | 25.26 | 30 | 8.24 | 32.45 | 25.26 | 272 | 0.10 |
| 50 | 6.79 | 32.51 | 6.50 | 25.51 | 50 | 6.79 | 32.51 | 25.51 | 249 | 0.15 |
| 75 | 6.54 | 32.62 | 6.63 | 25.63 | 75 | 6.54 | 32.62 | 25.63 | 238 | 0.21 |
| 100 | 5.69 | 32.77 | 6.24 | 25.85 | 100 | 5.69 | 32.77 | 25.85 | 217 | 0.27 |
| 125 | 5.52 | 33.13 | 4.96 | 26.15 | 150 | 5.41 | 33.46 | 26.43 | 162 | 0.36 |
| 150 | 5.41 | 33.46 | 3.77 | 26.43 | 200 | 5.11 | 33.75 | 26.69 | 138 | 0.44 |
| 175 | 5.42 | 33.63 | 3.26 | 26.56 | | | | | | |
| 200 | 5.11 | 33.75 | 2.72 | 26.69 | | | | | | |

76

HMCS OSHAWA; August 7, 1958; 1829 GCT; 58°23'N, 149°49'W; sounding, 66 fm; wind, 300°, 25 kt; weather, cloudy; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.70 | 31.62 | - | 24.05 | 0 | 11.70 | 31.62 | 24.05 | 388 | 0.00 |
| 10 | 11.80 | 31.61 | 6.62 | 24.02 | 10 | 11.80 | 31.61 | 24.02 | 390 | 0.04 |
| 20 | 9.68 | 31.91 | 6.60 | 24.61 | 20 | 9.68 | 31.91 | 24.61 | 334 | 0.08 |
| 30 | 8.64 | 32.09 | 6.42 | 24.92 | 30 | 8.64 | 32.09 | 24.92 | 305 | 0.11 |
| 50 | 6.72 | 32.24 | 6.16 | 25.30 | 50 | 6.72 | 32.24 | 25.30 | 268 | 0.16 |
| 75 | 6.47 | 32.43 | 5.90 | 25.49 | 75 | 6.47 | 32.43 | 25.49 | 251 | 0.23 |
| 100 | 6.10 | 32.61 | 5.76 | 25.67 | 100 | 6.10 | 32.61 | 25.67 | 234 | 0.29 |

77

HMCS OSHAWA; August 7, 1958; 2235 GCT; 58°10'N, 149°01.5'W; sounding, 95 fm; wind, 290°, 15 kt; weather, cloudy; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.20 | 32.50 | - | 24.64 | 0 | 12.20 | 32.50 | 24.64 | 331 | 0.00 |
| 10 | 11.56 | 32.55 | 6.87 | 24.79 | 10 | 11.56 | 32.55 | 24.79 | 317 | 0.03 |
| 19 | 9.46 | 32.63 | 6.85 | 25.22 | 20 | 9.19 | 32.64 | 25.27 | 272 | 0.06 |
| 29 | 6.46 | 32.74 | 6.85 | 25.73 | 30 | 6.26 | 32.74 | 25.76 | 225 | 0.09 |
| 48 | 5.78 | 32.78 | 6.73 | 25.85 | 50 | 5.72 | 32.78 | 25.86 | 216 | 0.13 |
| 73 | 5.22 | 32.88 | 6.42 | 25.99 | 75 | 5.20 | 32.91 | 26.02 | 201 | 0.18 |
| 97 | 5.12 | 33.49 | 3.82 | 26.49 | 100 | 5.11 | 33.53 | 26.52 | 153 | 0.23 |
| 121 | 5.10 | 33.58 | 3.34 | 26.56 | | | | | | |
| 145 | 5.06 | 33.61 | 3.24 | 26.59 | | | | | | |

82

HMCS OSHAWA; August 8, 1958; 0955 GCT; 56°58.5'N, 150°58.5'W; sounding, 450 fm; wind, 240°, 5 kt; weather, partly cloudy; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.20 | 32.30 | - | 24.66 | 0 | 11.20 | 32.30 | 24.66 | 329 | 0.00 |
| 10 | 10.62 | 32.31 | 7.18 | 24.77 | 10 | 10.62 | 32.31 | 24.77 | 319 | 0.03 |
| 20 | 10.05 | 32.29 | 6.96 | 24.85 | 20 | 10.05 | 32.29 | 24.85 | 311 | 0.06 |
| 30 | (9.06)a) | 32.44 | 6.64 | (25.13) | 30 | 9.06 | 32.44 | 25.13 | 285 | 0.09 |
| 49 | 6.01 | 32.67 | 6.60 | 25.73 | 50 | 5.92 | 32.67 | 25.75 | 226 | 0.15 |
| 74 | 5.60 | 32.74 | 6.66 | 25.84 | 75 | 5.58 | 32.75 | 25.85 | 217 | 0.20 |
| 99 | 4.90 | 33.02 | 5.69 | 26.14 | 100 | 4.88 | 33.03 | 26.15 | 188 | 0.25 |
| 123 | 4.73 | 33.26 | 5.41 | 26.35 | 150 | 4.71 | 33.57 | 26.60 | 146 | 0.34 |
| 148 | 4.70 | 33.55 | 5.34 | 26.58 | 200 | 4.53 | 33.83 | 26.82 | 125 | 0.40 |
| 172 | 4.86 | 33.75 | 2.71 | 26.73 | 250 | 4.18 | 33.94 | 26.95 | 114 | 0.46 |
| 197 | 4.56 | 33.82 | 2.27 | 26.81 | 300 | 4.12 | 33.99 | 26.99 | 110 | 0.52 |
| 246 | 4.20 | 33.93 | 1.21 | 26.94 | 400 | 3.99 | 34.09 | 27.09 | 102 | 0.63 |
| 295 | 4.12 | 33.98 | 0.90 | 26.99 | 500 | 3.84 | 34.15 | 27.15 | 96 | 0.73 |
| 345 | 4.14 | 34.03 | 0.72 | 27.02 | 600 | 3.62 | 34.20 | 27.21 | 91 | 0.82 |
| 394 | 4.00 | 34.09 | 0.63 | 27.08 | | | | | | |
| 492 | 3.85 | 34.15 | 0.49 | 27.15 | | | | | | |
| 591 | 3.64 | 34.20 | 0.40 | 27.21 | | | | | | |
| 690 | 3.48 | 34.26 | 0.39 | 27.27 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 83 | HMCS OSHAWA; August 8, 1958; 1130 GCT; 57°10'N, 151°10'W; sounding, 260 fm; wind, 220°, 8 kt; weather, clear; sea, smooth. | | | | | | | | | |
| 0 | 11.30 | 32.16 | - | 24.54 | 0 | 11.30 | 32.16 | 24.54 | 341 | 0.00 |
| 10 | 11.33 | 32.15 | 6.96 | 24.52 | 10 | 11.33 | 32.15 | 24.52 | 342 | 0.03 |
| 20 | 11.13 | 32.18 | 6.85 | 24.58 | 20 | 11.13 | 32.18 | 24.58 | 337 | 0.07 |
| 30 | 8.84 | 32.45 | 6.83 | 25.17 | 30 | 8.84 | 32.45 | 25.17 | 281 | 0.10 |
| 50 | 6.52 | 32.62 | 6.62 | 25.63 | 50 | 6.52 | 32.62 | 25.63 | 237 | 0.15 |
| 75 | 5.81 | 32.72 | 6.41 | 25.80 | 75 | 5.81 | 32.72 | 25.80 | 222 | 0.21 |
| 100 | 5.32 | 32.91 | 5.90 | 26.00 | 100 | 5.32 | 32.91 | 26.00 | 202 | 0.26 |
| 125 | 5.04 | 33.19 | 5.12 | 26.26 | 150 | 5.00 | 33.51 | 26.51 | 154 | 0.35 |
| 150 | 5.00 | 33.51 | 3.98 | 26.51 | 200 | 4.58 | 33.75 | 26.76 | 132 | 0.42 |
| 175 | 5.07 | 33.66 | 3.33 | 26.62 | 250 | 4.40 | 33.90 | 26.89 | 119 | 0.49 |
| 200 | 4.58 | 33.75 | 2.87 | 26.76 | 300 | 4.28 | 33.99 | 26.97 | 112 | 0.55 |
| 249 | 4.40 | 33.90 | 1.78 | 26.89 | | | | | | |
| 299 | 4.28 | 33.98 | 1.22 | 26.97 | | | | | | |
| 349 | 4.26 | 33.99 | 0.88 | 26.98 | | | | | | |
| 398 | 4.04 | 34.05 | 0.72 | 27.05 | | | | | | |
| 84 | HMCS OSHAWA; August 8, 1958; 1315 GCT; 57°12.5'N, 151°16.5'W; sounding, 70 fm; wind, calm; weather, clear; sea, calm. | | | | | | | | | |
| 0 | 10.70 | 32.05 | - | 24.55 | 0 | 10.70 | 32.05 | 24.55 | 339 | 0.00 |
| 10 | 10.40 | 32.03 | 7.27 | 24.59 | 10 | 10.40 | 32.03 | 24.59 | 336 | 0.03 |
| 20 | 9.94 | 32.03 | 7.27 | 24.67 | 20 | 9.94 | 32.03 | 24.67 | 328 | 0.07 |
| 30 | 9.55 | 32.08 | 6.74 | 24.77 | 30 | 9.55 | 32.08 | 24.77 | 319 | 0.10 |
| 50 | 7.42 | 32.33 | 6.05 | 25.28 | 50 | 7.42 | 32.33 | 25.28 | 271 | 0.16 |
| 75 | 6.57 | 32.55 | 5.62 | 25.57 | 75 | 6.57 | 32.55 | 25.57 | 244 | 0.22 |
| 100 | 5.98 | 32.78 | 5.11 | 25.82 | 100 | 5.98 | 32.78 | 25.82 | 219 | 0.28 |
| 85 | HMCS OSHAWA; August 8, 1958; 1453 GCT; 57°20'N, 151°22'W; sounding, 78 fm; wind, calm; weather, clear; sea, calm. | | | | | | | | | |
| 0 | 10.60 | 32.07 | - | 24.59 | 0 | 10.60 | 32.07 | 24.59 | 336 | 0.00 |
| 10 | 10.12 | 32.07 | 7.28 | 24.67 | 10 | 10.12 | 32.07 | 24.67 | 328 | 0.03 |
| 20 | 9.67 | 32.12 | 6.75 | 24.78 | 20 | 9.67 | 32.12 | 24.78 | 318 | 0.07 |
| 30 | 8.64 | 32.23 | 6.31 | 25.03 | 30 | 8.64 | 32.23 | 25.03 | 295 | 0.10 |
| 50 | 7.54 | 32.32 | 5.72 | 25.26 | 50 | 7.54 | 32.32 | 25.26 | 273 | 0.15 |
| 75 | 7.26 | 32.41 | 5.69 | 25.37 | 75 | 7.26 | 32.41 | 25.37 | 263 | 0.22 |
| 100 | 6.52 | 32.56 | 5.71 | 25.58 | 100 | 6.52 | 32.56 | 25.58 | 242 | 0.28 |
| 125 | 6.04 | 32.72 | 5.58 | 25.77 | | | | | | |
| 86 | HMCS OSHAWA; August 8, 1958; 1634 GCT; 57°28'N, 151°32'W; sounding, 69 fm; wind, 210°, 5 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 10.90 | 32.06 | - | 24.53 | 0 | 10.90 | 32.06 | 24.53 | 342 | 0.00 |
| 10 | 10.66 | 32.04 | 7.24 | 24.55 | 10 | 10.66 | 32.04 | 24.55 | 339 | 0.03 |
| 20 | 10.04 | 32.10 | 6.98 | 24.71 | 20 | 10.04 | 32.10 | 24.71 | 325 | 0.07 |
| 30 | 8.30 | (32.18)a) | 6.13 | (25.04) | 30 | 8.30 | 32.18 | 25.04 | 294 | 0.10 |
| 50 | 7.45 | 32.36 | 5.73 | 25.30 | 50 | 7.45 | 32.36 | 25.30 | 269 | 0.16 |
| 75 | 7.17 | 32.42 | 5.48 | 25.39 | 75 | 7.17 | 32.42 | 25.39 | 261 | 0.22 |
| 100 | 7.00 | 32.47 | 5.33 | 25.45 | 100 | 7.00 | 32.47 | 25.45 | 255 | 0.29 |
| 87 | HMCS OSHAWA; August 8, 1958; 1853 GCT; 57°36'N, 151°49'W; sounding, 81 fm; wind, calm; weather, cloudy; sea, calm. | | | | | | | | | |
| 0 | 9.80 | 32.08 | - | 24.73 | 0 | 9.80 | 32.08 | 24.73 | 322 | 0.00 |
| 10 | 9.61 | 32.07 | 7.73 | 24.75 | 10 | 9.61 | 32.07 | 24.75 | 320 | 0.03 |
| 20 | 9.47 | 32.06 | 7.57 | 24.77 | 20 | 9.47 | 32.06 | 24.77 | 319 | 0.06 |
| 30 | 9.24 | 32.09 | 6.88 | 24.82 | 30 | 9.24 | 32.09 | 24.82 | 314 | 0.10 |
| 50 | 8.52 | 32.19 | 6.31 | 25.02 | 50 | 8.52 | 32.19 | 25.02 | 296 | 0.16 |
| 75 | 8.04 | 32.28 | 5.96 | 25.16 | 75 | 8.04 | 32.28 | 25.16 | 283 | 0.23 |
| 100 | 7.32 | 32.42 | 5.48 | 25.37 | 100 | 7.32 | 32.42 | 25.37 | 263 | 0.30 |
| 125 | 6.83 | 32.55 | 5.06 | 25.53 | | | | | | |

a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

88

HMCS OSHAWA; August 10, 1958; 0023 GCT; 55°55'N, 154°52'W; sounding, 140 fm; wind, 290°, 30 kt; weather, partly cloudy; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.60 | 32.04 | - | 24.56 | 0 | 10.60 | 32.04 | 24.56 | 338 | 0.00 |
| 10 | 10.60 | 32.02 | 6.80 | 24.55 | 10 | 10.60 | 32.02 | 24.55 | 340 | 0.03 |
| 20 | 10.62 | 32.02 | 6.79 | 24.54 | 20 | 10.62 | 32.02 | 24.54 | 340 | 0.07 |
| 30 | 10.00 | 32.05 | 6.69 | 24.67 | 30 | 10.00 | 32.05 | 24.67 | 329 | 0.10 |
| 49 | 7.08 | 32.39 | 6.05 | 25.38 | 50 | 6.98 | 32.41 | 25.40 | 259 | 0.16 |
| 74 | 6.21 | 32.53 | 6.08 | 25.60 | 75 | 6.18 | 32.53 | 25.60 | 240 | 0.22 |
| 99 | 5.64 | 32.71 | 5.80 | 25.81 | 100 | 5.62 | 32.72 | 25.82 | 220 | 0.28 |
| 124 | 5.39 | 33.09 | 4.78 | 26.14 | 150 | 5.36 | 33.34 | 26.34 | 171 | 0.38 |
| 148 | 5.36 | 33.32 | 4.13 | 26.33 | | | | | | |
| 173 | 5.32 | 33.53 | 3.55 | 26.50 | | | | | | |
| 198 | 5.01 | 33.66 | 3.11 | 26.64 | | | | | | |

89

HMCS OSHAWA; August 10, 1958; 0338 GCT; 55°42.5'N, 154°33'W; sounding, 510 fm; wind, 300°, 30 kt; weather, partly cloudy; sea, very rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.70 | 32.25 | - | 24.71 | 0 | 10.70 | 32.25 | 24.71 | 324 | 0.00 |
| 10 | 10.52 | 32.23 | 6.62 | 24.73 | 10 | 10.52 | 32.23 | 24.73 | 323 | 0.03 |
| 20 | 10.56 | 32.23 | 6.68 | 24.72 | 20 | 10.56 | 32.23 | 24.72 | 324 | 0.06 |
| 30 | (9.90)a) | 32.24 | 6.63 | (24.83) | 30 | 9.90 | 32.24 | 24.83 | 313 | 0.10 |
| 50 | 6.51 | 32.44 | 6.08 | 25.49 | 50 | 6.51 | 32.44 | 25.49 | 250 | 0.15 |
| 75 | 6.17 | 32.52 | 6.07 | 25.60 | 75 | 6.17 | 32.52 | 25.60 | 241 | 0.22 |
| 100 | 5.89 | 32.61 | 5.99 | 25.70 | 100 | 5.89 | 32.61 | 25.70 | 231 | 0.28 |
| 125 | 5.71 | 32.69 | 5.76 | 25.79 | 150 | 5.47 | 32.84 | 25.93 | 210 | 0.39 |
| 149 | 5.48 | 32.83 | 5.68 | 25.92 | 200 | 5.12 | 33.49 | 26.48 | 158 | 0.48 |
| 174 | 5.26 | 33.20 | 4.48 | 26.25 | 250 | 5.12 | 33.74 | 26.68 | 139 | 0.55 |
| 199 | 5.12 | (33.48)a) | 3.42 | (26.48) | 300 | 4.88 | 33.90 | 26.84 | 125 | 0.62 |
| 237 | 5.14 | 33.68 | 2.98 | 26.64 | 400 | 4.26 | 33.99 | 26.98 | 113 | 0.74 |
| 284 | 4.99 | 33.86 | 2.13 | 26.80 | 500 | 3.94 | 34.09 | 27.09 | 102 | 0.85 |
| 331 | 4.60 | 33.93 | 1.62 | 26.89 | | | | | | |
| 379 | 4.35 | 33.97 | 1.18 | 26.95 | | | | | | |
| 474 | 4.00 | 34.07 | 0.66 | 27.07 | | | | | | |
| 568 | 3.86 | 34.14 | 0.54 | 27.14 | | | | | | |

90

HMCS OSHAWA; August 10, 1958; 0653 GCT; 55°30'N, 154°16'W; sounding, 900 fm; wind, 310°, 18 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.80 | 32.25 | - | 24.69 | 0 | 10.80 | 32.25 | 24.69 | 326 | 0.00 |
| 10 | 10.82 | 32.23 | 6.64 | 24.67 | 10 | 10.82 | 32.23 | 24.67 | 328 | 0.03 |
| 20 | 10.87 | 32.23 | 6.69 | 24.67 | 20 | 10.87 | 32.23 | 24.67 | 329 | 0.07 |
| 30 | 10.78 | 32.24 | 6.64 | 24.69 | 30 | 10.78 | 32.24 | 24.69 | 327 | 0.10 |
| 50 | 6.38 | 32.45 | 6.15 | 25.52 | 50 | 6.38 | 32.45 | 25.52 | 248 | 0.16 |
| 75 | 5.98 | 32.56 | 6.00 | 25.65 | 75 | 5.98 | 32.56 | 25.65 | 235 | 0.22 |
| 100 | 5.71 | 32.67 | 5.94 | 25.77 | 100 | 5.71 | 32.67 | 25.77 | 224 | 0.28 |
| 125 | 5.60 | 32.77 | 5.69 | 25.86 | 150 | 5.49 | 32.93 | 26.00 | 203 | 0.38 |
| 150 | 5.49 | 32.93 | 5.38 | 26.00 | 200 | 5.40 | 33.50 | 26.47 | 159 | 0.47 |
| 175 | 5.52 | 33.22 | 4.36 | 26.22 | 250 | 5.19 | 33.77 | 26.70 | 138 | 0.55 |
| 200 | 5.40 | 33.50 | 3.52 | 26.47 | 300 | 4.38 | 33.81 | 26.83 | 126 | 0.62 |
| 250 | 5.19 | 33.77 | 2.61 | 26.70 | 400 | 4.26 | 33.97 | 26.97 | 114 | 0.74 |
| 300 | 4.38 | 33.81 | 2.27 | 26.83 | 500 | 3.99 | 34.08 | 27.08 | 104 | 0.85 |
| 350 | 4.43 | 33.91 | 1.50 | 26.90 | 600 | 3.81 | 34.17 | 27.16 | 96 | 0.95 |
| 400 | 4.26 | 33.97 | 0.91 | 26.97 | 700 | 3.62 | 34.23 | 27.24 | 90 | 1.04 |
| 500 | 3.99 | 34.08 | 0.47 | 27.08 | 800 | 3.42 | 34.28 | 27.29 | 85 | 1.13 |
| 600 | 3.81 | 34.17 | 0.48 | 27.16 | 1000 | 3.09 | 34.35 | 27.38 | 77 | 1.29 |
| 800 | 3.42 | 34.28 | 0.44 | 27.29 | | | | | | |
| 1050 | 3.01 | 34.37 | - | 27.40 | | | | | | |

a) Value interpolated by three-point parabolic method.

POG

NP-58-3

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 91 | HMCS OSHAWA; August 10, 1958; 0945 GCT; 55°20'N, 153°54.5'W; sounding, missing; wind, 290°, 20 kt; weather, partly cloudy; sea, high. | | | | | | | | | |
| 0 | 10.40 | 32.29 | - | 24.79 | 0 | 10.40 | 32.29 | 24.79 | 317 | 0.00 |
| 10 | 10.36 | 32.28 | 6.70 | 24.79 | 10 | 10.36 | 32.28 | 24.79 | 317 | 0.03 |
| 19 | (9.86)a) | 32.26 | 6.64 | (24.86) | 20 | 9.79 | 32.27 | 24.88 | 309 | 0.06 |
| 29 | 8.97 | 32.31 | 6.47 | 25.04 | 30 | 8.86 | 32.32 | 25.06 | 291 | 0.09 |
| 49 | 6.14 | 32.43 | 5.91 | 25.53 | 50 | 6.06 | 32.44 | 25.55 | 245 | 0.15 |
| 73 | 6.01 | 32.55 | 6.14 | 25.64 | 75 | 5.99 | 32.56 | 25.65 | 236 | 0.21 |
| 97 | 5.63 | 32.69 | 5.88 | 25.80 | 100 | 5.60 | 32.71 | 25.81 | 220 | 0.26 |
| 122 | 5.52 | 32.82 | 5.62 | 25.91 | 150 | 5.54 | 32.98 | 26.04 | 200 | 0.37 |
| 146 | 5.51 | 32.96 | 5.24 | 26.02 | 200 | 5.71 | 33.39 | 26.34 | 172 | 0.46 |
| 170 | 5.87 | 33.15 | 4.46 | 26.13 | 250 | 5.11 | 33.66 | 26.62 | 145 | 0.54 |
| 200 | 5.71 | 33.39 | 3.80 | 26.34 | 300 | 5.05 | 33.87 | 26.80 | 129 | 0.61 |
| 250 | 5.11 | 33.66 | 3.05 | 26.62 | 400 | 4.38 | 33.97 | 26.95 | 115 | 0.74 |
| 300 | 5.05 | 33.87 | 2.23 | 26.80 | 500 | 4.10 | 34.05 | 27.04 | 107 | 0.85 |
| 350 | 4.66 | 33.89 | 1.75 | 26.86 | 600 | 3.88 | 34.12 | 27.12 | 100 | 0.95 |
| 400 | 4.38 | 33.97 | 1.16 | 26.95 | 700 | 3.69 | 34.19 | 27.20 | 94 | 1.05 |
| 500 | 4.10 | 34.05 | 0.74 | 27.04 | 800 | 3.52 | 34.26 | 27.26 | 88 | 1.14 |
| 600 | 3.88 | 34.12 | 0.64 | 27.12 | | | | | | |
| 800 | 3.52 | 34.26 | 0.53 | 27.26 | | | | | | |
| 950 | 3.28 | 34.32 | 0.50 | 27.34 | | | | | | |
| 92 | HMCS OSHAWA; August 10, 1958; 1403 GCT; 54°58.5'N, 153°30'W; sounding, missing; wind, 020°, 20 kt; weather, partly cloudy; sea, rough. | | | | | | | | | |
| 0 | 10.50 | 32.27 | - | 24.76 | 0 | 10.50 | 32.27 | 24.76 | 320 | 0.00 |
| 10 | 10.52 | 32.28 | 6.74 | 24.77 | 10 | 10.52 | 32.28 | 24.77 | 319 | 0.03 |
| 19 | 10.57 | 32.25 | 6.66 | 24.73 | 20 | 10.37 | 32.26 | 24.77 | 319 | 0.06 |
| 29 | 6.80 | 32.48 | 6.40 | 25.49 | 30 | 6.54 | 32.50 | 25.54 | 246 | 0.09 |
| 49 | 5.74 | 32.60 | 6.14 | 25.72 | 50 | 5.71 | 32.61 | 25.72 | 228 | 0.14 |
| 73 | 5.63 | 32.69 | 5.98 | 25.80 | 75 | 5.62 | 32.70 | 25.80 | 221 | 0.20 |
| 97 | 5.54 | 32.75 | 5.78 | 25.86 | 100 | 5.54 | 32.76 | 25.86 | 216 | 0.25 |
| 122 | 5.61 | 32.87 | 5.42 | 25.94 | 150 | 5.70 | 33.02 | 26.05 | 199 | 0.36 |
| 146 | 5.68 | 33.00 | 4.93 | 26.03 | 200 | 5.64 | 33.36 | 26.32 | 173 | 0.45 |
| 170 | 5.82 | 33.12 | 4.59 | 26.11 | 250 | 5.67 | 33.59 | 26.50 | 157 | 0.53 |
| 195 | 5.66 | 33.33 | 3.98 | 26.29 | 300 | 5.56 | 33.74 | 26.63 | 145 | 0.61 |
| 244 | 5.68 | 33.56 | 3.23 | 26.48 | 400 | 4.54 | 33.91 | 26.88 | 122 | 0.74 |
| 292 | 5.59 | 33.71 | 2.86 | 26.61 | 500 | 4.19 | 34.01 | 27.00 | 111 | 0.86 |
| 342 | 5.32 | 33.84 | 2.35 | 26.74 | 600 | 3.99 | 34.08 | 27.08 | 104 | 0.97 |
| 391 | 4.63 | 33.90 | 1.77 | 26.87 | 700 | 3.82 | 34.15 | 27.15 | 98 | 1.07 |
| 489 | 4.22 | 34.00 | 0.96 | 26.99 | 800 | 3.67 | 34.21 | 27.22 | 92 | 1.17 |
| 586 | 4.02 | 34.07 | 0.65 | 27.07 | 1000 | 3.28 | 34.32 | 27.34 | 82 | 1.34 |
| 781 | 3.70 | 34.20 | 0.46 | 27.20 | | | | | | |
| 1028 | 3.22 | 34.33 | 0.43 | 27.35 | | | | | | |
| 93 | HMCS OSHAWA; August 10, 1958; 1822 GCT; 54°33.5'N, 153°06'W; sounding, missing; wind, 330°, 15 kt; weather, fog; sea, slight. | | | | | | | | | |
| 0 | 10.50 | 32.23 | - | 24.73 | 0 | 10.50 | 32.23 | 24.73 | 322 | 0.00 |
| 10 | 10.49 | 32.22 | 6.88 | 24.72 | 10 | 10.49 | 32.22 | 24.72 | 323 | 0.03 |
| 20 | 10.51 | 32.22 | 6.79 | 24.72 | 20 | 10.51 | 32.22 | 24.72 | 324 | 0.06 |
| 30 | 7.08 | 32.40 | 5.81 | 25.39 | 30 | 7.08 | 32.40 | 25.39 | 260 | 0.09 |
| 50 | 6.05 | 32.47 | 5.78 | 25.58 | 50 | 6.05 | 32.47 | 25.58 | 242 | 0.14 |
| 75 | 5.92 | 32.57 | 5.91 | 25.67 | 75 | 5.92 | 32.57 | 25.67 | 234 | 0.20 |
| 100 | 5.58 | 32.70 | 5.89 | 25.81 | 100 | 5.58 | 32.70 | 25.81 | 221 | 0.26 |
| 125 | 5.51 | 32.91 | 5.29 | 25.99 | 150 | 5.61 | 33.28 | 26.26 | 178 | 0.36 |
| 150 | 5.61 | 33.28 | 4.17 | 26.26 | 200 | 5.38 | 33.70 | 26.62 | 145 | 0.44 |
| 175 | 5.69 | 33.49 | 3.57 | 26.42 | 250 | 4.91 | 33.84 | 26.79 | 129 | 0.51 |
| 200 | 5.38 | 33.70 | 2.91 | 26.62 | 300 | 4.52 | 33.92 | 26.90 | 119 | 0.58 |
| 250 | 4.91 | 33.84 | 2.35 | 26.79 | 400 | 4.20 | 34.02 | 27.01 | 109 | 0.69 |
| 300 | 4.52 | 33.92 | 1.59 | 26.90 | 500 | 3.97 | 34.10 | 27.10 | 102 | 0.80 |
| 350 | 4.41 | 33.97 | 1.18 | 26.94 | 600 | 3.77 | 34.17 | 27.17 | 96 | 0.90 |
| 400 | 4.20 | 34.02 | 0.91 | 27.01 | 700 | 3.56 | 34.23 | 27.24 | 89 | 0.99 |
| 500 | 3.97 | 34.10 | 0.56 | 27.10 | 800 | 3.35 | 34.29 | 27.31 | 83 | 1.08 |
| 600 | 3.77 | 34.17 | 0.52 | 27.17 | | | | | | |
| 800 | 3.35 | 34.29 | 0.43 | 27.31 | | | | | | |



a) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

94

HMCS OSHAWA; August 10, 1958; 2249 GCT; 54°14.5'N, 152°32.5'W; sounding, 2150 fm; wind, 340°, 10 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.50 | 32.28 | - | 24.59 | 0 | 11.50 | 32.28 | 24.59 | 336 | 0.00 |
| 10 | 11.50 | 32.27 | 6.59 | 24.58 | 10 | 11.50 | 32.27 | 24.58 | 337 | 0.03 |
| 19 | 11.43 | 32.27 | 6.63 | 24.60 | 20 | 11.33 | 32.28 | 24.62 | 333 | 0.07 |
| 29 | 9.58 | 32.43 | 6.55 | 25.04 | 30 | 9.40 | 32.44 | 25.08 | 290 | 0.10 |
| 50 | 5.75 | 32.68 | 6.96 | 25.78 | 50 | 5.75 | 32.68 | 25.78 | 223 | 0.15 |
| 74 | 4.95 | 32.81 | - | 25.97 | 75 | 4.93 | 32.83 | 25.98 | 204 | 0.20 |
| 99 | 4.53 | 33.23 | 5.00 | 26.35 | 100 | 4.53 | 33.25 | 26.36 | 168 | 0.25 |
| 124 | 4.82 | 33.62 | 3.33 | 26.63 | 150 | 4.54 | 33.79 | 26.79 | 128 | 0.33 |
| 149 | 4.54 | 33.78 | 2.43 | 26.78 | 200 | 4.32 | 33.88 | 26.89 | 119 | 0.39 |
| 174 | 4.59 | 33.84 | 2.02 | 26.82 | 250 | 4.21 | 33.98 | 26.97 | 111 | 0.45 |
| 197 | 4.34 | 33.88 | 1.70 | 26.88 | 300 | 4.12 | 34.03 | 27.02 | 107 | 0.50 |
| 246 | 4.22 | 33.97 | 1.00 | 26.97 | 400 | 4.03 | 34.11 | 27.09 | 101 | 0.61 |
| 296 | 4.13 | 34.02 | 0.75 | 27.02 | 500 | 3.70 | 34.19 | 27.20 | 92 | 0.70 |
| 345 | 4.05 | 34.06 | 0.55 | 27.05 | 600 | 3.46 | 34.26 | 27.27 | 86 | 0.79 |
| 394 | 4.04 | 34.10 | 0.56 | 27.09 | 700 | 3.28 | 34.31 | 27.33 | 81 | 0.88 |
| 494 | 3.72 | 34.19 | 0.44 | 27.19 | 800 | 3.13 | 34.35 | 27.37 | 77 | 0.96 |
| 593 | 3.48 | 34.25 | 0.49 | 27.27 | 1000 | 2.75 | 34.41 | 27.46 | 69 | 1.11 |
| 791 | 3.15 | 34.34 | 0.45 | 27.37 | | | | | | |
| 990 | 2.76 | 34.41 | 0.77 | 27.45 | | | | | | |
| 1188 | 2.56 | 34.46 | 0.63 | 27.52 | | | | | | |

95

HMCS OSHAWA; August 11, 1958; 0239 GCT; 53°57'N, 152°06.5'W; sounding, 2450 fm; wind, 020°, 10 kt; weather, cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 11.30 | 32.28 | - | 24.63 | 0 | 11.30 | 32.28 | 24.63 | 332 | 0.00 |
| 10 | 11.26 | 32.26 | 6.71 | 24.62 | 10 | 11.26 | 32.26 | 24.62 | 333 | 0.03 |
| 20 | 11.16 | 32.26 | 6.64 | 24.64 | 20 | 11.16 | 32.26 | 24.64 | 332 | 0.07 |
| 30 | 10.88 | 32.29 | 6.59 | 24.71 | 30 | 10.88 | 32.29 | 24.71 | 325 | 0.10 |
| 50 | 5.52 | 32.71 | 6.63 | 25.83 | 50 | 5.52 | 32.71 | 25.83 | 218 | 0.16 |
| 75 | 4.74 | 32.89 | 6.29 | 26.06 | 75 | 4.74 | 32.89 | 26.06 | 197 | 0.21 |
| 100 | 4.69 | 33.31 | 4.54 | 26.39 | 100 | 4.69 | 33.31 | 26.39 | 165 | 0.25 |
| 125 | 4.65 | 33.56 | 3.49 | 26.60 | 150 | 4.60 | 33.79 | 26.78 | 129 | 0.33 |
| 150 | 4.60 | 33.79 | 2.35 | 26.78 | 200 | 4.21 | 33.95 | 26.95 | 113 | 0.39 |
| 175 | 4.51 | 33.88 | 1.71 | 26.86 | 250 | 4.11 | 34.02 | 27.02 | 107 | 0.44 |
| 200 | 4.21 | 33.95 | 1.21 | 26.95 | 300 | 4.02 | 34.06 | 27.06 | 103 | 0.50 |
| 248 | 4.11 | 34.02 | 0.80 | 27.02 | 400 | 3.83 | 34.15 | 27.15 | 96 | 0.60 |
| 297 | 4.02 | 34.06 | 0.65 | 27.06 | 500 | 3.64 | 34.21 | 27.22 | 90 | 0.69 |
| 347 | 4.00 | 34.11 | 0.54 | 27.10 | 600 | 3.43 | 34.26 | 27.28 | 85 | 0.78 |
| 396 | 3.84 | 34.14 | 0.48 | 27.14 | 700 | 3.24 | 34.30 | 27.33 | 80 | 0.86 |
| 495 | 3.65 | 34.21 | 0.41 | 27.22 | 800 | 3.06 | 34.34 | 27.38 | 76 | 0.94 |
| 595 | 3.44 | 34.26 | 0.40 | 27.27 | 1000 | 2.73 | 34.42 | 27.47 | 69 | 1.09 |
| 794 | 3.07 | 34.34 | 0.43 | 27.37 | | | | | | |
| 992 | 2.74 | 34.41 | 0.52 | 27.46 | | | | | | |
| 1189 | 2.48 | 34.46 | 0.66 | 27.53 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **96** | HMCS OSHAWA; August 11, 1958; 1154 GCT; 52°48'N, 150°26.5'W; sounding, 2400 fm; wind, 010°, 15 kt; weather, drizzle; sea, slight.[a] | | | | | | | | | |
| 0 | 10.70 | 32.66 | - | 25.03 | 0 | 10.70 | 32.66 | 25.03 | 294 | 0.00 |
| 10 | 10.44 | 32.65 | 6.62 | 25.07 | 10 | 10.44 | 32.65 | 25.07 | 290 | 0.03 |
| 20 | 10.48 | 32.65 | 6.57 | 25.06 | 20 | 10.48 | 32.65 | 25.06 | 291 | 0.06 |
| 30 | 10.30 | 32.66 | 6.69 | 25.09 | 30 | 10.30 | 32.66 | 25.09 | 288 | 0.09 |
| 50 | 6.52 | 32.75 | 7.13 | 25.74 | 50 | 6.52 | 32.75 | 25.74 | 227 | 0.14 |
| 75 | 5.36 | 32.79 | 7.19 | 25.91 | 75 | 5.36 | 32.79 | 25.91 | 211 | 0.20 |
| 100 | 4.38 | 33.10 | 5.69 | 26.26 | 100 | 4.38 | 33.10 | 26.26 | 178 | 0.24 |
| 125 | 3.94 | 33.69 | 2.52 | 26.78 | 150 | 3.94 | 33.85 | 26.90 | 117 | 0.32 |
| 149 | 3.94 | 33.85 | 1.58 | 26.90 | 200 | 3.85 | 33.96 | 27.00 | 108 | 0.38 |
| 174 | 4.06 | 33.90 | 1.11 | 26.93 | 250 | 3.84 | 34.00 | 27.03 | 106 | 0.43 |
| 195 | 3.88 | 33.95 | 0.87 | 26.99 | 300 | 3.80 | 34.06 | 27.08 | 102 | 0.48 |
| 244 | 3.85 | 34.00 | 0.65 | 27.03 | 400 | 3.65 | 34.14 | 27.16 | 95 | 0.58 |
| 293 | 3.80 | 34.05 | 0.54 | 27.07 | 500 | 3.52 | 34.20 | 27.22 | 90 | 0.67 |
| 342 | 3.80 | 34.10 | 0.48 | 27.11 | | | | | | |
| 391 | 3.67 | 34.14 | 0.50 | 27.15 | | | | | | |
| 489 | 3.54 | 34.19 | 0.50 | 27.21 | | | | | | |
| 586 | 3.35 | 34.25 | 0.47 | 27.28 | | | | | | |
| **97** | HMCS OSHAWA; August 11, 1958; 2021 GCT; 51°38'N, 148°59.5'W; sounding, missing; wind, 050°, 8 kt; weather, drizzle; sea, smooth.[b] | | | | | | | | | |
| 0 | 11.30 | 32.60 | - | 24.88 | 0 | 11.30 | 32.60 | 24.88 | 308 | 0.00 |
| 10 | 11.32 | 32.59 | 6.51 | 24.87 | 10 | 11.32 | 32.59 | 24.87 | 309 | 0.03 |
| 20 | 11.35 | 32.59 | 6.52 | 24.86 | 20 | 11.35 | 32.59 | 24.86 | 310 | 0.06 |
| 30 | (10.72)c) | 32.59 | 6.46 | (24.97) | 30 | 10.72 | 32.59 | 24.97 | 300 | 0.09 |
| 50 | 7.48 | 32.66 | 7.24 | 25.54 | 50 | 7.48 | 32.66 | 25.54 | 246 | 0.15 |
| 75 | 6.04 | 32.71 | 7.02 | 25.76 | 75 | 6.04 | 32.71 | 25.76 | 225 | 0.21 |
| 100 | 5.18 | 32.98 | 6.01 | 26.08 | 100 | 5.18 | 32.98 | 26.08 | 195 | 0.26 |
| 125 | 5.33 | 33.61 | 3.14 | 26.56 | 150 | 5.60 | 33.81 | 26.68 | 139 | 0.34 |
| 149 | 5.59 | 33.80 | 2.11 | 26.68 | 200 | 5.18 | 33.89 | 26.80 | 128 | 0.41 |
| 174 | 5.62 | 33.87 | 1.80 | 26.73 | 250 | 4.71 | 33.91 | 26.87 | 122 | 0.47 |
| 195 | 5.25 | 33.89 | 1.72 | 26.79 | 300 | 4.35 | 33.94 | 26.93 | 116 | 0.53 |
| 244 | 4.76 | 33.91 | 1.67 | 26.86 | 400 | 4.03 | 34.03 | 27.04 | 107 | 0.65 |
| 292 | 4.39 | 33.94 | 1.57 | 26.92 | 500 | 3.82 | 34.12 | 27.12 | 99 | 0.75 |
| 341 | 4.23 | 33.98 | 1.22 | 26.97 | 600 | 3.60 | 34.19 | 27.20 | 92 | 0.85 |
| 390 | 4.06 | 34.02 | 0.95 | 27.03 | 700 | 3.40 | 34.25 | 27.27 | 86 | 0.94 |
| 487 | 3.85 | 34.11 | 0.75 | 27.11 | | | | | | |
| 585 | 3.63 | 34.17 | 0.58 | 27.19 | | | | | | |
| 780 | 3.26 | 34.30 | 0.48 | 27.32 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 22.1; 10, 22.6; 20, 23.2; 30, 22.8; 50, 33.4; 75, 36.8; 100, 47.7; 149, 80.2; 195, 90.8; 293, 101.0; 391, 115.0; 586, 125.0 µg at/L.

b) The following silicate values were obtained for this station: 10 m, 21.6; 30, 20.7; 50, 24.0; 75, 26.0; 100, 36.8; 149, 60.9; 195, 67.2 µg at/L.

c) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

98

HMCS OSHAWA; August 12, 1958; 0637 GCT; 50°15'N, 147°20'W; sounding, 2320 fm; wind, 340°, 8 kt; weather, cloudy; sea, smooth.[a]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.40 | 32.58 | - | 24.66 | 0 | 12.40 | 32.58 | 24.66 | 329 | 0.00 |
| 10 | 12.01 | 32.55 | 6.44 | 24.71 | 10 | 12.01 | 32.55 | 24.71 | 324 | 0.03 |
| 20 | 11.98 | 32.55 | 6.50 | 24.72 | 20 | 11.98 | 32.55 | 24.72 | 324 | 0.06 |
| 30 | 11.86 | 32.56 | 6.50 | 24.74 | 30 | 11.86 | 32.56 | 24.74 | 322 | 0.10 |
| 50 | 6.80 | 32.85 | 7.17 | 25.78 | 50 | 6.80 | 32.85 | 25.78 | 224 | 0.15 |
| 75 | 6.22 | 32.93 | 7.08 | 25.92 | 75 | 6.22 | 32.93 | 25.92 | 210 | 0.21 |
| 100 | 5.35 | 32.95 | 6.99 | 26.03 | 100 | 5.35 | 32.95 | 26.03 | 200 | 0.26 |
| 125 | 4.58 | 33.40 | 5.35 | 26.48 | 150 | 3.95 | 33.60 | 26.70 | 136 | 0.34 |
| 149 | 3.96 | 33.60 | 4.38 | 26.70 | 200 | 3.62 | 33.78 | 26.88 | 120 | 0.41 |
| 174 | 3.85 | 33.70 | 3.58 | 26.79 | 250 | 3.63 | 33.86 | 26.94 | 114 | 0.47 |
| 200 | 3.62 | 33.78 | 2.89 | 26.88 | 300 | 3.64 | 33.93 | 27.00 | 109 | 0.52 |
| 250 | 3.63 | 33.86 | 2.23 | 26.94 | 400 | 3.68 | 34.06 | 27.09 | 101 | 0.63 |
| 300 | 3.64 | 33.93 | 1.64 | 27.00 | 500 | 3.59 | 34.16 | 27.19 | 93 | 0.73 |
| 349 | 3.72 | 34.00 | 1.23 | 27.04 | 600 | 3.40 | 34.24 | 27.26 | 86 | 0.82 |
| 399 | 3.68 | 34.06 | 0.88 | 27.09 | 700 | 3.23 | 34.29 | 27.32 | 81 | 0.90 |
| 499 | 3.59 | 34.16 | 0.66 | 27.18 | 800 | 3.08 | 34.33 | 27.37 | 78 | 0.98 |
| 595 | 3.41 | 34.24 | 0.65 | 27.26 | 1000 | 2.81 | 34.40 | 27.45 | 70 | 1.13 |
| 793 | 3.09 | 34.33 | 0.58 | 27.36 | | | | | | |
| 991 | 2.82 | 34.40 | 0.54 | 27.45 | | | | | | |
| 1190 | 2.52 | 34.46 | 0.64 | 27.52 | | | | | | |

99

HMCS OSHAWA; August 12, 1958; 1636 GCT; 49°00'N, 145°40'W; sounding, missing; wind, 270°, 10 kt; weather, partly cloudy; sea, smooth.[b]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 12.80 | 32.80 | - | 24.75 | 0 | 12.80 | 32.80 | 24.75 | 321 | 0.00 |
| 10 | 13.05 | 32.78 | 6.34 | 24.69 | 10 | 13.05 | 32.78 | 24.69 | 327 | 0.03 |
| 20 | 12.91 | 32.78 | 6.34 | 24.72 | 20 | 12.91 | 32.78 | 24.72 | 324 | 0.06 |
| 30 | 12.86 | 32.78 | 6.26 | 24.73 | 30 | 12.86 | 32.78 | 24.73 | 323 | 0.10 |
| 50 | 10.79 | 32.82 | 6.81 | 25.14 | 50 | 10.79 | 32.82 | 25.14 | 284 | 0.16 |
| 75 | 6.88 | 32.92 | 7.15 | 25.82 | 75 | 6.88 | 32.92 | 25.82 | 220 | 0.22 |
| 100 | 6.18 | 32.96 | 6.90 | 25.94 | 100 | 6.18 | 32.96 | 25.94 | 208 | 0.28 |
| 124 | 5.99 | 33.14 | 6.51 | 26.11 | 150 | 5.78 | 33.60 | 26.49 | 156 | 0.37 |
| 149 | 5.79 | 33.59 | 5.62 | 26.48 | 200 | 4.95 | 33.75 | 26.71 | 136 | 0.44 |
| 174 | 5.54 | 33.72 | 5.13 | 26.62 | 250 | 4.20 | 33.78 | 26.82 | 126 | 0.51 |
| 195 | 5.05 | 33.75 | 4.87 | 26.70 | 300 | 4.03 | 33.86 | 26.90 | 119 | 0.57 |
| 243 | 4.27 | 33.78 | 3.95 | 26.81 | 400 | 3.89 | 33.99 | 27.02 | 108 | 0.68 |
| 292 | 4.05 | 33.85 | 2.99 | 26.89 | 500 | 3.78 | 34.10 | 27.11 | 100 | 0.79 |
| 341 | 3.99 | 33.91 | 2.28 | 26.94 | 600 | 3.65 | 34.17 | 27.19 | 94 | 0.89 |
| 389 | 3.91 | 33.98 | 1.77 | 27.01 | 700 | 3.49 | 34.24 | 27.25 | 88 | 0.98 |
| 486 | 3.80 | 34.09 | 1.19 | 27.10 | 800 | 3.31 | 34.29 | 27.31 | 83 | 1.06 |
| 584 | 3.67 | 34.16 | 0.90 | 27.18 | 1000 | 2.96 | 34.37 | 27.41 | 74 | 1.22 |
| 780 | 3.34 | 34.28 | 0.64 | 27.30 | | | | | | |
| 1031 | 2.91 | 34.38 | 0.56 | 27.42 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 16.6; 10, 17.0; 20, 17.2; 30, 15.7; 50, 30.9; 75, 29.7; 100, 31.3; 149, 60.0; 200, 76.2; 300, 94.3; 399, 109.0; 595, 128.0; 793, 141.0; 991, 146.0; 1190, 153.0 µg at/L.

b) The following silicate values were obtained for this station: 0 m, 18.8; 10, 18.7; 20, 19.0; 30, 19.0; 50, 21.9; 75, 25.5; 100, 26.8; 149, 39.3; 195, 49.9; 292, 75.3; 389, 92.3; 584, 116.0; 780, 131.0; 1031, 143.0 µg at/L and the following nitrate values: 0 m, 8.3; 10, 8.8; 30, 8.0; 75, 12.8; 100, 14.8; 195, 31.0; 292, 37.4; 584, 40.2; 780, 44.2; 1031, 42.7 µg at/L.

100 HMCS OSHAWA; August 13, 1958; 0155 GCT; 48°58'N, 143°20'W; sounding, 2300 fm; wind, 250°, 10 kt; weather, cloudy; sea, slight.[a)]

| OBSERVED Z m | T °C | S ‰ | $O_2$ ml/L | COMPUTED $\sigma_t$ g/L | INTERPOLATED Z m | T °C | S ‰ | COMPUTED $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 13.20 | 32.76 | - | 24.64 | 0 | 13.20 | 32.76 | 24.64 | 331 | 0.00 |
| 8 | 13.39 | 32.77 | 6.24 | 24.61 | 10 | 13.37 | 32.77 | 24.61 | 334 | 0.03 |
| 18 | 13.04 | 32.75 | 6.34 | 24.66 | 20 | 13.00 | 32.75 | 24.67 | 328 | 0.07 |
| 28 | 12.92 | 32.75 | 6.35 | 24.69 | 30 | 12.72 | 32.76 | 24.74 | 322 | 0.10 |
| 48 | 8.18 | 32.96 | 7.21 | 25.67 | 50 | 7.90 | 32.97 | 25.72 | 229 | 0.16 |
| 73 | 7.22 | 32.97 | 6.80 | 25.81 | 75 | 7.16 | 32.97 | 25.82 | 219 | 0.21 |
| 98 | 6.55 | 32.98 | 6.82 | 25.91 | 100 | 6.51 | 33.00 | 25.93 | 209 | 0.26 |
| 123 | 6.13 | 33.40 | 5.90 | 26.30 | 150 | 5.52 | 33.68 | 26.59 | 148 | 0.36 |
| 148 | 5.56 | 33.66 | 5.28 | 26.57 | 200 | 4.64 | 33.76 | 26.76 | 132 | 0.43 |
| 173 | 5.17 | 33.72 | 4.97 | 26.67 | 250 | 4.24 | 33.81 | 26.84 | 124 | 0.49 |
| 198 | 4.67 | 33.76 | 4.49 | 26.75 | 300 | 4.00 | 33.86 | 26.90 | 118 | 0.55 |
| 250 | 4.24 | 33.81 | 3.57 | 26.84 | 400 | 3.86 | 33.99 | 27.02 | 108 | 0.66 |
| 300 | 4.00 | 33.86 | 2.72 | 26.90 | 500 | 3.80 | 34.10 | 27.11 | 100 | 0.77 |
| 350 | 3.87 | 33.92 | 2.02 | 26.96 | 600 | 3.64 | 34.18 | 27.19 | 93 | 0.87 |
| 400 | 3.86 | 33.99 | 1.59 | 27.02 | 700 | 3.47 | 34.24 | 27.26 | 88 | 0.96 |
| 500 | 3.80 | 34.10 | 1.10 | 27.11 | 800 | 3.28 | 34.29 | 27.31 | 83 | 1.04 |
| 600 | 3.64 | 34.18 | 0.84 | 27.19 | 1000 | 2.97 | 34.37 | 27.41 | 74 | 1.20 |
| 799 | 3.28 | 34.29 | 0.62 | 27.31 | | | | | | |
| 998 | 2.97 | 34.37 | 0.56 | 27.41 | | | | | | |
| 1198 | 2.67 | 34.43 | 0.60 | 27.48 | | | | | | |

101 HMCS OSHAWA; August 13, 1958; 1106 GCT; 48°31'N, 141°23'W; sounding, missing; wind, 200°, 15 kt; weather, overcast; sea, smooth.[b)]

| OBSERVED Z m | T °C | S ‰ | $O_2$ ml/L | COMPUTED $\sigma_t$ g/L | INTERPOLATED Z m | T °C | S ‰ | COMPUTED $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 14.30 | 32.82 | - | 24.46 | 0 | 14.30 | 32.82 | 24.46 | 348 | 0.00 |
| 10 | 14.44 | 32.81 | 6.26 | 24.43 | 10 | 14.44 | 32.81 | 24.43 | 352 | 0.04 |
| 19 | 14.36 | 32.81 | 6.24 | 24.44 | 20 | 14.20 | 32.81 | 24.47 | 347 | 0.07 |
| 29 | 11.47 | 32.82 | 6.91 | 25.02 | 30 | 11.23 | 32.82 | 25.06 | 292 | 0.10 |
| 48 | 8.32 | (32.86)c) | 7.27 | (25.57) | 50 | 8.12 | 32.87 | 25.61 | 240 | 0.16 |
| 72 | 7.56 | 32.96 | 6.90 | 25.76 | 75 | 7.50 | 32.96 | 25.77 | 225 | 0.21 |
| 97 | 7.34 | 32.95 | 6.76 | 25.79 | 100 | 7.30 | 32.96 | 25.79 | 223 | 0.27 |
| 121 | 6.88 | 32.99 | 6.72 | 25.88 | 150 | 6.20 | 33.59 | 26.44 | 162 | 0.37 |
| 145 | 6.27 | 33.53 | 5.68 | 26.38 | 200 | 5.33 | 33.72 | 26.65 | 142 | 0.44 |
| 169 | 6.12 | 33.67 | 5.49 | 26.51 | 250 | 4.70 | 33.78 | 26.77 | 131 | 0.51 |
| 193 | 5.48 | 33.71 | 5.24 | 26.62 | 300 | 4.41 | 33.85 | 26.85 | 124 | 0.58 |
| 250 | 4.70 | 33.78 | 4.26 | 26.77 | 400 | 4.23 | 33.99 | 26.98 | 112 | 0.70 |
| 300 | 4.41 | 33.85 | 3.17 | 26.85 | 500 | 3.98 | 34.10 | 27.10 | 102 | 0.80 |
| 350 | 4.28 | 33.92 | 2.28 | 26.92 | 600 | 3.70 | 34.18 | 27.18 | 94 | 0.90 |
| 400 | 4.23 | 33.99 | 1.85 | 26.98 | 700 | 3.49 | 34.24 | 27.26 | 88 | 1.00 |
| 500 | 3.98 | 34.10 | 1.15 | 27.10 | 800 | 3.35 | 34.30 | 27.32 | 82 | 1.08 |
| 599 | 3.70 | 34.18 | 0.77 | 27.18 | 1000 | 2.98 | 34.37 | 27.41 | 74 | 1.24 |
| 799 | 3.35 | 34.30 | 0.50 | 27.32 | | | | | | |
| 998 | 2.98 | 34.37 | 0.46 | 27.41 | | | | | | |
| 1196 | 2.68 | 34.44 | 0.47 | 27.49 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 20.6; 8, 21.2; 18, 21.4; 28, 21.3; 48, 16.5; 73, 18.1; 98, 24.0; 148, 42.2; 198, 56.8; 300, 78.7; 400, 97.3; 600, 115.0; 799, 130.0; 998, 141.0; 1198, 149.0 μg at/L.

b) The following silicate values were obtained for this station: 10 m, 5.1; 19, 5.5; 29, 10.2; 48, 14.9; 72, 17.1; 97, 17.0; 145, 35.3; 193, 44.1; 300, 71.1; 400, 90.8; 599, 116.0; 799, 128.0; 998, 141.0; 1196, 151.0 μg at/L.

c) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

102

HMCS OSHAWA; August 13, 1958; 1928 GCT; 48°05'N, 139°25'W; sounding, missing; wind, 240°, 15 kt; weather, cloudy; sea, slight.[a]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.30 | 32.66 | - | 24.13 | 0 | 15.30 | 32.66 | 24.13 | 380 | 0.00 |
| 10 | 15.48 | 32.64 | 5.76 | 24.08 | 10 | 15.48 | 32.64 | 24.08 | 385 | 0.04 |
| 20 | 15.49 | 32.64 | 6.01 | 24.07 | 20 | 15.49 | 32.64 | 24.07 | 386 | 0.08 |
| 30 | 11.94 | (32.63)b) | 7.11 | (24.78) | 30 | 11.94 | 32.63 | 24.78 | 318 | 0.11 |
| 50 | 8.97 | 32.57 | 7.36 | 25.24 | 50 | 8.97 | 32.57 | 25.24 | 275 | 0.17 |
| 75 | 8.03 | 32.65 | 6.83 | 25.45 | 75 | 8.03 | 32.65 | 25.45 | 255 | 0.24 |
| 100 | 7.18 | 32.70 | 6.52 | 25.61 | 100 | 7.18 | 32.70 | 25.61 | 240 | 0.30 |
| 125 | 6.52 | 33.03 | 5.94 | 25.95 | 150 | 6.16 | 33.40 | 26.29 | 176 | 0.41 |
| 150 | 6.16 | 33.40 | 5.39 | 26.29 | 200 | 6.06 | 33.80 | 26.62 | 145 | 0.49 |
| 175 | 6.18 | 33.64 | 4.93 | 26.47 | 250 | 5.66 | 33.88 | 26.74 | 135 | 0.56 |
| 200 | 6.06 | 33.80 | 4.18 | 26.62 | 300 | 5.27 | 33.91 | 26.81 | 128 | 0.62 |
| 250 | 5.66 | 33.88 | 3.54 | 26.74 | 400 | 4.53 | 34.00 | 26.95 | 115 | 0.75 |
| 300 | 5.27 | 33.91 | 2.48 | 26.81 | 500 | 4.19 | 34.10 | 27.07 | 104 | 0.86 |
| 350 | 4.89 | 33.94 | 2.17 | 26.87 | 600 | 3.91 | 34.19 | 27.17 | 96 | 0.96 |
| 400 | 4.53 | 34.00 | 1.46 | 26.95 | 700 | 3.71 | 34.25 | 27.25 | 89 | 1.05 |
| 500 | 4.19 | 34.10 | 0.85 | 27.07 | 800 | 3.58 | 34.30 | 27.29 | 85 | 1.14 |
| 600 | 3.91 | 34.19 | 0.58 | 27.17 | 1000 | 3.04 | 34.37 | 27.40 | 76 | 1.30 |
| 800 | 3.58 | 34.30 | 0.50 | 27.29 | | | | | | |
| 999 | 3.04 | 34.37 | 0.45 | 27.40 | | | | | | |
| 1198 | 2.72 | 34.38 | 0.59 | 27.44 | | | | | | |

103

HMCS OSHAWA; August 14, 1958; 0416 GCT; 47°36'N, 137°30'W; sounding, 2175 fm; wind, 250°, 12 kt; weather, cloudy; sea, smooth.[c]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 16.40 | 32.62 | - | 23.85 | 0 | 16.40 | 32.62 | 23.85 | 406 | 0.00 |
| 10 | 16.46 | 32.58 | 5.79 | 23.80 | 10 | 16.46 | 32.58 | 23.80 | 411 | 0.04 |
| 20 | 16.44 | 32.58 | 5.68 | 23.81 | 20 | 16.44 | 32.58 | 23.81 | 411 | 0.08 |
| 30 | 16.35 | 32.59 | 5.80 | 23.84 | 30 | 16.35 | 32.59 | 23.84 | 408 | 0.12 |
| 50 | 10.20 | 32.54 | 7.45 | 25.02 | 50 | 10.20 | 32.54 | 25.02 | 296 | 0.19 |
| 75 | 8.37 | 32.60 | 6.98 | 25.36 | 75 | 8.37 | 32.60 | 25.36 | 264 | 0.26 |
| 100 | 7.34 | 32.77 | 6.42 | 25.64 | 100 | 7.34 | 32.77 | 25.64 | 237 | 0.33 |
| 125 | 6.34 | 33.20 | 5.71 | 26.11 | 150 | 6.23 | 33.52 | 26.38 | 168 | 0.43 |
| 150 | 6.23 | 33.52 | 5.75 | 26.38 | 200 | 5.90 | 33.82 | 26.65 | 142 | 0.51 |
| 175 | 6.16 | 33.71 | 4.75 | 26.53 | 250 | 5.49 | 33.88 | 26.75 | 133 | 0.58 |
| 200 | 5.90 | 33.82 | 4.49 | 26.65 | 300 | 5.04 | 33.92 | 26.83 | 126 | 0.64 |
| 248 | 5.51 | 33.88 | 3.55 | 26.75 | 400 | 4.41 | 34.00 | 26.97 | 113 | 0.76 |
| 297 | 5.06 | 33.91 | 2.62 | 26.83 | 500 | 4.09 | 34.09 | 27.08 | 104 | 0.87 |
| 347 | 4.79 | 33.95 | 1.83 | 26.89 | 600 | 3.91 | 34.17 | 27.16 | 97 | 0.97 |
| 396 | 4.43 | 34.00 | 1.48 | 26.97 | 700 | 3.72 | 34.24 | 27.23 | 90 | 1.07 |
| 495 | 4.10 | 34.09 | 0.94 | 27.07 | 800 | 3.53 | 34.30 | 27.30 | 84 | 1.16 |
| 601 | 3.91 | 34.17 | 0.65 | 27.16 | | | | | | |
| 793 | 3.54 | 34.30 | 0.53 | 27.30 | | | | | | |
| 992 | 3.18 | 34.39 | 0.44 | 27.40 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 0.9; 10, 0.4; 20, 0.4; 30, 0.5; 50, 4.6; 75, 10.6; 100, 16.1; 150, 35.2; 200, 47.1; 300, 66.1; 400, 85.2; 600, 109.0; 800, 130.0; 999, 137.0; 1198, 141.0 μg at/L.

b) Value interpolated by three-point parabolic method.

c) The following silicate values were obtained for this station: 0 m, 0.2; 10, <0.1; 20, <0.1; 30, <0.1; 50, 0.7; 75, 17.4; 100, 17.9; 150, 34.0; 200, 45.7; 297, 67.9; 396, 85.0; 601, 107.0; 793, 124.0; 992, 136.0 μg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **104** | HMCS OSHAWA; August 14, 1958; 1300 GCT; 47°10'N, 135°30'W; sounding, missing; wind, 190°, 10 kt; weather, overcast; sea, smooth.[a] | | | | | | | | | |
| 0 | 17.00 | 32.59 | - | 23.69 | 0 | 17.00 | 32.59 | 23.69 | 422 | 0.00 |
| 10 | 17.21 | 32.58 | 5.82 | 23.63 | 10 | 17.21 | 32.58 | 23.63 | 428 | 0.04 |
| 20 | 17.19 | 32.58 | 5.82 | 23.63 | 20 | 17.19 | 32.58 | 23.63 | 427 | 0.09 |
| 30 | (15.95)b) | 32.58 | 6.08 | (23.92) | 30 | 15.95 | 32.58 | 23.92 | 400 | 0.13 |
| 50 | 9.83 | 32.58 | 7.49 | 25.11 | 50 | 9.83 | 32.58 | 25.11 | 287 | 0.20 |
| 75 | 8.57 | 32.63 | 6.97 | 25.35 | 75 | 8.57 | 32.63 | 25.35 | 264 | 0.27 |
| 100 | 7.96 | 32.72 | 6.68 | 25.51 | 100 | 7.96 | 32.72 | 25.51 | 249 | 0.33 |
| 125 | 6.73 | (32.93)b) | 5.70 | (25.85) | 150 | 6.18 | 33.25 | 26.17 | 187 | 0.44 |
| 149 | 6.19 | (33.23)b) | 5.38 | (26.16) | 200 | 6.07 | 33.80 | 26.62 | 146 | 0.52 |
| 174 | 6.29 | 33.67 | 4.88 | 26.49 | 250 | 5.82 | 33.87 | 26.71 | 137 | 0.60 |
| 199 | 6.08 | 33.80 | 4.37 | 26.61 | 300 | 5.26 | 33.92 | 26.81 | 128 | 0.66 |
| 246 | 5.85 | 33.87 | 3.49 | 26.70 | 400 | 4.54 | 33.96 | 26.93 | 117 | 0.79 |
| 295 | 5.31 | 33.92 | 2.77 | 26.80 | 500 | 4.12 | 34.06 | 27.05 | 106 | 0.90 |
| 345 | 4.88 | 33.92 | 2.42 | 26.86 | 600 | 3.84 | 34.15 | 27.15 | 98 | 1.00 |
| 394 | 4.57 | 33.96 | 1.84 | 26.92 | 700 | 3.61 | 34.22 | 27.23 | 91 | 1.10 |
| 492 | 4.15 | 34.06 | 1.21 | 27.04 | 800 | 3.45 | 34.28 | 27.29 | 85 | 1.19 |
| 591 | 3.86 | 34.14 | 0.80 | 27.14 | 1000 | 3.14 | 34.38 | 27.40 | 76 | 1.35 |
| 788 | 3.47 | 34.27 | 0.53 | 27.28 | | | | | | |
| 983 | 3.17 | 34.37 | 0.38 | 27.39 | | | | | | |
| 1182 | 2.78 | 34.44 | 0.43 | 27.48 | | | | | | |
| **105** | HMCS OSHAWA; August 14, 1958; 2125 GCT; 46°42.5'N, 133°32.5'W; sounding, 2100 fm; wind, 200°, 18 kt; weather, intermittent slight rain; sea, slight.[c] | | | | | | | | | |
| 0 | 18.20 | 32.59 | - | 23.40 | 0 | 18.20 | 32.59 | 23.40 | 449 | 0.00 |
| 10 | 18.18 | 32.58 | 5.61 | 23.40 | 10 | 18.18 | 32.58 | 23.40 | 450 | 0.04 |
| 20 | 18.20 | 32.58 | 5.63 | 23.40 | 20 | 18.20 | 32.58 | 23.40 | 450 | 0.09 |
| 30 | 16.62 | 32.57 | 5.94 | 23.76 | 30 | 16.62 | 32.57 | 23.76 | 416 | 0.13 |
| 50 | 10.90 | 32.55 | 7.16 | 24.91 | 30 | 16.62 | 32.57 | 23.76 | 416 | 0.13 |
| 75 | 9.00 | 32.58 | 6.47 | 25.24 | 50 | 10.90 | 32.55 | 24.91 | 306 | 0.21 |
| 100 | 8.20 | 32.69 | 6.19 | 25.45 | 75 | 9.00 | 32.58 | 25.24 | 275 | 0.28 |
| 125 | 7.20 | (32.90)b) | 5.75 | (25.76) | 100 | 8.20 | 32.69 | 25.45 | 255 | 0.35 |
| 150 | 7.00 | (33.21)b) | 5.15 | (26.03) | 150 | 7.00 | 33.21 | 26.03 | 201 | 0.46 |
| 175 | 7.22 | 33.62 | 5.36 | 26.32 | 200 | 6.58 | 33.77 | 26.53 | 154 | 0.55 |
| 198 | 6.62 | 33.76 | 5.17 | 26.52 | 250 | 6.15 | 33.87 | 26.66 | 142 | 0.62 |
| 248 | 6.17 | 33.87 | 4.44 | 26.66 | 300 | 5.49 | 33.88 | 26.75 | 134 | 0.69 |
| 297 | 5.52 | 33.88 | 3.72 | 26.75 | 400 | 4.67 | 33.95 | 26.90 | 120 | 0.82 |
| 346 | 5.14 | 33.91 | 2.84 | 26.82 | 500 | 4.22 | 34.03 | 27.01 | 110 | 0.94 |
| 396 | 4.70 | 33.95 | 2.11 | 26.90 | 600 | 3.94 | 34.12 | 27.11 | 101 | 1.04 |
| 495 | 4.24 | 34.03 | 1.30 | 27.01 | 700 | 3.72 | 34.20 | 27.20 | 94 | 1.14 |
| 594 | 3.96 | 34.11 | 0.82 | 27.11 | 800 | 3.56 | 34.27 | 27.27 | 87 | 1.24 |
| 792 | 3.57 | 34.27 | 0.43 | 27.27 | 1000 | 3.20 | 34.38 | 27.39 | 77 | 1.40 |
| 991 | 3.22 | (34.37)b) | 0.39 | (27.39) | | | | | | |
| 1189 | 2.86 | 34.43 | 0.37 | 27.47 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 0.5; 10, <0.1; 20, <0.1; 30, <0.1; 50, 0.2; 75, 4.5; 100, 11.1; 149, 34.7; 199, 44.9; 295, 63.3; 394; 79.3; 591, 105.0; 788, 120.0; 983, 131.0; 1182, 138.0 μg at/L and the following nitrate values: 0 m, 1.8; 10, 1.6; 20, 1.9; 30, 2.0; 50, 7.2; 75, 5.7; 100, 11.2; 199, 27.9; 295, 34.6; 591, 39.7; 788, 39.1; 983, 41.8 μg at/L.

b) Value interpolated by three-point parabolic method.

c) The following silicate values were obtained for this station: 0 m, <0.1; 10, <0.1; 20, <0.1; 30, <0.1; 50, <0.1; 75, 5.2; 100, 12.0; 150, 29.3; 198, 36.2; 297, 55.0; 396, 75.0; 594, 100.0; 792, 117.0; 991, 129.0; 1189, 137.0 μg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z<br>m | T<br>°C | S<br>‰ | $O_2$<br>ml/L | $\sigma_t$<br>g/L | Z<br>m | T<br>°C | S<br>‰ | $\sigma_t$<br>g/L | δ<br>cl/ton | ΔD<br>dyn m |

106

HMCS OSHAWA; August 15, 1958; 0545 GCT; 46°42.5'N, 131°37.5'W; sounding, 1750 fm; wind, 200°, 12 kt; weather, drizzle; sea, slight.[a]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.40 | 32.57 | - | 23.34 | 0 | 18.40 | 32.57 | 23.34 | 455 | 0.00 |
| 10 | 18.44 | (32.58)b) | 5.66 | (23.33) | 10 | 18.44 | 32.58 | 23.33 | 456 | 0.05 |
| 20 | 18.34 | 32.57 | 5.69 | 23.35 | 20 | 18.34 | 32.57 | 23.35 | 455 | 0.09 |
| 30 | 16.88 | 32.54 | 6.08 | 23.68 | 30 | 16.88 | 32.54 | 23.68 | 424 | 0.14 |
| 50 | 10.63 | 32.50 | 7.38 | 24.92 | 50 | 10.63 | 32.50 | 24.92 | 306 | 0.21 |
| 74 | 8.75 | 32.51 | 6.81 | 25.23 | 75 | 8.69 | 32.51 | 25.24 | 275 | 0.28 |
| 99 | 7.76 | 32.65 | 6.31 | 25.48 | 100 | 7.72 | 32.66 | 25.50 | 251 | 0.35 |
| 124 | 6.81 | 33.16 | 5.70 | 26.02 | 150 | 6.79 | 33.51 | 26.30 | 176 | 0.46 |
| 149 | 6.80 | 33.50 | 5.58 | 26.29 | 200 | 6.50 | 33.75 | 26.53 | 154 | 0.54 |
| 174 | 6.54 | 33.69 | 5.43 | 26.47 | 250 | 6.10 | 33.87 | 26.67 | 141 | 0.61 |
| 197 | 6.51 | 33.75 | 5.26 | 26.52 | 300 | 5.58 | 33.91 | 26.77 | 132 | 0.68 |
| 246 | 6.14 | 33.87 | 4.44 | 26.66 | 400 | 4.80 | 33.98 | 26.91 | 119 | 0.81 |
| 296 | 5.62 | 33.91 | 2.79 | 26.76 | 500 | 4.44 | 34.09 | 27.04 | 108 | 0.92 |
| 345 | 5.23 | 33.93 | 2.15 | 26.83 | 600 | 3.96 | 34.13 | 27.12 | 100 | 1.03 |
| 395 | 4.83 | 33.97 | 1.64 | 26.90 | 700 | 3.71 | 34.20 | 27.20 | 93 | 1.13 |
| 493 | 4.47 | 34.08 | 0.85 | 27.03 | 800 | 3.65 | 34.28 | 27.27 | 87 | 1.22 |
| 592 | 3.99 | 34.13 | 0.69 | 27.12 | 1000 | 3.25 | 34.41 | 27.41 | 75 | 1.38 |
| 790 | 3.67 | 34.28 | 0.37 | 27.27 | | | | | | |
| 985 | 3.28 | 34.40 | 0.32 | 27.40 | | | | | | |
| 1182 | 2.85 | 34.43 | 0.43 | 27.46 | | | | | | |

107

HMCS OSHAWA; August 15, 1958; 1409 GCT; 46°42'N, 129°39'W; sounding, 1425 fm; wind, 220°, 5 kt; weather, drizzle; sea, smooth.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 18.50 | 32.19 | - | 23.02 | 0 | 18.50 | 32.19 | 23.02 | 485 | 0.00 |
| 10 | 18.72 | 32.18 | 5.52 | 22.96 | 10 | 18.72 | 32.18 | 22.96 | 491 | 0.05 |
| 20 | 18.30 | 32.14 | 5.59 | 23.04 | 20 | 18.30 | 32.14 | 23.04 | 484 | 0.10 |
| 30 | 15.87 | 32.19 | 6.00 | 23.64 | 30 | 15.87 | 32.19 | 23.64 | 427 | 0.14 |
| 49 | 11.40 | 32.38 | 6.54 | 24.68 | 50 | 11.23 | 32.38 | 24.72 | 324 | 0.22 |
| 74 | 9.16 | 32.45 | 6.40 | 25.12 | 75 | 9.10 | 32.46 | 25.14 | 285 | 0.30 |
| 99 | 8.24 | 32.74 | 5.67 | 25.49 | 100 | 8.21 | 32.76 | 25.51 | 250 | 0.36 |
| 123 | 7.58 | 33.23 | 4.80 | 25.97 | 150 | 7.22 | 33.46 | 26.20 | 185 | 0.47 |
| 148 | 7.22 | 33.44 | 4.57 | 26.18 | 200 | 6.89 | 33.76 | 26.48 | 159 | 0.56 |
| 172 | 7.47 | 33.66 | 3.68 | 26.32 | 250 | 6.50 | 33.87 | 26.62 | 146 | 0.64 |
| 197 | 6.94 | 33.75 | 4.82 | 26.46 | 300 | 5.91 | 33.91 | 26.72 | 137 | 0.71 |
| 248 | 6.52 | (33.87)b) | 4.18 | (26.61) | 400 | 4.95 | 33.96 | 26.88 | 123 | 0.84 |
| 297 | 5.94 | 33.90 | 3.26 | 26.72 | 500 | 4.43 | 34.04 | 27.00 | 111 | 0.96 |
| 346 | 5.45 | 33.93 | 2.55 | 26.80 | 600 | 4.01 | 34.12 | 27.11 | 102 | 1.06 |
| 396 | 4.98 | 33.95 | 1.85 | 26.87 | 700 | 3.71 | 34.20 | 27.20 | 93 | 1.16 |
| 495 | 4.45 | 34.04 | 1.20 | 26.99 | 800 | 3.52 | 34.27 | 27.28 | 87 | 1.25 |
| 981 | 3.46 | 34.39 | 0.36 | 27.38 | | | | | | |
| 986 | 3.48 | 34.40 | 0.36 | 27.38 | | | | | | |
| 991 | 3.50 | 34.40 | 0.36 | 27.38 | | | | | | |
| 996 | 3.48 | 34.40 | 0.36 | 27.38 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, <0.1; 10, <0.1; 20, <0.1; 30, <0.1; 50, <0.1; 74, 6.4; 99, 13.2; 149, 28.3; 197, 34.8; 296, 59.1; 395, 78.8; 592, 106.0; 790, 123.0; 985, 141.0; 1182, 154.0 μg at/L.

b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **108** | HMCS OSHAWA; August 15, 1958; 2129 GCT; 46°40'N, 127°42'W; sounding, missing; wind, 340°, 10 kt; weather, partly cloudy; sea, smooth. | | | | | | | | | |
| 0 | 19.40 | 32.27 | - | 22.86 | 0 | 19.40 | 32.27 | 22.86 | 500 | 0.00 |
| 10 | 19.18 | 32.26 | 5.54 | 22.91 | 10 | 19.18 | 32.26 | 22.91 | 497 | 0.05 |
| 20 | 17.62 | 32.41 | 5.66 | 23.40 | 20 | 17.62 | 32.41 | 23.40 | 450 | 0.10 |
| 30 | 16.91 | 32.43 | 5.91 | 23.59 | 30 | 16.91 | 32.43 | 23.59 | 432 | 0.14 |
| 50 | 11.04 | 32.56 | 6.94 | 24.90 | 50 | 11.04 | 32.56 | 24.90 | 308 | 0.22 |
| 75 | 10.50 | 32.80 | 5.49 | 25.17 | 75 | 10.50 | 32.80 | 25.17 | 282 | 0.29 |
| 100 | 9.74 | 33.13 | 4.66 | 25.56 | 100 | 9.74 | 33.13 | 25.56 | 246 | 0.36 |
| 124 | 8.68 | 33.52 | 3.76 | 26.03 | 150 | 7.77 | 33.63 | 26.25 | 180 | 0.46 |
| 149 | 7.79 | 33.62 | 3.74 | 26.24 | 200 | 7.32 | 33.89 | 26.52 | 155 | 0.55 |
| 174 | 7.88 | 33.83 | 2.89 | 26.40 | 250 | 6.91 | 33.97 | 26.64 | 145 | 0.62 |
| 199 | 7.34 | 33.89 | 2.69 | 26.52 | | | | | | |
| 249 | 6.92 | 33.97 | 2.26 | 26.64 | | | | | | |
| 298 | 6.19 | 33.97 | 2.06 | 26.74 | | | | | | |
| **109** | HMCS OSHAWA; August 16, 1958; 0308 GCT; 46°42'N, 126°24'W; sounding, 1400 fm; wind, 340°, 12 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 19.10 | 32.24 | - | 22.92 | 0 | 19.10 | 32.24 | 22.92 | 496 | 0.00 |
| 10 | 19.33 | 32.23 | 5.51 | 22.85 | 10 | 19.33 | 32.23 | 22.85 | 502 | 0.05 |
| 20 | 17.27 | 32.22 | 5.78 | 23.34 | 20 | 17.27 | 32.22 | 23.34 | 455 | 0.10 |
| 30 | 16.47 | 32.24 | 5.92 | 23.54 | 30 | 16.47 | 32.24 | 23.54 | 436 | 0.14 |
| 50 | 11.30 | 32.36 | 6.91 | 24.69 | 50 | 11.30 | 32.36 | 24.69 | 327 | 0.22 |
| 74 | 8.95 | 32.45 | 6.44 | 25.16 | 75 | 8.88 | 32.46 | 25.17 | 282 | 0.30 |
| 99 | 7.85 | 32.75 | 5.80 | 25.55 | 100 | 7.81 | 32.77 | 25.57 | 244 | 0.36 |
| 124 | 7.09 | 33.25 | 5.03 | 26.05 | 150 | 7.19 | 33.59 | 26.30 | 175 | 0.47 |
| 149 | 7.18 | 33.58 | 4.05 | 26.30 | 200 | 7.02 | 33.87 | 26.55 | 152 | 0.55 |
| 174 | 7.44 | 33.76 | 3.36 | 26.40 | 250 | 6.49 | 33.95 | 26.68 | 140 | 0.62 |
| 199 | 7.03 | 33.87 | 3.01 | 26.54 | 300 | 5.92 | 33.94 | 26.75 | 134 | 0.69 |
| 248 | 6.51 | 33.95 | 2.46 | 26.68 | 400 | 5.31 | 34.04 | 26.90 | 121 | 0.82 |
| 298 | 5.94 | 33.94 | 2.26 | 26.75 | 500 | 4.85 | 34.09 | 26.99 | 113 | 0.94 |
| 348 | 5.55 | 33.97 | 1.90 | 26.81 | 600 | 4.40 | 34.17 | 27.10 | 103 | 1.05 |
| 397 | 5.32 | 34.03 | 1.33 | 26.89 | 700 | 4.11 | 34.23 | 27.19 | 95 | 1.15 |
| 497 | 4.86 | 34.09 | 0.90 | 26.99 | 800 | 3.97 | 34.29 | 27.25 | 90 | 1.24 |
| 596 | 4.41 | 34.16 | 0.52 | 27.10 | 1000 | 3.49 | 34.39 | 27.38 | 79 | 1.41 |
| 795 | 3.98 | 34.29 | 0.34 | 27.24 | | | | | | |
| 994 | 3.50 | 34.39 | 0.32 | 27.37 | | | | | | |
| 1191 | 3.07 | 34.45 | 0.48 | 27.46 | | | | | | |
| **110** | HMCS OSHAWA; August 16, 1958; 0905 GCT; 46°42'N, 125°05'W; sounding, 430 fm; wind, 340°, 18 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | 18.50 | 32.23 | - | 23.05 | 0 | 18.50 | 32.23 | 23.05 | 482 | 0.00 |
| 10 | 19.14 | 32.21 | 5.50 | 22.88 | 10 | 19.14 | 32.21 | 22.88 | 499 | 0.05 |
| 19 | 16.60 | 32.20 | 6.19 | 23.48 | 20 | 16.18 | 32.21 | 23.59 | 432 | 0.10 |
| 29 | 11.10 | 32.46 | 7.27 | 24.80 | 30 | 10.73 | 32.47 | 24.88 | 309 | 0.13 |
| 48 | 9.88 | 32.45 | 7.18 | 25.01 | 50 | 9.77 | 32.46 | 25.03 | 294 | 0.19 |
| 71 | 8.76 | 32.75 | 5.66 | 25.42 | 75 | 8.59 | 32.83 | 25.50 | 250 | 0.26 |
| 95 | 7.89 | 33.29 | 4.55 | 25.97 | 100 | 7.80 | 33.37 | 26.04 | 199 | 0.32 |
| 121 | 7.80 | 33.56 | 3.77 | 26.20 | 150 | 7.59 | 33.75 | 26.38 | 168 | 0.41 |
| 145 | 7.60 | 33.72 | 3.44 | 26.35 | 200 | 7.21 | 33.91 | 26.55 | 152 | 0.49 |
| 169 | 7.68 | 33.84 | 2.92 | 26.43 | 250 | 6.74 | 33.96 | 26.66 | 143 | 0.57 |
| 193 | 7.30 | 33.90 | 2.70 | 26.53 | 300 | 6.34 | 34.00 | 26.74 | 136 | 0.64 |
| 241 | 6.82 | 33.95 | 2.32 | 26.64 | 400 | 5.68 | 34.06 | 26.87 | 124 | 0.77 |
| 289 | 6.42 | 33.99 | 1.87 | 26.72 | 500 | 5.13 | 34.11 | 26.98 | 114 | 0.89 |
| 337 | 6.09 | 34.03 | 1.49 | 26.80 | | | | | | |
| 386 | 5.77 | 34.05 | 1.31 | 26.86 | | | | | | |
| 482 | 5.22 | 34.10 | 0.86 | 26.96 | | | | | | |
| 578 | 4.80 | 34.16 | 0.60 | 27.06 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| HMCS OSHAWA; August 16, 1958; 1858 GCT; 48°24'N, 124°52'W; sounding, 176 fm; wind, 340°, 10 kt; weather, overcast; sea, slight. | | | | | | | | | | |
| 0 | 10.50 | 32.38 | - | 24.85 | 0 | 10.50 | 32.38 | 24.85 | 311 | 0.00 |
| 10 | 8.27 | 33.03 | 4.01 | 25.71 | 10 | 8.27 | 33.03 | 25.71 | 229 | 0.03 |
| 20 | 7.76 | 33.32 | 3.91 | 26.01 | 20 | 7.76 | 33.32 | 26.01 | 201 | 0.05 |
| 30 | 7.68 | 33.37 | 3.83 | 26.06 | 30 | 7.68 | 33.37 | 26.06 | 196 | 0.07 |
| 50 | 7.49 | 33.53 | 3.39 | 26.22 | 50 | 7.49 | 33.53 | 26.22 | 182 | 0.11 |
| 74 | 7.41 | 33.59 | 3.27 | 26.28 | 75 | 7.40 | 33.60 | 26.28 | 176 | 0.15 |
| 99 | 7.01 | 33.70 | 2.52 | 26.42 | 100 | 7.00 | 33.71 | 26.42 | 163 | 0.20 |
| 124 | 6.91 | 33.76 | 2.41 | 26.47 | 150 | 6.84 | 33.83 | 26.54 | 153 | 0.27 |
| 149 | 6.84 | 33.83 | 2.33 | 26.54 | 200 | 6.75 | 33.86 | 26.57 | 150 | 0.35 |
| 174 | 6.96 | 33.84 | 2.30 | 26.53 | 250 | 6.76 | 33.89 | 26.60 | 148 | 0.43 |
| 198 | 6.76 | 33.86 | 2.18 | 26.57 | | | | | | |
| 248 | 6.76 | 33.89 | 2.16 | 26.60 | | | | | | |
| 298 | 6.70 | 33.92 | 2.07 | 26.63 | | | | | | |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

1

HMCS OSHAWA; September 2, 1958; 1730 GCT;[a] 48°40'N, 135°30'W; sounding, missing; wind, 220°, 5 kt; weather, overcast; sea, slight.

| | | | |
|---|---|---|---|
| 1202 | 2.71 | - | |
| 1505 | 2.35 | 34.511 | 27.56 |
| 2010 | 1.94 | 34.582 | 27.65 |
| 2512 | 1.73 | 34.638 | 27.71 |
| 3015 | 1.60 | 34.650 | 27.73 |

2

HMCS OSHAWA; September 3, 1958; 1540 GCT; 48°04'N, 135°37'W; sounding, missing; wind, 280°, 10 kt; weather, intermittent moderate rain; sea, slight.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 15.20 | 32.578 | 24.08 | 0 | 15.20 | 32.58 | 24.08 | 384 | 0.00 |
| 10 | 15.65 | 32.617 | 24.02 | 10 | 15.65 | 32.62 | 24.02 | 391 | 0.04 |
| 20 | 15.66 | 32.570 | 23.98 | 20 | 15.66 | 32.57 | 23.98 | 395 | 0.08 |
| 30 | 14.46 | 32.593 | 24.25 | 30 | 14.46 | 32.59 | 24.25 | 368 | 0.12 |
| 50 | (11.80)b) | 32.609 | (24.79) | 50 | 11.80 | 32.61 | 24.79 | 318 | 0.19 |
| 75 | 7.98 | 32.713 | 25.50 | 75 | 7.98 | 32.71 | 25.50 | 250 | 0.26 |
| 100 | 7.20 | 32.753 | 25.65 | 100 | 7.20 | 32.75 | 25.65 | 237 | 0.32 |
| 150 | 6.10 | 33.462 | 26.35 | 125 | 6.57 | 33.00 | 25.93 | 210 | 0.37 |
| 200 | 5.64 | 33.778 | 26.65 | 150 | 6.10 | 33.46 | 26.35 | 170 | 0.42 |
| 251 | 5.19 | 33.850 | 26.76 | 175 | 5.79 | 33.67 | 26.55 | 152 | 0.46 |
| 301 | 4.76 | 33.896 | 26.85 | 200 | 5.64 | 33.78 | 26.65 | 142 | 0.50 |
| 351 | 4.56 | 33.941 | 26.91 | 250 | 5.20 | 33.85 | 26.76 | 132 | 0.57 |
| 402 | 4.23 | 33.985 | 26.98 | 300 | 4.77 | 33.90 | 26.85 | 124 | 0.63 |
| 503 | 4.12 | 34.087 | 27.07 | 400 | 4.25 | 33.98 | 26.97 | 113 | 0.75 |
| 606 | 3.92 | 34.166 | 27.15 | 500 | 4.11 | 34.08 | 27.07 | 105 | 0.86 |
| 808 | 3.40 | 34.279 | 27.29 | 600 | 3.93 | 34.16 | 27.15 | 98 | 0.96 |
| 1010 | 3.10 | 34.388 | 27.41 | 700 | 3.70 | 34.23 | 27.22 | 91 | 1.06 |
| 1212 | 2.83 | 34.465 | 27.50 | 800 | 3.42 | 34.28 | 27.29 | 85 | 1.15 |
| | | | | 1000 | 3.11 | 34.38 | 27.40 | 75 | 1.31 |
| | | | | 1200 | 2.85 | 34.46 | 27.49 | 68 | 1.46 |

2B

HMCS OSHAWA; September 4, 1958; 0328 GCT; 48°07'N, 135°45'W; sounding, missing; wind, 350°, 18 kt; weather, overcast; sea, moderate.

| | | | |
|---|---|---|---|
| 1012 | 3.11 | 34.391 | 27.40 |
| 1212 | 2.79 | 34.450 | 27.48 |
| 1515 | 2.39 | 34.513 | 27.56 |

a) Although not indicated in the tabulation, three casts were made at each station to a maximum depth of 3000 meters. (On Stas. 1 and 2B only the deep casts were successful.) The time reported is the time of the messenger release of the first cast.

b) Value interpolated by three-point parabolic method.

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 3 | | | | | | | | | |
| HMCS OSHAWA; September 5, 1958; 1657 GCT; 48°22'N, 132°00'W; sounding, 1560 fm; wind, 250°, 15 kt; weather, cloudy; sea, moderate. | | | | | | | | | |
| 0 | 17.10 | 32.266 | 23.42 | 0 | 17.10 | 32.27 | 23.42 | 448 | 0.00 |
| 10 | 17.42 | 32.239 | 23.32 | 10 | 17.42 | 32.24 | 23.32 | 457 | 0.04 |
| 20 | 17.44 | 32.246 | 23.32 | 20 | 17.44 | 32.25 | 23.32 | 457 | 0.09 |
| 30 | 17.40 | 32.242 | 23.33 | 30 | 17.40 | 32.24 | 23.33 | 457 | 0.14 |
| 50 | 11.96 | 32.420 | 24.62 | 50 | 11.96 | 32.42 | 24.62 | 334 | 0.22 |
| 72 | 9.28 | 32.480 | 25.13 | 75 | 9.04 | 32.49 | 25.17 | 281 | 0.29 |
| 96 | 8.20 | 32.629 | 25.41 | 100 | 8.05 | 32.66 | 25.46 | 255 | 0.36 |
| 148 | 6.88 | 33.258 | 26.09 | 125 | 7.29 | 32.93 | 25.77 | 225 | 0.42 |
| 196 | 6.69 | 33.739 | 26.49 | 150 | 6.85 | 33.28 | 26.11 | 194 | 0.48 |
| 244 | 6.26 | 33.865 | 26.65 | 175 | 6.65 | 33.54 | 26.34 | 172 | 0.52 |
| 292 | 5.72 | 33.916 | 26.75 | 200 | 6.66 | 33.76 | 26.51 | 156 | 0.56 |
| 341 | 5.32 | 33.943 | 26.82 | 250 | 6.20 | 33.88 | 26.66 | 142 | 0.64 |
| 390 | 4.90 | 33.965 | 26.89 | 300 | 5.64 | 33.92 | 26.77 | 132 | 0.71 |
| 487 | 4.52 | 34.054 | 27.00 | 400 | 4.83 | 33.97 | 26.90 | 120 | 0.83 |
| 585 | 4.34 | 34.166 | 27.11 | 500 | 4.48 | 34.07 | 27.02 | 110 | 0.95 |
| 784 | 3.86 | 34.298 | 27.26 | 600 | 4.31 | 34.18 | 27.12 | 101 | 1.06 |
| 1000 | 3.46 | 34.393 | 27.38 | 700 | 4.08 | 34.26 | 27.21 | 93 | 1.15 |
| 1203 | 2.95 | 34.455 | 27.48 | 800 | 3.83 | 34.31 | 27.27 | 87 | 1.24 |
| 1505 | 2.44 | 34.529 | 27.58 | 1000 | 3.46 | 34.39 | 27.38 | 78 | 1.41 |
| 2010 | 1.92 | 34.599 | 27.68 | 1200 | 2.96 | 34.45 | 27.48 | 70 | 1.56 |
| 2515 | 1.72 | 34.642 | 27.73 | 1500 | 2.45 | 34.53 | 27.58 | 60 | 1.76 |
| 3025 | 1.68 | 34.660 | 27.75 | 2000 | 1.93 | 34.60 | 27.68 | 51 | 2.04 |
| | | | | 2500 | 1.72 | 34.64 | 27.73 | 47 | 2.29 |
| | | | | 3000 | 1.68 | 34.66 | 27.75 | 47 | 2.53 |
| 4 | | | | | | | | | |
| HMCS OSHAWA; September 7, 1958; 2140 GCT; 48°14'N, 131°44'W; sounding, missing; wind, 020°, 15 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | 17.60 | 32.330 | 23.35 | 0 | 17.60 | 32.33 | 23.35 | 454 | 0.00 |
| 10 | (17.74)a) | 32.301 | (23.29) | 10 | 17.74 | 32.30 | 23.29 | 460 | 0.05 |
| 20 | 17.76 | 32.291 | 23.28 | 20 | 17.76 | 32.29 | 23.28 | 461 | 0.09 |
| 30 | 17.66 | 32.283 | 23.30 | 30 | 17.66 | 32.28 | 23.30 | 460 | 0.14 |
| 50 | 13.00 | (32.325)a) | (24.34) | 50 | 13.00 | 32.32 | 24.34 | 360 | 0.22 |
| 75 | 9.11 | 32.486 | 25.16 | 75 | 9.11 | 32.49 | 25.16 | 283 | 0.30 |
| 100 | 7.92 | 32.667 | 25.48 | 100 | 7.92 | 32.67 | 25.48 | 253 | 0.37 |
| 150 | 6.71 | 33.436 | 26.25 | 125 | 7.12 | 32.98 | 25.84 | 219 | 0.43 |
| 200 | 6.72 | 33.806 | 26.54 | 150 | 6.71 | 33.44 | 26.25 | 180 | 0.48 |
| 250 | 6.20 | 33.910 | 26.69 | 175 | 6.56 | 33.67 | 26.45 | 161 | 0.52 |
| 300 | 5.73 | 33.911 | 26.75 | 200 | 6.72 | 33.81 | 26.54 | 153 | 0.56 |
| 350 | 5.30 | 33.934 | 26.82 | 250 | 6.20 | 33.91 | 26.69 | 140 | 0.64 |
| 400 | 4.89 | 33.967 | 26.89 | 300 | 5.73 | 33.91 | 26.75 | 134 | 0.70 |
| 500 | 4.41 | 34.085 | 27.04 | 400 | 4.89 | 33.97 | 26.89 | 121 | 0.83 |
| 602 | 4.22 | 34.159 | 27.12 | 500 | 4.41 | 34.08 | 27.04 | 108 | 0.95 |
| 806 | 3.87 | 34.330 | 27.29 | 600 | 4.22 | 34.16 | 27.12 | 101 | 1.05 |
| 1010 | 3.31 | 34.400 | 27.40 | 700 | 4.05 | 34.24 | 27.20 | 94 | 1.15 |
| 1210 | 2.94 | 34.453 | 27.48 | 800 | 3.88 | 34.32 | 27.28 | 87 | 1.24 |
| 1515 | 2.45 | 34.521 | 27.57 | 1000 | 3.34 | 34.40 | 27.40 | 77 | 1.41 |
| 2020 | 1.94 | 34.597 | 27.68 | 1200 | 2.95 | 34.45 | 27.47 | 70 | 1.56 |
| 2525 | 1.73 | 34.640 | 27.73 | 1500 | 2.47 | 34.52 | 27.57 | 61 | 1.76 |
| 2930 | 1.66 | 34.642 | 27.73 | 2000 | 1.95 | 34.59 | 27.67 | 52 | 2.04 |
| 3000 | (1.66)b) | (34.639)b) | (27.73) | 2500 | 1.73 | 34.64 | 27.72 | 47 | 2.29 |
| | | | | 3000 | 1.66 | 34.64 | 27.73 | 48 | 2.54 |

a) Value interpolated by three-point parabolic method.
b) Value extrapolated by three-point parabolic method.

| OBSERVED | |
|---|---|
| Z<br>m | T<br>°C |

HMCS OSHAWA; September 26, 1958; 0617 GCT;[a] 53°44'N, 133°52.5'W; sounding, missing; wind, 130°, 10 kt; weather, overcast; sea, moderate.

| Z | T |
|---|---|
| 0 | 13.10 |
| 10 | 13.22 |
| 20 | 13.18 |
| 30 | 13.12 |
| 50 | 8.80 |
| 75 | 8.50 |
| 100 | 7.44 |
| 125 | 6.77 |
| 150 | 6.61 |
| 175 | 6.34 |
| 200 | 5.98 |
| 250 | 5.53 |
| 300 | 5.26 |
| 350 | 4.97 |
| 400 | 4.61 |
| 500 | 4.25 |
| 600 | 4.23 |
| 800 | 3.64 |
| 998 | 3.11 |
| 1196 | 2.73 |

1

HMCS OSHAWA; September 27, 1958; 1119 GCT; 53°29.5'N, 135°26'W; sounding, 700 fm; wind, 350°, 15 kt; weather, overcast; sea, moderate.

2

| Z | T |
|---|---|
| 0 | 12.90 |
| 10 | 13.05 |
| 20 | 13.03 |
| 30 | 10.97 |
| 50 | 7.66 |
| 75 | 6.88 |
| 99 | 6.90 |
| 124 | 6.50 |
| 149 | 6.42 |
| 174 | 6.30 |
| 199 | 6.16 |
| 249 | 5.76 |
| 298 | 5.38 |
| 348 | 4.92 |
| 398 | 4.62 |
| 497 | 4.26 |
| 597 | 4.03 |
| 796 | 3.53 |
| 995 | 3.22 |

HMCS OSHAWA; September 27, 1958; 1355 GCT; 53°35.5'N, 135°14.5'W; sounding, 1550 fm; wind, 350°, 10 kt; weather, overcast; sea, moderate.

3

| Z | T |
|---|---|
| 0 | 13.00 |
| 10 | 13.24 |
| 20 | 13.23 |
| 30 | 13.05 |
| 50 | 7.92 |
| 75 | 7.00 |
| 100 | 6.68 |
| 125 | 6.50 |
| 150 | 6.33 |
| 175 | 5.98 |
| 200 | 5.74 |

HMCS OSHAWA; September 27, 1958; 1725 GCT; 53°42'N, 135°02.5'W; sounding, 1400 fm; wind, 360°, 15 kt; weather, cloudy; sea, moderate.

4

| Z | T |
|---|---|
| 0 | 13.10 |
| 10 | 13.32 |
| 20 | 13.34 |
| 29 | 13.35 |
| 49 | 8.36 |
| 74 | 7.44 |
| 98 | 6.80 |
| 123 | 6.42 |
| 147 | 6.14 |
| 172 | 5.90 |
| 196 | 5.76 |
| 245 | 5.38 |
| 295 | 5.04 |
| 350 | 4.59 |
| 400 | 4.37 |
| 501 | 4.18 |
| 603 | 3.96 |
| 807 | 3.51 |

a) Although not indicated in the tabulation, two casts were made at each station, the first from 500 to 2500 meters and the second from 0 to 400 meters. The time reported is the time of the messenger release of the first cast (deep).

| OBSERVED | |
|---|---|
| Z<br>m | T<br>°C |

5

HMCS OSHAWA; September 27, 1958; 2037 GCT; 53°50'N, 134°47.5'W; sounding, 1495 fm; wind,

6

350°, 15 kt; weather, partly cloudy; sea, moderate.

| | |
|---|---|
| 0 | 13.60 |
| 10 | 13.25 |
| 20 | 13.20 |
| 30 | 13.20 |
| 50 | 8.45 |
| 75 | 7.66 |
| 100 | 6.76 |
| 125 | 6.46 |
| 150 | 6.23 |
| 175 | 5.91 |
| 200 | 5.64 |
| 300 | 4.86 |
| 400 | 4.34 |
| 500 | 4.06 |
| 600 | 3.79 |
| 800 | 3.40 |
| 1003 | 3.04 |
| 1205 | 2.61 |
| 1510 | 2.27 |
| 2017 | 1.89 |

| OBSERVED | |
|---|---|
| Z<br>m | T<br>°C |

HMCS OSHAWA; September 29, 1958; 0412 GCT; 54°04'N, 134°22'W; sounding, 1507 fm; wind, 020°, 5 kt; weather, overcast; sea, slight.

| | |
|---|---|
| 0 | 13.00 |
| 10 | 13.32 |
| 20 | 13.24 |
| 30 | 13.24 |
| 50 | 9.20 |
| 75 | 7.16 |
| 100 | 6.70 |
| 125 | 6.44 |
| 150 | 6.24 |
| 175 | 5.98 |
| 200 | 5.83 |
| 300 | 5.12 |
| 400 | 4.50 |
| 500 | 4.18 |
| 600 | 3.96 |
| 802 | 3.54 |
| 1005 | 3.17 |
| 1204 | 2.87 |
| 1502 | 2.32 |
| 2498 | 1.71 |

7

HMCS OSHAWA; September 29, 1958; 0709 GCT; 53°57'N, 134°34'W; sounding, 1525 fm; wind,

8

missing; weather, cloudy; sea, calm.

| | |
|---|---|
| 0 | 13.10 |
| 10 | 13.32 |
| 20 | 13.26 |
| 30 | 13.26 |
| 50 | 9.82 |
| 75 | 7.86 |
| 100 | 7.16 |
| 125 | 6.76 |
| 150 | 6.51 |
| 175 | 6.27 |
| 200 | 5.98 |
| 300 | 4.88 |
| 400 | 4.34 |
| 502 | 4.04 |
| 603 | 3.88 |
| 805 | 3.42 |
| 1007 | 2.99 |
| 1209 | 2.70 |
| 1512 | 2.20 |
| 2017 | 1.92 |
| 2525 | 1.70 |

HMCS OSHAWA; September 29, 1958; 1201 GCT; 53°42'N, 135°00'W; sounding, 1465 fm; wind, 060°, 5 kt; weather, overcast; sea, calm.

| | |
|---|---|
| 0 | 12.90 |
| 10 | 13.14 |
| 20 | 13.04 |
| 30 | 11.70 |
| 50 | 8.14 |
| 75 | 7.15 |
| 100 | 6.64 |
| 125 | 6.40 |
| 150 | 6.10 |
| 175 | 5.82 |
| 200 | 5.69 |
| 300 | 4.91 |
| 400 | 4.58 |
| 500 | 4.19 |
| 600 | 3.93 |
| 802 | 3.48 |
| 1003 | 3.12 |
| 1204 | 2.82 |
| 1508 | 2.30 |
| 2014 | 1.93 |
| 2519 | 1.69 |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CNAV WHITETHROAT; November 12, 1958; 1936 GCT;[a] 48°17'N, 123°31'W; sounding, 100 fm; wind, 220°, 18 kt; weather, cloudy; sea, rough. 1

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.20 | 31.357 | 4.53 | 24.26 | 0 | 9.20 | 31.36 | 24.26 | 367 | 0.00 |
| 2 | 9.02 | 31.346 | 4.64 | 24.28 | 10 | 8.99 | 31.43 | 24.35 | 358 | 0.04 |
| 5 | 9.02 | 31.347 | 4.68 | 24.28 | 20 | 8.96 | 31.48 | 24.39 | 355 | 0.07 |
| 8 | 9.00 | 31.406 | 4.62 | 24.33 | 30 | 8.91 | 31.62 | 24.51 | 344 | 0.11 |
| 16 | 8.98 | 31.445 | 4.57 | 24.36 | 50 | 8.69 | 32.06 | 24.89 | 308 | 0.17 |
| 39 | 8.83 | 31.801 | 4.17 | 24.67 | 75 | 8.46 | 32.50 | 25.26 | 273 | 0.25 |
| 59 | 8.55 | 32.314 | 3.51 | 25.11 | 100 | 8.26 | 32.91 | 25.62 | 239 | 0.31 |
| 79 | 8.46 | 32.509 | 3.64 | 25.27 | 125 | 8.17 | 32.95 | 25.66 | 235 | 0.37 |
| 98 | 8.27 | 32.893 | 3.32 | 25.60 | 150 | 8.05 | 33.05 | 25.76 | 227 | 0.43 |
| 118 | 8.20 | 32.933 | 3.33 | 25.64 | | | | | | |
| 138 | 8.11 | 32.999 | 3.27 | 25.71 | | | | | | |
| 150 | (8.05)b) | (33.051)b) | - | (25.76) | | | | | | |

CNAV WHITETHROAT; November 12, 1958; 2040 GCT; 48°14.5'N, 123°32.5'W; sounding, 95 fm; wind, 220°, 30 kt; weather, cloudy; sea, moderate. 2

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.10 | 31.665 | 4.70 | 24.52 | 0 | 9.10 | 31.67 | 24.52 | 343 | 0.00 |
| 2 | 8.95 | 31.647 | 4.50 | 24.53 | 10 | 8.94 | 31.65 | 24.53 | 341 | 0.03 |
| 6 | 8.94 | 31.653 | 4.65 | 24.53 | 20 | 8.95 | 31.65 | 24.53 | 342 | 0.07 |
| 10 | 8.94 | 31.652 | 4.58 | 24.53 | 30 | 8.95 | 31.67 | 24.54 | 341 | 0.10 |
| 19 | 8.95 | 31.650 | 4.42 | 24.53 | 50 | 8.92 | 31.76 | 24.52 | 334 | 0.17 |
| 48 | 8.92 | 31.752 | 4.18 | 24.61 | 75 | 8.81 | 31.93 | 24.77 | 320 | 0.25 |
| 72 | 8.84 | 31.870 | 3.65 | 24.72 | 100 | 8.41 | 32.73 | 25.45 | 255 | 0.32 |
| 97 | 8.45 | 32.664 | 3.32 | 25.40 | 125 | 8.21 | 33.01 | 25.70 | 232 | 0.39 |
| 121 | 8.24 | 32.978 | 3.29 | 25.67 | 150 | 8.08 | 33.08 | 25.78 | 225 | 0.44 |
| 145 | 8.10 | 33.087 | 3.28 | 25.78 | | | | | | |
| 150 | (8.08)b) | (33.084)b) | - | (25.78) | | | | | | |

CNAV WHITETHROAT; November 12, 1958; 2137 GCT; 48°10'N, 123°33'W; sounding, 17 fm; wind, 220°, 10 kt; weather, cloudy; sea, rough. 3

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.40 | 31.382 | 4.75 | 24.25 | 0 | 9.40 | 31.38 | 24.25 | 368 | 0.00 |
| 2 | 9.30 | 30.766 | 4.95 | 23.79 | 10 | 9.27 | 31.44 | 24.31 | 362 | 0.04 |
| 6 | 9.30 | 31.419 | 5.12 | 24.29 | 20 | 9.25 | 31.50 | 24.37 | 357 | 0.07 |
| 10 | 9.27 | 31.437 | 5.02 | 24.31 | | | | | | |
| 15 | 9.27 | 31.479 | 4.43 | 24.35 | | | | | | |
| 24 | 9.22 | 31.510 | 4.43 | 24.38 | | | | | | |
| 25 | (9.21)b) | (31.510)b) | - | (24.38) | | | | | | |

CNAV WHITETHROAT; November 12, 1958; 2311 GCT; 48°10'N, 123°33'W; sounding, 13 fm; wind, 240°, 12 kt; weather, cloudy; sea, moderate. 4

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.50 | 31.368 | 5.30 | 24.22 | 0 | 9.50 | 31.37 | 24.22 | 371 | 0.00 |
| 4 | 9.42 | 31.363 | 5.24 | 24.23 | 10 | 9.30 | 31.48 | 24.35 | 359 | 0.04 |
| 14 | 9.22 | 31.650 | 4.70 | 24.49 | 20 | 9.03 | 31.90 | 24.71 | 324 | 0.07 |
| 29 | 8.66 | 32.392 | 3.94 | 25.15 | | | | | | |

CNAV WHITETHROAT; November 13, 1958; 0000 GCT; 48°14.5'N, 123°32.5'W; sounding, 90 fm; wind, 240°, 12 kt; weather, partly cloudy; sea, moderate. 5

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.10 | 31.675 | 4.75 | 24.53 | 0 | 9.10 | 31.67 | 24.53 | 342 | 0.00 |
| 2 | 8.90 | 31.615 | 4.53 | 24.51 | 10 | 8.90 | 31.80 | 24.65 | 330 | 0.03 |
| 6 | 8.90 | 31.713 | 4.50 | 24.59 | 20 | 8.81 | 31.82 | 24.68 | 327 | 0.07 |
| 10 | 8.90 | 31.796 | 4.39 | 24.65 | 30 | 8.76 | 31.87 | 24.73 | 323 | 0.10 |
| 20 | 8.81 | 31.822 | 4.39 | 24.68 | 50 | 8.76 | 32.02 | 24.85 | 312 | 0.16 |
| 49 | 8.77 | 31.995 | 4.14 | 24.83 | 75 | 8.28 | 32.92 | 25.63 | 238 | 0.23 |
| 74 | 8.30 | 32.900 | 3.34 | 25.60 | 100 | 7.99 | 33.25 | 25.92 | 210 | 0.29 |
| 98 | 8.00 | 33.231 | 3.01 | 25.91 | 125 | 7.93 | 33.33 | 25.99 | 204 | 0.34 |
| 123 | 7.94 | 33.320 | 2.94 | 25.99 | 150 | 7.83 | 33.42 | 26.08 | 196 | 0.39 |
| 148 | 7.84 | 33.412 | 2.86 | 26.07 | | | | | | |
| 150 | (7.83)b) | (33.419)b) | - | (26.08) | | | | | | |

a) At inshore stations observations were made to a maximum depth of 400 meters. At offshore stations data were collected to a depth of 1500 meters. Although not indicated in the tabulation, two casts were made, the first to 250 meters. The time reported is the time of the messenger release of the shallow cast. On the deep stations (over 400 meters) the messenger for the deep cast was usually released 30 to 40 minutes later.

b) Value extrapolated by three-point parabolic method.

POG

CS-58-I

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 6 | CNAV WHITETHROAT; November 13, 1958; 0133 GCT; 48°16'N, 123°30.5'W; sounding, 88 fm; wind, 240°, 18 kt; weather, partly cloudy; sea, rough. | | | | | | | | | |
| 0 | 8.90 | 31.469 | 5.31 | 24.40 | 0 | 8.90 | 31.47 | 24.40 | 354 | 0.00 |
| 2 | 8.92 | 31.421 | 4.72 | 24.35 | 10 | 8.92 | 31.51 | 24.43 | 351 | 0.04 |
| 6 | 8.95 | 31.426 | 4.70 | 24.35 | 20 | 8.88 | 31.73 | 24.60 | 335 | 0.07 |
| 10 | 8.92 | 31.513 | 4.66 | 24.43 | 30 | 8.84 | 31.86 | 24.71 | 325 | 0.10 |
| 19 | 8.88 | 31.712 | 4.40 | 24.59 | 50 | 8.78 | 31.88 | 24.73 | 323 | 0.17 |
| 49 | 8.78 | 31.870 | 4.22 | 24.73 | 75 | 8.69 | 32.03 | 24.87 | 310 | 0.25 |
| 73 | 8.70 | 32.016 | 4.12 | 24.85 | 100 | 8.52 | 32.31 | 25.11 | 288 | 0.32 |
| 97 | 8.55 | 32.257 | 3.85 | 25.06 | 125 | 8.13 | 33.00 | 25.71 | 231 | 0.39 |
| 121 | 8.21 | 32.865 | 3.38 | 25.59 | | | | | | |
| 125 | (8.13)a) | (33.002)a) | - | (25.71) | | | | | | |
| 7 | CNAV WHITETHROAT; November 13, 1958; 0802 GCT; 48°46'N, 123°02'W; sounding, 123 fm; wind, 260°, 13 kt; weather, clear; sea, calm. | | | | | | | | | |
| 0 | 10.00 | 29.991 | 4.70 | 23.07 | 0 | 10.00 | 29.99 | 23.07 | 480 | 0.00 |
| 2 | 9.42 | 30.139 | 4.62 | 23.28 | 10 | 9.42 | 30.14 | 23.28 | 461 | 0.05 |
| 6 | 9.42 | 30.141 | 4.46 | 23.28 | 20 | 9.42 | 30.15 | 23.29 | 460 | 0.09 |
| 10 | 9.42 | 30.135 | 4.64 | 23.28 | 30 | 9.42 | 30.17 | 23.31 | 459 | 0.14 |
| 19 | 9.42 | 30.145 | 4.59 | 23.28 | 50 | 9.40 | 30.26 | 23.37 | 453 | 0.23 |
| 48 | 9.40 | 30.253 | 4.40 | 23.37 | 75 | 9.41 | 30.24 | 23.36 | 454 | 0.34 |
| 72 | 9.41 | 30.235 | 4.45 | 23.36 | 100 | 9.41 | 30.25 | 23.37 | 454 | 0.46 |
| 97 | 9.41 | 30.257 | 4.20 | 23.37 | 125 | 9.42 | 30.21 | 23.33 | 458 | 0.57 |
| 121 | 9.42 | 30.210 | 4.46 | 23.33 | 150 | 9.41 | 30.19 | 23.32 | 459 | 0.69 |
| 145 | 9.41 | 30.199 | 4.48 | 23.33 | 175 | 9.40 | 30.09 | 23.25 | 466 | 0.80 |
| 169 | 9.40 | 30.123 | 4.44 | 23.27 | | | | | | |
| 175 | (9.40)a) | (30.094)a) | - | (23.25) | | | | | | |
| 8 | CNAV WHITETHROAT; November 13, 1958; 0918 GCT; 48°43.5'N, 122°58.5'W; sounding, 88 fm; wind, 230°, 15 kt; weather, clear; sea, calm. | | | | | | | | | |
| 0 | 9.40 | 28.810 | 5.39 | 22.25 | 0 | 9.40 | 28.81 | 22.25 | 559 | 0.00 |
| 2 | 9.34 | 29.414 | 5.10 | 22.73 | 10 | 9.38 | 29.95 | 23.14 | 474 | 0.05 |
| 6 | 9.34 | 29.897 | 5.00 | 23.10 | 20 | 9.39 | 30.05 | 23.21 | 467 | 0.10 |
| 10 | 9.38 | 29.950 | 4.90 | 23.14 | 30 | 9.39 | 30.12 | 23.27 | 462 | 0.15 |
| 20 | 9.39 | 30.048 | 4.79 | 23.21 | 50 | 9.38 | 30.19 | 23.33 | 457 | 0.24 |
| 49 | 9.38 | 30.187 | 4.59 | 23.32 | 75 | 9.39 | 30.26 | 23.38 | 452 | 0.35 |
| 73 | 9.39 | 30.257 | 4.54 | 23.38 | 100 | 9.39 | 30.24 | 23.36 | 454 | 0.47 |
| 98 | 9.39 | 30.244 | 4.48 | 23.37 | 125 | 9.39 | 30.24 | 23.36 | 454 | 0.58 |
| 122 | 9.39 | 30.242 | 4.51 | 23.36 | 150 | 9.38 | 30.24 | 23.37 | 455 | 0.69 |
| 147 | 9.38 | 30.243 | 4.53 | 23.37 | | | | | | |
| 150 | (9.38)a) | (30.243)a) | - | (23.37) | | | | | | |
| 9 | CNAV WHITETHROAT; November 13, 1958; 1103 GCT; 48°40'N, 122°43'W; sounding, 60 fm; wind, 200°, 7 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 9.30 | 30.187 | 4.65 | 23.33 | 0 | 9.30 | 30.19 | 23.33 | 455 | 0.00 |
| 2 | 9.34 | 30.199 | 4.66 | 23.34 | 10 | 9.34 | 30.19 | 23.33 | 456 | 0.05 |
| 6 | 9.34 | 30.194 | 4.74 | 23.33 | 20 | 9.36 | 30.20 | 23.34 | 456 | 0.09 |
| 16 | 9.36 | 30.201 | 4.70 | 23.34 | 30 | 9.37 | 30.21 | 23.34 | 455 | 0.14 |
| 46 | 9.34 | 30.204 | 4.71 | 23.34 | 50 | 9.34 | 30.21 | 23.34 | 455 | 0.23 |
| 71 | 9.37 | 30.222 | 4.88 | 23.35 | 75 | 9.37 | 30.23 | 23.36 | 454 | 0.34 |
| 86 | 9.37 | 30.277 | 4.54 | 23.39 | 100 | 9.36 | 30.36 | 23.46 | 445 | 0.46 |
| 100 | (9.36)a) | (30.358)a) | - | (23.46) | | | | | | |
| 10 | CNAV WHITETHROAT; November 13, 1958; 1140 GCT; 48°41'N, 122°41'W; sounding, 44 fm; wind, 200°, 7 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 9.40 | 30.188 | 4.90 | 23.32 | 0 | 9.40 | 30.19 | 23.32 | 457 | 0.00 |
| 2 | 9.29 | 30.175 | 4.65 | 23.33 | 10 | 9.34 | 30.18 | 23.33 | 456 | 0.05 |
| 6 | 9.33 | 30.186 | 4.66 | 23.33 | 20 | 9.34 | 30.18 | 23.32 | 457 | 0.09 |
| 10 | 9.34 | 30.183 | 4.75 | 23.33 | 30 | 9.34 | 30.18 | 23.32 | 457 | 0.14 |
| 20 | 9.34 | 30.181 | 4.68 | 23.32 | 50 | 9.34 | 30.19 | 23.33 | 456 | 0.23 |
| 50 | 9.34 | 30.194 | 4.68 | 23.33 | 75 | 9.37 | 30.18 | 23.32 | 458 | 0.34 |
| 70 | 9.36 | 30.185 | 4.73 | 23.32 | | | | | | |
| 75 | (9.37)a) | (30.181)a) | - | (23.32) | | | | | | |



a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $\sigma_t$ g/L | δ cl/ton | ΔD dyn m |

11

CNAV WHITETHROAT; November 13, 1958; 1323 GCT; 48°43.5'N, 122°58.5'W; sounding, 88 fm; wind, 110°, 11 kt; weather, cloudy; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.50 | 30.562 | 4.55 | 23.60 | 0 | 9.50 | 30.56 | 23.60 | 430 | 0.00 |
| 2 | 9.22 | 30.528 | 4.66 | 23.61 | 10 | 9.33 | 30.52 | 23.59 | 431 | 0.04 |
| 6 | 9.33 | 30.527 | 4.64 | 23.60 | 20 | 9.35 | 30.53 | 23.60 | 431 | 0.09 |
| 10 | 9.33 | 30.523 | 4.64 | 23.59 | 30 | 9.36 | 30.53 | 23.60 | 431 | 0.13 |
| 20 | 9.35 | 30.531 | 5.03 | 23.60 | 50 | 9.34 | 30.52 | 23.59 | 432 | 0.22 |
| 50 | 9.34 | 30.523 | 4.96 | 23.59 | 75 | 9.34 | 30.53 | 23.59 | 432 | 0.32 |
| 75 | 9.34 | 30.525 | 4.52 | 23.59 | 100 | 9.36 | 30.53 | 23.59 | 432 | 0.43 |
| 100 | 9.36 | 30.530 | 4.52 | 23.59 | 125 | 9.37 | 30.52 | 23.58 | 434 | 0.54 |
| 124 | 9.37 | 30.519 | 4.51 | 23.58 | 150 | 9.34 | 30.53 | 23.60 | 433 | 0.65 |
| 149 | 9.34 | 30.531 | 4.47 | 23.60 | | | | | | |
| 150 | (9.34)a) | (30.532)a) | - | (23.60) | | | | | | |

12

CNAV WHITETHROAT; November 13, 1958; 1418 GCT; 48°46.5'N, 123°03'W; sounding, 90 fm; wind, 210°, 16 kt; weather, overcast; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.30 | 29.935 | 4.72 | 23.14 | 0 | 9.30 | 29.94 | 23.14 | 474 | 0.00 |
| 2 | 9.28 | 29.691 | 4.52 | 22.95 | 10 | 9.29 | 30.13 | 23.29 | 460 | 0.05 |
| 6 | 9.30 | 30.065 | 4.53 | 23.24 | 20 | 9.31 | 30.18 | 23.33 | 456 | 0.09 |
| 10 | 9.29 | 30.132 | 4.52 | 23.29 | 30 | 9.32 | 30.22 | 23.36 | 454 | 0.14 |
| 20 | 9.31 | 30.181 | 4.52 | 23.33 | 50 | 9.30 | 30.27 | 23.40 | 450 | 0.23 |
| 50 | 9.30 | 30.271 | 4.49 | 23.40 | 75 | 9.30 | 30.28 | 23.41 | 449 | 0.34 |
| 75 | 9.30 | 30.282 | 4.49 | 23.41 | 100 | 9.30 | 30.30 | 23.42 | 449 | 0.46 |
| 100 | 9.30 | 30.295 | 4.49 | 23.42 | 125 | 9.32 | 30.33 | 23.44 | 447 | 0.57 |
| 125 | 9.32 | 30.332 | 4.49 | 23.44 | 150 | 9.31 | 30.36 | 23.47 | 445 | 0.68 |
| 150 | 9.31 | 30.362 | 4.47 | 23.47 | | | | | | |

13

CNAV WHITETHROAT; November 13, 1958; 1656 GCT; 48°57'N, 123°05.5'W; sounding, 76 fm; wind, 210°, 15 kt; weather, cloudy; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.80 | 28.992 | 5.33 | 22.48 | 0 | 8.80 | 28.99 | 22.48 | 537 | 0.00 |
| 2 | 9.26 | 29.084 | 5.11 | 22.48 | 10 | 9.34 | 29.18 | 22.55 | 531 | 0.05 |
| 6 | 9.30 | 29.085 | 5.19 | 22.48 | 20 | 9.43 | 29.69 | 22.93 | 495 | 0.10 |
| 10 | 9.34 | 29.182 | 5.11 | 22.55 | 30 | 9.47 | 30.02 | 23.18 | 471 | 0.15 |
| 20 | 9.43 | 29.689 | 4.86 | 22.93 | 50 | 9.39 | 30.14 | 23.29 | 461 | 0.25 |
| 50 | 9.39 | 30.142 | 4.66 | 23.29 | 75 | 9.38 | 30.27 | 23.39 | 452 | 0.36 |
| 75 | 9.38 | 30.269 | 4.53 | 23.39 | 100 | 9.37 | 30.42 | 23.50 | 441 | 0.47 |
| 100 | 9.37 | 30.418 | 4.40 | 23.50 | 125 | 9.38 | 30.43 | 23.51 | 440 | 0.58 |
| 125 | 9.38 | 30.434 | 4.40 | 23.51 | | | | | | |

14

CNAV WHITETHROAT; November 13, 1958; 1944 GCT; 49°07'N, 123°30'W; sounding, 200 fm; wind, 220°, 3 kt; weather, missing; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.30 | 27.417 | 6.37 | 21.18 | 0 | 9.30 | 27.42 | 21.18 | 662 | 0.00 |
| 2 | 9.30 | 27.404 | 6.16 | 21.17 | 10 | 9.62 | 27.95 | 21.54 | 627 | 0.06 |
| 6 | 9.41 | 27.596 | 6.06 | 21.30 | 20 | 9.84 | 29.10 | 22.41 | 544 | 0.12 |
| 10 | 9.62 | 27.946 | 5.88 | 21.54 | 30 | 9.91 | 29.77 | 22.91 | 496 | 0.18 |
| 19 | 9.82 | 29.007 | 4.50 | 22.34 | 50 | 9.70 | 29.77 | 22.95 | 493 | 0.28 |
| 48 | 9.70 | 29.732 | 3.72 | 22.92 | 75 | 9.82 | 30.13 | 23.21 | 469 | 0.40 |
| 72 | 9.81 | 30.095 | 3.61 | 23.18 | 100 | 9.81 | 30.30 | 23.34 | 456 | 0.51 |
| 97 | 9.82 | 30.271 | 3.78 | 23.32 | 125 | 9.73 | 30.54 | 23.54 | 438 | 0.62 |
| 121 | 9.74 | 30.499 | 3.82 | 23.51 | 150 | 9.64 | 30.75 | 23.72 | 421 | 0.73 |
| 145 | 9.66 | 30.713 | 3.74 | 23.69 | 175 | 9.55 | 30.89 | 23.85 | 409 | 0.84 |
| 169 | 9.56 | 30.856 | 3.68 | 23.82 | 200 | 9.53 | 31.04 | 23.96 | 399 | 0.94 |
| 193 | 9.54 | 31.007 | 3.53 | 23.94 | 250 | 9.50 | 30.88 | 23.84 | 411 | 1.14 |
| 242 | 9.50 | 31.154 | 3.35 | 24.06 | 300 | 9.53 | 27.28 | 21.04 | 678 | 1.42 |
| 290 | 9.52 | (28.265)b) | 3.14 | (21.81) | | | | | | |
| 300 | (9.53)a) | (27.285)a) | - | (21.04) | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 15 | CNAV WHITETHROAT; November 14, 1958; 0623 GCT; 49°14'N, 123°47'W; sounding, 193 fm; wind, 040°, 10 kt; weather, missing; sea, moderate. | | | | | | | | | |
| 0 | 8.90 | 27.145 | 6.78 | 21.02 | 0 | 8.90 | 27.14 | 21.02 | 676 | 0.00 |
| 2 | 9.14 | 27.200 | 6.47 | 21.03 | 10 | 9.32 | 27.34 | 21.12 | 668 | 0.07 |
| 6 | 9.14 | 27.221 | 6.81 | 21.05 | 20 | 9.92 | 28.23 | 21.71 | 611 | 0.13 |
| 10 | 9.32 | 27.345 | 6.74 | 21.12 | 30 | 10.18 | 28.96 | 22.25 | 560 | 0.19 |
| 20 | 9.92 | 28.227 | 5.77 | 21.71 | 50 | 9.66 | 30.00 | 23.13 | 476 | 0.29 |
| 50 | 9.66 | 29.996 | 3.47 | 23.13 | 75 | 9.88 | 30.28 | 23.32 | 458 | 0.41 |
| 75 | 9.88 | 30.284 | 3.45 | 23.32 | 100 | 9.97 | 30.55 | 23.51 | 440 | 0.52 |
| 100 | 9.97 | 30.545 | 3.47 | 23.51 | 125 | 9.83 | 30.74 | 23.68 | 424 | 0.63 |
| 124 | 9.84 | 30.734 | 3.52 | 23.68 | 150 | 9.69 | 30.90 | 23.82 | 411 | 0.74 |
| 149 | 9.70 | 30.891 | 3.32 | 23.82 | 175 | 9.57 | 30.95 | 23.89 | 405 | 0.84 |
| 174 | 9.57 | 30.949 | 3.35 | 23.89 | 200 | 9.49 | 31.03 | 23.96 | 399 | 0.94 |
| 199 | 9.49 | 31.028 | 3.16 | 23.96 | 250 | 9.45 | 31.10 | 24.02 | 394 | 1.14 |
| 249 | 9.45 | 31.094 | 3.14 | 24.02 | 300 | 9.52 | 31.21 | 24.10 | 387 | 1.34 |
| 299 | 9.52 | 31.209 | 3.07 | 24.10 | | | | | | |
| 339 | 9.54 | 31.297 | 3.09 | 24.16 | | | | | | |
| 16 | CNAV WHITETHROAT; November 14, 1958; 0912 GCT; 49°18'N, 123°42.5'W; sounding, 132 fm; wind, 360°, 12 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 8.80 | 23.214 | 6.77 | 17.98 | 0 | 8.80 | 23.21 | 17.98 | 970 | 0.00 |
| 2 | 8.66 | 23.258 | 6.81 | 18.03 | 10 | 9.55 | 26.82 | 20.68 | 710 | 0.08 |
| 6 | 9.49 | 26.610 | 6.49 | 20.52 | 20 | 9.84 | 28.88 | 22.23 | 561 | 0.15 |
| 10 | 9.55 | 26.822 | 6.32 | 20.68 | 30 | 9.97 | 30.09 | 23.15 | 473 | 0.20 |
| 20 | 9.84 | 28.875 | 4.85 | 22.23 | 50 | 9.73 | 29.99 | 23.11 | 477 | 0.30 |
| 50 | 9.73 | 29.988 | 3.54 | 23.11 | 75 | 9.93 | 30.37 | 23.38 | 452 | 0.41 |
| 75 | 9.93 | 30.372 | 3.51 | 23.38 | 100 | 9.94 | 30.56 | 23.52 | 439 | 0.52 |
| 100 | 9.94 | 30.559 | 3.52 | 23.52 | 125 | 9.82 | 30.73 | 23.68 | 425 | 0.63 |
| 125 | 9.82 | 30.732 | 3.31 | 23.68 | 150 | 9.48 | 30.83 | 23.81 | 413 | 0.74 |
| 150 | 9.48 | 30.827 | 3.44 | 23.81 | 175 | 9.57 | 30.98 | 23.91 | 404 | 0.84 |
| 175 | 9.57 | 30.977 | 3.44 | 23.91 | 200 | 9.60 | 31.06 | 23.97 | 398 | 0.94 |
| 200 | 9.60 | 31.063 | 3.31 | 23.97 | | | | | | |
| 220 | 9.57 | 31.117 | 3.28 | 24.02 | | | | | | |
| 17 | CNAV WHITETHROAT; November 14, 1958; 1023 GCT; 49°23'N, 123°37'W; sounding, 96 fm; wind, missing; weather, cloudy; sea, calm. | | | | | | | | | |
| 0 | 8.40 | 21.955 | 6.73 | 17.05 | 0 | 8.40 | 21.95 | 17.05 | 1059 | 0.00 |
| 2 | 8.29 | 22.155 | 6.61 | 17.22 | 10 | 9.66 | 27.19 | 20.95 | 684 | 0.09 |
| 6 | 8.65 | 22.810 | 6.42 | 17.68 | 20 | 9.84 | 28.59 | 22.01 | 582 | 0.15 |
| 10 | 9.66 | 27.188 | 4.85 | 20.95 | 30 | 9.92 | 29.52 | 22.72 | 514 | 0.21 |
| 20 | 9.84 | 28.594 | 4.22 | 22.01 | 50 | 9.80 | 30.01 | 23.12 | 477 | 0.30 |
| 49 | 9.80 | 29.981 | 3.68 | 23.10 | 75 | 9.90 | 30.26 | 23.29 | 460 | 0.42 |
| 74 | 9.90 | 30.245 | 3.70 | 23.29 | 100 | 9.88 | 30.53 | 23.51 | 440 | 0.54 |
| 99 | 9.88 | 30.518 | 3.65 | 23.50 | 125 | 9.81 | 30.67 | 23.63 | 429 | 0.64 |
| 124 | 9.81 | 30.664 | 3.55 | 23.63 | 150 | 9.72 | 30.75 | 23.71 | 422 | 0.75 |
| 148 | 9.72 | 30.739 | 3.43 | 23.70 | | | | | | |
| 168 | 9.70 | 30.916 | 0.11 | 23.84 | | | | | | |
| 18 | CNAV WHITETHROAT; November 14, 1958; 1520 GCT; 49°23'N, 123°37'W; sounding, 96 fm; wind, 300°, 5 kt; weather, cloudy; sea, calm. | | | | | | | | | |
| 0 | 8.20 | 21.606 | 6.67 | 16.80 | 0 | 8.20 | 21.61 | 16.80 | 1083 | 0.00 |
| 2 | 8.50 | 22.200 | 6.51 | 17.23 | 10 | 9.79 | 27.52 | 21.19 | 661 | 0.09 |
| 6 | 9.41 | 25.445 | 5.38 | 19.63 | 20 | 9.83 | 29.48 | 22.70 | 516 | 0.15 |
| 10 | 9.79 | 27.523 | 5.58 | 21.19 | 30 | 9.86 | 30.57 | 23.54 | 436 | 0.19 |
| 20 | 9.83 | 29.479 | 3.74 | 22.70 | 50 | 9.88 | 30.15 | 23.22 | 467 | 0.28 |
| 50 | 9.88 | 30.154 | 3.57 | 23.22 | 75 | 9.90 | 30.38 | 23.39 | 451 | 0.40 |
| 75 | 9.90 | 30.379 | 3.68 | 23.39 | 100 | 9.82 | 30.51 | 23.51 | 440 | 0.51 |
| 100 | 9.82 | 30.514 | 3.64 | 23.51 | 125 | 9.82 | 30.60 | 23.58 | 434 | 0.62 |
| 125 | 9.82 | 30.603 | 3.55 | 23.58 | 150 | 9.64 | 30.78 | 23.74 | 419 | 0.73 |
| 150 | 9.64 | 30.776 | 3.48 | 23.74 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z m | T °C | S ‰ | $O_2$ ml/L | $\sigma_t$ g/L | Z m | T °C | S ‰ | $\sigma_t$ g/L | $\delta$ cl/ton | $\Delta D$ dyn m |

19

CNAV WHITETHROAT; November 14, 1958; 1719 GCT; 49°17.5'N, 123°43'W; sounding, missing; wind, 260°, 10 kt; weather, missing; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.30 | 21.675 | 6.93 | 16.84 | 0 | 8.30 | 21.67 | 16.84 | 1079 | 0.00 |
| 2 | 8.30 | 21.772 | 6.84 | 16.92 | 10 | 9.77 | 27.53 | 21.20 | 660 | 0.09 |
| 5 | 9.30 | 26.960 | 6.73 | 20.82 | 20 | 10.02 | 28.86 | 22.19 | 565 | 0.15 |
| 9 | 9.70 | 27.413 | 6.35 | 21.12 | 30 | 10.06 | 29.67 | 22.81 | 506 | 0.20 |
| 18 | 9.98 | 28.636 | 5.15 | 22.02 | 50 | 9.68 | 30.12 | 23.23 | 466 | 0.30 |
| 45 | 9.67 | 29.994 | 3.53 | 23.13 | 75 | 9.92 | 30.34 | 23.36 | 454 | 0.42 |
| 68 | 9.88 | 30.277 | 3.43 | 23.31 | 100 | 9.95 | 30.53 | 23.50 | 442 | 0.53 |
| 91 | 9.98 | 30.456 | 3.50 | 23.44 | 125 | 9.77 | 30.70 | 23.66 | 426 | 0.64 |
| 113 | 9.83 | 30.626 | 3.47 | 23.59 | 150 | 9.66 | 30.84 | 23.79 | 414 | 0.74 |
| 136 | 9.74 | 30.757 | 3.37 | 23.71 | 175 | 9.61 | 30.96 | 23.89 | 405 | 0.84 |
| 159 | 9.60 | 30.898 | 3.30 | 23.84 | 200 | 9.63 | 31.04 | 23.94 | 401 | 0.95 |
| 181 | 9.63 | 30.983 | 3.29 | 23.90 | 250 | 9.53 | 31.08 | 23.99 | 397 | 1.15 |
| 226 | 9.60 | 31.075 | 3.19 | 23.98 | | | | | | |
| 250 | (9.53)a) | (31.079)a) | - | (23.99) | | | | | | |

20

CNAV WHITETHROAT; November 14, 1958; 1842 GCT; 49°14'N, 123°47'W; sounding, missing; wind, 280°, 15 kt; weather, missing; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.60 | 24.944 | 6.94 | 19.35 | 0 | 8.60 | 24.94 | 19.35 | 837 | 0.00 |
| 2 | 8.59 | 25.777 | 6.83 | 20.00 | 10 | 9.48 | 27.64 | 21.32 | 648 | 0.07 |
| 6 | 9.43 | 27.607 | 6.29 | 21.31 | 20 | 9.82 | 28.83 | 22.19 | 565 | 0.14 |
| 10 | 9.48 | 27.635 | 6.29 | 21.32 | 30 | 9.96 | 29.58 | 22.76 | 511 | 0.19 |
| 20 | 9.82 | 28.825 | 5.27 | 22.19 | 50 | 9.64 | 29.80 | 22.98 | 490 | 0.29 |
| 50 | 9.64 | 29.795 | 3.92 | 22.98 | 75 | 9.70 | 30.08 | 23.19 | 471 | 0.41 |
| 75 | 9.70 | 30.076 | 3.52 | 23.19 | 100 | 9.82 | 30.40 | 23.42 | 449 | 0.53 |
| 100 | 9.82 | 30.399 | 3.52 | 23.42 | 125 | 9.80 | 30.69 | 23.65 | 428 | 0.64 |
| 125 | 9.80 | 30.689 | 3.44 | 23.65 | 150 | 9.68 | 30.83 | 23.78 | 416 | 0.74 |
| 150 | 9.68 | 30.830 | 3.27 | 23.78 | 175 | 9.58 | 30.98 | 23.91 | 403 | 0.84 |
| 175 | 9.58 | 30.983 | 3.23 | 23.91 | 200 | 9.56 | 31.01 | 23.93 | 401 | 0.95 |
| 200 | 9.56 | 31.009 | 3.14 | 23.93 | 250 | 9.37 | 31.14 | 24.07 | 389 | 1.14 |
| 225 | 9.49 | 31.062 | 3.07 | 23.99 | | | | | | |
| 250 | (9.37)a) | (31.142)a) | - | (24.07) | | | | | | |

21

CNAV WHITETHROAT; November 14, 1958; 2115 GCT; 49°24.5'N, 124°03'W; sounding, 196 fm; wind, 280°, 15 kt; weather, partly cloudy; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.80 | 26.100 | 6.74 | 20.22 | 0 | 8.80 | 26.10 | 20.22 | 753 | 0.00 |
| 2 | 8.55 | 25.382 | 6.89 | 19.70 | 10 | 9.44 | 27.86 | 21.50 | 631 | 0.07 |
| 6 | 9.16 | 27.557 | 6.31 | 21.31 | 20 | 9.75 | 28.61 | 22.04 | 580 | 0.13 |
| 10 | 9.44 | 27.857 | 6.10 | 21.50 | 30 | 9.91 | 29.21 | 22.48 | 537 | 0.19 |
| 20 | 9.75 | 28.610 | 5.43 | 22.04 | 50 | 9.76 | 29.98 | 23.10 | 478 | 0.29 |
| 50 | 9.76 | 29.981 | 3.53 | 23.10 | 75 | 9.88 | 30.28 | 23.31 | 459 | 0.40 |
| 75 | 9.88 | 30.277 | 3.46 | 23.31 | 100 | 9.90 | 30.56 | 23.53 | 438 | 0.52 |
| 100 | 9.90 | 30.562 | 3.52 | 23.53 | 125 | 9.88 | 30.66 | 23.61 | 431 | 0.63 |
| 125 | 9.88 | 30.662 | 3.44 | 23.61 | 150 | 9.71 | 30.85 | 23.79 | 414 | 0.73 |
| 150 | 9.71 | 30.854 | 3.33 | 23.79 | 175 | 9.68 | 30.93 | 23.85 | 409 | 0.84 |
| 175 | 9.68 | 30.929 | 3.33 | 23.85 | 200 | 9.57 | 31.00 | 23.93 | 402 | 0.94 |
| 200 | 9.57 | 31.000 | 3.30 | 23.93 | 250 | 9.42 | 31.09 | 24.02 | 394 | 1.14 |
| 250 | 9.42 | 31.089 | 3.07 | 24.02 | 300 | 9.45 | 31.17 | 24.08 | 389 | 1.34 |
| 300 | 9.45 | 31.171 | 3.07 | 24.08 | | | | | | |
| 350 | 9.50 | 31.243 | 3.10 | 24.13 | | | | | | |

22

CNAV WHITETHROAT; November 15, 1958; 0242 GCT; 49°38.5'N, 124°41.5'W; sounding, 70 fm; wind, 310°, 25 kt; weather, partly cloudy; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.20 | 28.541 | 6.44 | 22.21 | 0 | 8.20 | 28.54 | 22.21 | 563 | 0.00 |
| 2 | 9.39 | 28.521 | 6.28 | 22.02 | 10 | 9.41 | 28.50 | 22.00 | 583 | 0.06 |
| 5 | 9.39 | 28.498 | 6.37 | 22.01 | 20 | 9.41 | 28.52 | 22.02 | 581 | 0.12 |
| 9 | 9.41 | 28.499 | 6.27 | 22.00 | 30 | 9.42 | 28.77 | 22.21 | 563 | 0.17 |
| 18 | 9.41 | 28.498 | 6.27 | 22.00 | 50 | 9.46 | 29.68 | 22.91 | 496 | 0.28 |
| 45 | 9.46 | 29.554 | 4.34 | 22.82 | 75 | 9.48 | 30.05 | 23.20 | 470 | 0.40 |
| 68 | 9.44 | 29.939 | 3.67 | 23.12 | 100 | 9.67 | 30.39 | 23.43 | 448 | 0.52 |
| 91 | 9.64 | 30.273 | 3.33 | 23.35 | | | | | | |
| 113 | 9.67 | 30.537 | 3.25 | 23.55 | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 23 | CNAV WHITETHROAT; November 15, 1958; 0447 GCT; 49°44.5'N, 124°48.5'W; sounding, 88 fm; wind, 300°, 15 kt; weather, clear; sea, rough. | | | | | | | | | |
| 0 | 9.10 | 28.684 | 6.21 | 22.19 | 0 | 9.10 | 28.68 | 22.19 | 564 | 0.00 |
| 2 | 9.17 | 28.703 | 6.10 | 22.20 | 10 | 9.18 | 28.70 | 22.20 | 564 | 0.06 |
| 6 | 9.17 | 28.695 | 6.28 | 22.19 | 20 | 9.26 | 28.86 | 22.31 | 554 | 0.11 |
| 10 | 9.18 | 28.703 | 6.22 | 22.20 | 30 | 9.32 | 29.06 | 22.45 | 540 | 0.17 |
| 20 | 9.26 | 28.857 | 5.97 | 22.31 | 50 | 9.38 | 29.60 | 22.86 | 501 | 0.27 |
| 50 | 9.38 | 29.596 | 4.32 | 22.86 | 75 | 9.44 | 29.78 | 23.00 | 489 | 0.40 |
| 75 | 9.44 | 29.779 | 4.06 | 23.00 | 100 | 9.46 | 30.04 | 23.20 | 470 | 0.52 |
| 99 | 9.45 | 30.025 | 3.75 | 23.19 | 125 | 9.74 | 30.66 | 23.64 | 429 | 0.63 |
| 124 | 9.74 | 30.650 | 3.30 | 23.63 | 150 | 9.65 | 30.72 | 23.70 | 423 | 0.74 |
| 149 | 9.66 | 30.731 | 3.23 | 23.70 | | | | | | |
| 150 | (9.65)a) | (30.723)a) | - | (23.70) | | | | | | |
| 24 | CNAV WHITETHROAT; November 15, 1958; 0641 GCT; 49°44'N, 124°40'W; sounding, 170-85 fm; wind, 320°, 18 kt; weather, clear; sea, rough. | | | | | | | | | |
| 0 | 9.20 | 27.933 | 6.63 | 21.59 | 0 | 9.20 | 27.93 | 21.59 | 622 | 0.00 |
| 2 | 9.31 | 28.195 | 6.31 | 21.78 | 10 | 9.35 | 28.25 | 21.82 | 601 | 0.06 |
| 5 | 9.34 | 28.223 | 6.24 | 21.80 | 20 | 9.54 | 28.43 | 21.93 | 590 | 0.12 |
| 8 | 9.34 | 28.235 | 6.24 | 21.81 | 30 | 9.77 | 28.90 | 22.26 | 558 | 0.18 |
| 16 | 9.44 | 28.294 | 6.25 | 21.84 | 50 | 9.54 | 29.52 | 22.78 | 509 | 0.29 |
| 25 | 9.71 | 28.703 | 5.86 | 22.12 | 75 | 9.60 | 30.04 | 23.17 | 472 | 0.41 |
| 45 | 9.55 | 29.382 | 4.84 | 22.67 | 100 | 9.64 | 30.24 | 23.32 | 458 | 0.52 |
| 65 | 9.58 | 29.878 | 3.99 | 23.05 | 125 | 9.70 | 30.43 | 23.46 | 446 | 0.64 |
| 86 | 9.62 | 30.142 | 3.54 | 23.25 | 150 | 9.75 | 30.59 | 23.58 | 435 | 0.75 |
| 106 | 9.65 | 30.266 | 3.44 | 23.34 | 175 | 9.70 | 30.70 | 23.67 | 426 | 0.86 |
| 127 | 9.71 | 30.446 | 3.33 | 23.47 | 200 | 9.60 | 30.78 | 23.75 | 419 | 0.96 |
| 147 | 9.75 | 30.572 | 3.33 | 23.56 | | | | | | |
| 188 | 9.63 | 30.740 | 3.24 | 23.71 | | | | | | |
| 228 | 9.53 | 30.861 | 3.19 | 23.82 | | | | | | |
| 25 | CNAV WHITETHROAT; November 15, 1958; 0906 GCT; 49°48.5'N, 124°52'W; sounding, 170 fm; wind, 320°, 20 kt; weather, clear; sea, rough. | | | | | | | | | |
| 0 | 8.50 | 28.451 | 6.43 | 22.10 | 0 | 8.50 | 28.45 | 22.10 | 574 | 0.00 |
| 2 | 9.09 | 28.389 | 6.35 | 21.97 | 10 | 9.08 | 28.40 | 21.97 | 586 | 0.06 |
| 6 | 9.06 | 28.395 | 6.55 | 21.98 | 20 | 9.13 | 28.43 | 22.00 | 584 | 0.12 |
| 10 | 9.08 | 28.396 | 6.31 | 21.97 | 30 | 9.20 | 28.64 | 22.15 | 569 | 0.18 |
| 19 | 9.12 | 28.423 | 6.30 | 21.99 | 50 | 9.41 | 29.49 | 22.78 | 510 | 0.28 |
| 48 | 9.40 | 29.443 | 4.62 | 22.74 | 75 | 9.37 | 29.86 | 23.07 | 482 | 0.41 |
| 73 | 9.36 | 29.816 | 3.81 | 23.04 | 100 | 9.56 | 30.49 | 23.53 | 438 | 0.52 |
| 97 | 9.54 | 30.443 | 3.29 | 23.50 | 125 | 9.72 | 30.67 | 23.65 | 428 | 0.63 |
| 122 | 9.72 | 30.655 | 3.30 | 23.63 | 150 | 9.66 | 30.77 | 23.73 | 420 | 0.74 |
| 146 | 9.66 | 30.757 | 3.30 | 23.72 | 175 | 9.69 | 30.82 | 23.76 | 417 | 0.84 |
| 170 | 9.70 | 30.809 | 3.39 | 23.76 | 200 | 9.58 | 30.84 | 23.80 | 414 | 0.95 |
| 194 | 9.60 | 30.838 | 3.14 | 23.79 | 250 | 9.49 | 30.88 | 23.85 | 410 | 1.16 |
| 244 | 9.50 | 30.882 | 3.11 | 23.84 | 300 | 9.40 | 30.88 | 23.86 | 410 | 1.36 |
| 294 | 9.41 | 30.882 | 3.02 | 23.86 | | | | | | |
| 300 | (9.40)a) | (30.879)a) | - | (23.86) | | | | | | |
| 26 | CNAV WHITETHROAT; November 15, 1958; 1209 GCT; 50°05'N, 125°07'W; sounding, 130 fm; wind, 310°, 16 kt; weather, clear; sea, moderate. | | | | | | | | | |
| 0 | 8.50 | 28.287 | 5.43 | 21.97 | 0 | 8.50 | 28.29 | 21.97 | 586 | 0.00 |
| 2 | 8.72 | 28.236 | 5.54 | 21.90 | 10 | 8.88 | 28.30 | 21.93 | 590 | 0.06 |
| 6 | 8.72 | 28.239 | 5.49 | 21.90 | 20 | 9.08 | 29.06 | 22.49 | 536 | 0.12 |
| 10 | 8.88 | 28.299 | 5.46 | 21.93 | 30 | 9.21 | 29.59 | 22.88 | 499 | 0.17 |
| 20 | 9.08 | 29.059 | 4.24 | 22.49 | 50 | 9.26 | 29.96 | 23.16 | 473 | 0.26 |
| 50 | 9.26 | 29.958 | 3.51 | 23.16 | 75 | 9.40 | 30.33 | 23.43 | 447 | 0.38 |
| 75 | 9.40 | 30.332 | 3.33 | 23.43 | 100 | 9.52 | 30.54 | 23.58 | 434 | 0.49 |
| 99 | 9.52 | 30.535 | 3.43 | 23.57 | 125 | 9.56 | 30.65 | 23.65 | 427 | 0.60 |
| 124 | 9.56 | 30.645 | 3.23 | 23.65 | 150 | 9.48 | 30.72 | 23.72 | 421 | 0.71 |
| 149 | 9.48 | 30.718 | 3.20 | 23.72 | 175 | 9.43 | 30.77 | 23.77 | 416 | 0.81 |
| 173 | 9.43 | 30.769 | 3.16 | 23.77 | 200 | 9.43 | 30.81 | 23.80 | 414 | 0.92 |
| 197 | 9.43 | 30.807 | 3.12 | 23.80 | 250 | 9.38 | 30.83 | 23.82 | 413 | 1.12 |
| 226 | 9.41 | 30.829 | 3.14 | 23.82 | | | | | | |
| 250 | (9.38)a) | (30.827)a) | - | (23.82) | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

27

CNAV WHITETHROAT; November 15, 1958; 1538 GCT; 49°59.5'N, 125°12.5'W; sounding, 23 fm; wind, 310°, 13 kt; weather, clear; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.00 | 29.497 | 4.78 | 22.84 | 0 | 9.00 | 29.50 | 22.84 | 502 | 0.00 |
| 2 | 9.22 | 29.430 | 4.65 | 22.76 | 10 | 9.24 | 29.43 | 22.75 | 511 | 0.05 |
| 6 | 9.22 | 29.435 | 4.78 | 22.76 | 20 | 9.26 | 29.46 | 22.77 | 510 | 0.10 |
| 10 | 9.24 | 29.427 | 4.78 | 22.75 | 30 | 9.27 | 29.48 | 22.79 | 508 | 0.15 |
| 20 | 9.26 | 29.456 | 4.65 | 22.77 | | | | | | |
| 40 | 9.27 | 29.509 | 4.66 | 22.81 | | | | | | |

28

CNAV WHITETHROAT; November 15, 1958; 1604 GCT; 49°59.5'N, 125°12'W; sounding, 30 fm; wind, 310°, 12 kt; weather, clear; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.70 | 29.512 | 4.75 | 22.90 | 0 | 8.70 | 29.51 | 22.90 | 497 | 0.00 |
| 2 | 9.23 | 29.522 | 4.63 | 22.83 | 10 | 9.26 | 29.54 | 22.83 | 503 | 0.05 |
| 6 | 9.24 | 29.533 | 4.73 | 22.83 | 20 | 9.26 | 29.56 | 22.85 | 502 | 0.10 |
| 10 | 9.26 | 29.536 | 4.71 | 22.83 | 30 | 9.26 | 29.57 | 22.86 | 501 | 0.15 |
| 19 | 9.26 | 29.557 | 4.62 | 22.85 | 50 | 9.26 | 29.56 | 22.85 | 502 | 0.25 |
| 48 | 9.26 | 29.558 | 4.67 | 22.85 | | | | | | |
| 62 | 9.26 | 29.544 | 4.56 | 22.84 | | | | | | |

29

CNAV WHITETHROAT; November 15, 1958; 2242 GCT; 49°59.5'N, 125°12'W; sounding, missing; wind, 310°, 10 kt; weather, clear; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.50 | 28.582 | 5.81 | 22.20 | 0 | 8.50 | 28.58 | 22.20 | 564 | 0.00 |
| 2 | 8.71 | 28.520 | 5.65 | 22.12 | 10 | 9.33 | 28.43 | 21.96 | 587 | 0.06 |
| 32 | 9.22 | 29.510 | 4.57 | 22.82 | 20 | 9.61 | 28.68 | 22.12 | 572 | 0.12 |
| 57 | 9.38 | 30.398 | 3.54 | 23.49 | 30 | 9.34 | 29.33 | 22.66 | 520 | 0.17 |
| 67 | 9.41 | 30.660 | 3.02 | 23.69 | 50 | 9.36 | 30.14 | 23.29 | 460 | 0.27 |
| 75 | (9.42)a) | (30.831)a) | - | (23.82) | 75 | 9.42 | 30.83 | 23.82 | 410 | 0.38 |

30

CNAV WHITETHROAT; November 15, 1958; 2258 GCT; 49°59.5'N, 125°12.5'W; sounding, 27 fm; wind, 310°, 9 kt; weather, clear; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.10 | 28.748 | 5.62 | 22.24 | 0 | 9.10 | 28.75 | 22.24 | 560 | 0.00 |
| 2 | 8.68 | 29.489 | 4.72 | 22.88 | 10 | 9.22 | 29.56 | 22.86 | 501 | 0.05 |
| 6 | 9.18 | 29.525 | 4.57 | 22.84 | 20 | 9.22 | 29.66 | 22.94 | 494 | 0.10 |
| 10 | 9.22 | 29.559 | 4.57 | 22.86 | | | | | | |
| 20 | 9.22 | 29.661 | 4.55 | 22.94 | | | | | | |

31

CNAV WHITETHROAT; November 16, 1958; 0455 GCT; 50°28'N, 126°08.5'W; sounding, missing; wind, 170°, 5 kt; weather, clear; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.80 | 30.850 | 4.93 | 23.93 | 0 | 8.80 | 30.85 | 23.93 | 399 | 0.00 |
| 2 | 8.79 | 30.823 | 4.68 | 23.91 | 10 | 8.86 | 30.85 | 23.92 | 400 | 0.04 |
| 6 | 8.82 | 30.858 | 5.32 | 23.93 | 20 | 8.86 | 30.88 | 23.94 | 398 | 0.08 |
| 10 | 8.86 | 30.847 | 4.72 | 23.92 | 30 | 8.86 | 30.93 | 23.98 | 395 | 0.12 |
| 20 | 8.86 | 30.881 | 4.73 | 23.94 | 50 | 8.88 | 31.04 | 24.07 | 386 | 0.20 |
| 49 | 8.88 | 31.040 | 4.68 | 24.06 | 75 | 8.90 | 31.13 | 24.13 | 381 | 0.30 |
| 74 | 8.90 | 31.127 | 4.67 | 24.13 | 100 | 8.88 | 31.20 | 24.19 | 376 | 0.39 |
| 99 | 8.88 | 31.195 | 4.66 | 24.18 | 125 | 8.89 | 31.25 | 24.22 | 372 | 0.48 |
| 124 | 8.89 | 31.246 | 4.67 | 24.22 | 150 | 8.85 | 31.25 | 24.23 | 372 | 0.58 |
| 148 | 8.85 | 31.252 | 4.68 | 24.23 | 175 | 8.89 | 31.28 | 24.25 | 371 | 0.67 |
| 173 | 8.89 | 31.278 | 4.68 | 24.25 | 200 | 8.89 | 31.28 | 24.25 | 371 | 0.76 |
| 198 | 8.89 | 31.282 | 4.65 | 24.25 | 250 | 8.87 | 31.33 | 24.29 | 368 | 0.95 |
| 247 | 8.87 | 31.329 | 4.67 | 24.29 | | | | | | |
| 250 | (8.87)a) | (31.334)a) | - | (24.29) | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 32 | CNAV WHITETHROAT; November 16, 1958; 0550 GCT; 50°29'N, 126°09.5'W; sounding, missing; wind, 060°, 10 kt; weather, clear; sea, calm. | | | | | | | | | |
| 0 | 8.60 | 30.881 | 4.87 | 23.98 | 0 | 8.60 | 30.88 | 23.98 | 394 | 0.00 |
| 2 | 8.84 | (30.869)a) | 4.71 | (23.94) | 10 | 8.87 | 30.88 | 23.94 | 398 | 0.04 |
| 5 | 8.84 | 30.862 | 4.77 | 23.93 | 20 | 8.93 | 30.91 | 23.96 | 396 | 0.08 |
| 9 | 8.86 | 30.875 | 4.72 | 23.94 | 30 | 8.94 | 30.94 | 23.98 | 395 | 0.12 |
| 18 | 8.92 | 30.905 | 4.72 | 23.95 | 50 | 8.88 | 30.99 | 24.02 | 390 | 0.20 |
| 45 | 8.88 | 30.977 | 4.66 | 24.01 | 75 | 8.90 | 31.07 | 24.08 | 385 | 0.30 |
| 67 | 8.90 | 31.036 | 4.75 | 24.06 | 100 | 8.90 | 31.17 | 24.16 | 378 | 0.39 |
| 90 | 8.90 | 31.132 | 4.68 | 24.13 | 125 | 8.88 | 31.23 | 24.21 | 374 | 0.49 |
| 112 | 8.89 | 31.209 | 4.69 | 24.19 | 150 | 8.86 | 31.25 | 24.23 | 372 | 0.58 |
| 135 | 8.86 | 31.231 | 4.64 | 24.22 | 175 | 8.88 | 31.29 | 24.26 | 370 | 0.67 |
| 157 | 8.87 | 31.266 | 4.69 | 24.24 | 200 | 8.88 | 31.31 | 24.27 | 369 | 0.77 |
| 180 | 8.88 | 31.296 | 4.68 | 24.26 | 250 | 8.87 | 31.32 | 24.28 | 369 | 0.95 |
| 225 | 8.88 | 31.303 | 4.68 | 24.27 | | | | | | |
| 270 | 8.86 | 31.334 | 4.69 | 24.30 | | | | | | |
| 33 | CNAV WHITETHROAT; November 16, 1958; 0947 GCT; 50°28'N, 126°08'W; sounding, 160 fm; wind, 060°, 15 kt; weather, clear; sea, calm. | | | | | | | | | |
| 0 | 8.60 | 30.797 | 4.98 | 23.92 | 0 | 8.60 | 30.80 | 23.92 | 400 | 0.00 |
| 2 | 8.82 | 30.787 | 4.96 | 23.88 | 10 | 8.82 | 30.83 | 23.91 | 401 | 0.04 |
| 5 | 8.80 | (30.809)a) | 4.78 | (23.90) | 20 | 8.83 | 30.81 | 23.89 | 402 | 0.08 |
| 9 | 8.82 | 30.825 | 4.84 | 23.90 | 30 | 8.85 | 30.84 | 23.91 | 401 | 0.12 |
| 17 | 8.83 | 30.814 | 4.88 | 23.89 | 50 | 8.87 | 30.93 | 23.98 | 395 | 0.20 |
| 43 | 8.86 | 30.905 | 4.78 | 23.96 | 75 | 8.88 | 30.98 | 24.02 | 391 | 0.30 |
| 65 | 8.88 | 30.966 | 4.67 | 24.01 | 100 | 8.90 | 30.99 | 24.02 | 391 | 0.40 |
| 87 | 8.88 | 30.990 | 4.72 | 24.02 | 125 | 8.88 | 30.97 | 24.01 | 393 | 0.50 |
| 108 | 8.91 | 30.982 | 4.62 | 24.01 | 150 | 8.89 | 31.08 | 24.09 | 385 | 0.59 |
| 130 | 8.86 | 30.965 | 4.64 | 24.01 | 175 | 8.89 | 31.08 | 24.09 | 386 | 0.69 |
| 152 | 8.90 | 31.099 | 4.59 | 24.11 | 200 | 8.89 | 31.15 | 24.15 | 381 | 0.79 |
| 173 | 8.89 | 31.080 | 4.62 | 24.09 | 250 | 8.87 | 31.31 | 24.28 | 370 | 0.98 |
| 217 | 8.89 | 31.247 | 4.59 | 24.22 | | | | | | |
| 238 | 8.88 | 31.293 | 4.66 | 24.26 | | | | | | |
| 250 | (8.87)b) | (31.310)b) | - | (24.28) | | | | | | |
| 34 | CNAV WHITETHROAT; November 16, 1958; 1039 GCT; 50°28.5'N, 126°09'W; sounding, 155 fm; wind, 060°, 12 kt; weather, clear; sea, slight. | | | | | | | | | |
| 0 | 8.50 | 30.668 | 5.02 | 23.83 | 0 | 8.50 | 30.67 | 23.83 | 408 | 0.00 |
| 2 | 8.68 | 30.648 | 4.92 | 23.79 | 10 | 8.79 | 30.70 | 23.81 | 410 | 0.04 |
| 6 | 8.72 | 30.657 | 4.85 | 23.79 | 20 | 8.81 | 30.79 | 23.88 | 404 | 0.08 |
| 9 | 8.78 | 30.692 | 4.88 | 23.81 | 30 | 8.85 | 30.85 | 23.92 | 400 | 0.12 |
| 19 | 8.81 | 30.781 | 4.68 | 23.87 | 50 | 8.91 | 30.89 | 23.94 | 398 | 0.20 |
| 47 | 8.91 | 30.883 | 4.72 | 23.94 | 75 | 8.87 | 30.95 | 23.99 | 394 | 0.30 |
| 70 | 8.88 | 30.939 | 4.73 | 23.98 | 100 | 8.87 | 30.96 | 24.01 | 393 | 0.40 |
| 94 | 8.86 | 30.953 | 4.72 | 24.00 | 125 | 8.90 | 31.05 | 24.07 | 387 | 0.50 |
| 117 | 8.91 | 31.004 | 4.71 | 24.03 | 150 | 8.86 | 31.22 | 24.20 | 375 | 0.60 |
| 141 | 8.86 | 31.192 | 4.64 | 24.19 | 175 | 8.89 | 31.20 | 24.19 | 376 | 0.69 |
| 164 | 8.88 | 31.203 | 4.53 | 24.19 | 200 | 8.90 | 31.21 | 24.19 | 377 | 0.78 |
| 188 | 8.90 | 31.203 | 4.67 | 24.19 | 250 | 8.89 | 31.28 | 24.25 | 372 | 0.97 |
| 235 | 8.90 | 31.254 | 4.59 | 24.23 | | | | | | |
| 259 | 8.89 | (31.306)b) | 4.59 | (24.27) | | | | | | |
| 35 | CNAV WHITETHROAT; November 18, 1958; 1647 GCT; 50°41.5'N, 127°13.5'W; sounding, 71 fm; wind, 120°, 7 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 8.40 | 31.573 | 5.65 | 24.55 | 0 | 8.40 | 31.57 | 24.55 | 339 | 0.00 |
| 2 | 8.42 | 31.564 | 5.85 | 24.54 | 10 | 8.44 | 31.56 | 24.54 | 341 | 0.03 |
| 6 | 8.44 | 31.567 | 5.75 | 24.54 | 20 | 8.44 | 31.57 | 24.54 | 341 | 0.07 |
| 10 | 8.44 | 31.561 | 5.60 | 24.54 | 30 | 8.48 | 31.62 | 24.58 | 338 | 0.10 |
| 20 | 8.44 | 31.568 | 5.70 | 24.54 | 50 | 8.66 | 31.85 | 24.73 | 323 | 0.17 |
| 50 | 8.66 | 31.853 | 5.80 | 24.73 | 75 | 8.68 | 31.97 | 24.82 | 315 | 0.25 |
| 75 | 8.68 | 31.970 | 5.01 | 24.82 | | | | | | |

a) Value interpolated by three-point parabolic method.

b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| CNAV WHITETHROAT; November 18, 1958; 1813 GCT; 50°45'N, 127°20.5'W; sounding, 145 fm; wind, 210°, 9 kt; weather, cloudy; sea, slight. | | | | | | | | | | 36 |
| 0 | 8.25 | 31.395 | 6.05 | 24.43 | 0 | 8.25 | 31.39 | 24.43 | 351 | 0.00 |
| 2 | 8.27 | 31.445 | 5.85 | 24.47 | 10 | 8.36 | 31.48 | 24.48 | 346 | 0.04 |
| 6 | 8.32 | 31.464 | 5.99 | 24.48 | 20 | 8.42 | 31.53 | 24.51 | 343 | 0.07 |
| 10 | 8.36 | 31.479 | 6.09 | 24.48 | 30 | 8.48 | 31.58 | 24.54 | 341 | 0.10 |
| 20 | 8.42 | 31.528 | 6.05 | 24.51 | 50 | 8.60 | 31.68 | 24.60 | 335 | 0.17 |
| 50 | 8.60 | 31.678 | 5.85 | 24.60 | 75 | 8.69 | 31.73 | 24.63 | 333 | 0.26 |
| 75 | 8.69 | 31.728 | 5.75 | 24.63 | 100 | 9.02 | 31.86 | 24.68 | 328 | 0.34 |
| 100 | 9.02 | 31.861 | 5.72 | 24.68 | 125 | 8.78 | 32.24 | 25.01 | 297 | 0.42 |
| 125 | 8.78 | 32.238 | 4.97 | 25.01 | 150 | 8.52 | 32.27 | 25.08 | 291 | 0.49 |
| 150 | 8.52 | 32.273 | 4.84 | 25.08 | 175 | 8.28 | 32.45 | 25.26 | 275 | 0.56 |
| 175 | 8.28 | 32.452 | 4.17 | 25.26 | 200 | 8.28 | 32.53 | 25.32 | 269 | 0.63 |
| 200 | 8.28 | 32.533 | 4.08 | 25.32 | 250 | 8.02 | 32.78 | 25.56 | 248 | 0.76 |
| 250 | 8.02 | 32.785 | 3.64 | 25.56 | | | | | | |
| CNAV WHITETHROAT; November 18, 1958; 1910 GCT; 50°49'N, 127°17.5'W; sounding, 73 fm; wind, 100°, 5 kt; weather, cloudy; sea, slight. | | | | | | | | | | 37 |
| 0 | 8.25 | 31.281 | - | 24.34 | 0 | 8.25 | 31.28 | 24.34 | 359 | 0.00 |
| 2 | 8.30 | 31.278 | 5.55 | 24.34 | 10 | 8.42 | 31.43 | 24.44 | 350 | 0.04 |
| 6 | 8.37 | 31.346 | 5.73 | 24.38 | 20 | 8.44 | 31.53 | 24.51 | 344 | 0.07 |
| 10 | 8.42 | 31.429 | 5.37 | 24.44 | 30 | 8.46 | 31.59 | 24.55 | 340 | 0.10 |
| 19 | 8.44 | 31.521 | 5.66 | 24.50 | 50 | 8.48 | 31.58 | 24.55 | 341 | 0.17 |
| 49 | 8.48 | 31.581 | 6.06 | 24.55 | 75 | 8.50 | 31.61 | 24.57 | 339 | 0.26 |
| 73 | 8.50 | 31.609 | 5.60 | 24.56 | 100 | 8.55 | 31.68 | 24.61 | 335 | 0.34 |
| 97 | 8.54 | 31.656 | 5.54 | 24.60 | | | | | | |
| 122 | 8.70 | 31.951 | 4.77 | 24.80 | | | | | | |
| CNAV WHITETHROAT; November 18, 1958; 1956 GCT; 50°52'N, 127°14.5'W; sounding, 70 fm; wind, 100°, 6 kt; weather, cloudy; sea, calm.[a] | | | | | | | | | | 38 |
| 0 | 8.40 | 31.191 | 5.44 | 24.25 | 0 | 8.40 | 31.19 | 24.25 | 368 | 0.00 |
| 2 | 8.26 | 31.185 | 5.39 | 24.27 | 10 | 8.30 | 31.21 | 24.28 | 365 | 0.04 |
| 6 | 8.28 | 31.208 | 5.43 | 24.28 | 20 | 8.34 | 31.26 | 24.32 | 362 | 0.07 |
| 10 | 8.30 | 31.213 | 5.40 | 24.28 | 30 | 8.36 | 31.30 | 24.34 | 360 | 0.11 |
| 20 | 8.34 | 31.260 | 5.34 | 24.32 | 50 | 8.36 | 31.34 | 24.38 | 357 | 0.18 |
| 49 | 8.36 | 31.337 | 5.37 | 24.37 | 75 | 8.38 | 31.44 | 24.45 | 350 | 0.27 |
| 73 | 8.38 | 31.436 | 5.47 | 24.45 | 100 | 8.42 | 31.49 | 24.48 | 348 | 0.36 |
| 98 | 8.42 | 31.481 | 5.49 | 24.48 | | | | | | |
| 122 | 8.47 | 31.538 | 5.60 | 24.51 | | | | | | |
| CNAV WHITETHROAT; November 18, 1958; 2248 GCT; 51°00.5'N, 127°51'W; sounding, 80 fm; wind, 120°, 5 kt; weather, cloudy; sea, rough. | | | | | | | | | | 39 |
| 0 | 9.60 | 31.867 | 6.24 | 24.60 | 0 | 9.60 | 31.87 | 24.60 | 335 | 0.00 |
| 2 | 9.68 | 31.848 | 6.23 | 24.57 | 10 | 9.64 | 31.85 | 24.58 | 337 | 0.03 |
| 6 | 9.65 | 31.852 | 6.22 | 24.58 | 20 | 9.68 | 31.84 | 24.57 | 338 | 0.07 |
| 10 | 9.64 | 31.849 | 6.16 | 24.58 | 30 | 9.69 | 31.85 | 24.56 | 339 | 0.10 |
| 20 | 9.68 | 31.845 | 6.17 | 24.57 | 50 | 9.65 | 31.86 | 24.58 | 337 | 0.17 |
| 50 | 9.65 | 31.860 | 6.09 | 24.58 | 75 | 9.57 | 31.89 | 24.62 | 334 | 0.25 |
| 75 | 9.57 | 31.892 | 5.94 | 24.62 | 100 | 9.34 | 31.88 | 24.65 | 332 | 0.34 |
| 99 | 9.36 | 31.871 | 5.87 | 24.64 | 125 | 8.43 | 32.53 | 25.30 | 271 | 0.41 |
| 124 | 8.48 | (32.491)[b] | 5.59 | (25.26) | 150 | (6.65) | (33.83) | (26.57) | (150) | (0.47) |
| 139 | 7.54 | 33.178 | 3.25 | 25.93 | | | | | | |

a) The following silicate values were obtained for this station: 2 m, 50.6; 10, 49.3; 20, 49.1; 49, 49.4; 98, 48.1; 122, 48.2 μg at/L.

b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 40 | CNAV WHITETHROAT; November 19, 1958; 0158 GCT; 50°56.5'N, 128°32'W; sounding, 50 fm; wind, 260°, 8 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | |
| 0 | 9.50 | 31.857 | 6.29 | 24.60 | 0 | 9.50 | 31.86 | 24.60 | 334 | 0.00 |
| 2 | 9.80 | 31.825 | 6.36 | 24.53 | 10 | 9.82 | 31.83 | 24.53 | 342 | 0.03 |
| 6 | 9.80 | 31.823 | 6.39 | 24.53 | 20 | 9.82 | 31.83 | 24.53 | 342 | 0.07 |
| 10 | 9.82 | 31.827 | 6.26 | 24.53 | 30 | 9.83 | 31.83 | 24.53 | 342 | 0.10 |
| 20 | 9.82 | 31.827 | 6.29 | 24.53 | 50 | 9.87 | 31.86 | 24.55 | 341 | 0.17 |
| 50 | 9.87 | 31.861 | 6.29 | 24.55 | | | | | | |
| 41 | CNAV WHITETHROAT; November 19, 1958; 0307 GCT; 50°47.5'N, 128°29'W; sounding, 35 fm; wind, 210°, 13 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | |
| 0 | 9.40 | 31.673 | 6.41 | 24.48 | 0 | 9.40 | 31.67 | 24.48 | 346 | 0.00 |
| 2 | 9.66 | 31.630 | 6.39 | 24.40 | 10 | 9.70 | 31.64 | 24.41 | 353 | 0.04 |
| 6 | 9.68 | 31.614 | 6.39 | 24.39 | 20 | 9.77 | 31.73 | 24.46 | 348 | 0.07 |
| 10 | 9.70 | 31.644 | 6.14 | 24.41 | 30 | 9.81 | 31.78 | 24.49 | 346 | 0.10 |
| 20 | 9.77 | 31.732 | 5.63 | 24.46 | 50 | 9.81 | 31.75 | 24.47 | 348 | 0.18 |
| 49 | 9.81 | 31.747 | 6.39 | 24.47 | 75 | 9.80 | 31.89 | 24.58 | 338 | 0.26 |
| 74 | 9.80 | 31.882 | 6.29 | 24.58 | | | | | | |
| 75 | (9.80)a) | (31.890)a) | - | (24.58) | | | | | | |
| 42 | CNAV WHITETHROAT; November 19, 1958; 0454 GCT; 50°50'N, 128°48'W; sounding, missing; wind, 200°, 15 kt; weather, missing; sea, rough. | | | | | | | | | |
| 0 | 9.70 | 31.823 | 6.39 | 24.55 | 0 | 9.70 | 31.82 | 24.55 | 340 | 0.00 |
| 2 | 9.82 | 31.755 | 6.29 | 24.47 | 10 | 9.83 | 31.76 | 24.48 | 347 | 0.04 |
| 6 | 9.80 | 31.816 | 6.34 | 24.52 | 20 | 9.82 | 31.76 | 24.48 | 347 | 0.07 |
| 10 | 9.83 | 31.760 | 5.12 | 24.48 | 30 | 9.82 | 31.77 | 24.49 | 346 | 0.10 |
| 20 | 9.82 | 31.762 | 6.34 | 24.48 | 50 | 9.83 | 31.82 | 24.52 | 343 | 0.17 |
| 50 | 9.83 | 31.818 | 6.39 | 24.52 | 75 | 9.82 | 31.85 | 24.55 | 341 | 0.26 |
| 74 | 9.82 | 31.848 | 6.39 | 24.55 | | | | | | |
| 75 | (9.82)a) | (31.849)a) | - | (24.55) | | | | | | |
| 43 | CNAV WHITETHROAT; November 19, 1958; 0602 GCT; 50°52'N, 128°56.5'W; sounding, 45 fm; wind, direction missing, 12 kt; weather, missing; sea, rough. | | | | | | | | | |
| 0 | 9.80 | 31.866 | 6.50 | 24.56 | 0 | 9.80 | 31.87 | 24.56 | 338 | 0.00 |
| 2 | 9.75 | 31.840 | 5.73 | 24.55 | 10 | 9.76 | 31.83 | 24.54 | 340 | 0.03 |
| 6 | 9.75 | 31.833 | 5.37 | 24.55 | 20 | 9.80 | 31.92 | 24.60 | 335 | 0.07 |
| 10 | 9.76 | 31.832 | 6.14 | 24.54 | 30 | 9.82 | 31.96 | 24.63 | 332 | 0.10 |
| 20 | 9.80 | 31.919 | 6.14 | 24.60 | 50 | 9.83 | 31.92 | 24.60 | 335 | 0.17 |
| 49 | 9.83 | 31.930 | 6.14 | 24.61 | | | | | | |
| 50 | (9.83)a) | (31.924)a) | - | (24.60) | | | | | | |
| 44 | CNAV WHITETHROAT; November 19, 1958; 0802 GCT; 50°55.5'N, 129°15'W; sounding, 60 fm; wind, 200°, 10 kt; weather, missing; sea, rough. | | | | | | | | | |
| 0 | 9.60 | 32.019 | 6.30 | 24.71 | 0 | 9.60 | 32.02 | 24.71 | 324 | 0.00 |
| 2 | 9.70 | 31.953 | 6.38 | 24.65 | 10 | 9.72 | 31.94 | 24.63 | 332 | 0.03 |
| 6 | 9.69 | 31.940 | 6.41 | 24.64 | 20 | 9.74 | 31.97 | 24.65 | 330 | 0.07 |
| 10 | 9.72 | 31.941 | 6.38 | 24.63 | 30 | 9.76 | 32.00 | 24.67 | 328 | 0.10 |
| 20 | 9.74 | 31.970 | 6.31 | 24.65 | 50 | 9.82 | 32.05 | 24.70 | 326 | 0.16 |
| 50 | 9.82 | 32.046 | 6.26 | 24.70 | 75 | 9.82 | 32.07 | 24.72 | 325 | 0.25 |
| 75 | 9.82 | 32.066 | 6.26 | 24.72 | | | | | | |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

45

CNAV WHITETHROAT; November 19, 1958; 1011 GCT; 51°03'N, 129°32'W; sounding, 230 fm; wind, 200°, 10 kt; weather, partly cloudy; sea, rough.[a]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.90 | 32.424 | 6.32 | 24.98 | 0 | 9.90 | 32.42 | 24.98 | 298 | 0.00 |
| 4 | 10.30 | 32.389 | 6.36 | 24.89 | 10 | 10.47 | 32.37 | 24.84 | 312 | 0.03 |
| 14 | 10.30 | 32.383 | 6.33 | 24.88 | 20 | 10.30 | 32.38 | 24.88 | 308 | 0.06 |
| 43 | 10.34 | 32.397 | 6.35 | 24.89 | 30 | 10.31 | 32.38 | 24.88 | 308 | 0.09 |
| 67 | 10.27 | 32.387 | 6.34 | 24.89 | 50 | 10.33 | 32.40 | 24.89 | 308 | 0.16 |
| 91 | 7.54 | 33.017 | 4.87 | 25.81 | 75 | 9.66 | 32.53 | 25.10 | 288 | 0.23 |
| 114 | 7.10 | 33.450 | 4.17 | 26.21 | 100 | 7.11 | 33.21 | 26.01 | 202 | 0.29 |
| 138 | 7.07 | 33.595 | 3.98 | 26.32 | 125 | 7.03 | 33.56 | 26.30 | 175 | 0.34 |
| 161 | 7.07 | 33.786 | 3.34 | 26.47 | 150 | 7.07 | 33.69 | 26.40 | 166 | 0.38 |
| 184 | 6.70 | 33.887 | 2.79 | 26.60 | 175 | 6.89 | 33.86 | 26.56 | 151 | 0.42 |
| 229 | 6.58 | 33.902 | 2.60 | 26.63 | 200 | 6.57 | 33.92 | 26.65 | 143 | 0.46 |
| 276 | 6.49 | 33.916 | 2.38 | 26.66 | 250 | 6.54 | 33.91 | 26.64 | 144 | 0.53 |
| 322 | 6.14 | 33.961 | 1.94 | 26.74 | 300 | 6.34 | 33.94 | 26.69 | 140 | 0.60 |
| 369 | 5.71 | 33.980 | 3.13 | 26.80 | 400 | 5.39 | 33.98 | 26.84 | 126 | 0.74 |
| 400 | (5.39)b) | (33.978)b) | - | (26.84) | | | | | | |

46

CNAV WHITETHROAT; November 19, 1958; 1525 GCT; 51°23'N, 128°36.5'W; sounding, 115 fm; wind, 120°, 38 kt; weather, overcast; sea, rough.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.00 | 31.754 | 6.29 | 24.44 | 0 | 10.00 | 31.75 | 24.44 | 350 | 0.00 |
| 2 | 9.38 | 31.748 | 6.39 | 24.54 | 10 | 9.38 | 31.73 | 24.53 | 342 | 0.04 |
| 6 | 9.38 | 31.738 | 5.22 | 24.53 | 20 | 9.37 | 31.74 | 24.53 | 342 | 0.07 |
| 10 | 9.38 | 31.734 | 5.37 | 24.53 | 30 | 9.40 | 31.74 | 24.53 | 342 | 0.10 |
| 19 | 9.37 | 31.736 | - | 24.53 | 50 | 9.54 | 31.77 | 24.53 | 342 | 0.17 |
| 48 | 9.53 | 31.759 | 5.22 | 24.52 | 75 | 9.55 | 32.05 | 24.75 | 322 | 0.26 |
| 72 | 9.60 | 31.999 | 5.63 | 24.70 | 100 | 8.69 | 32.67 | 25.36 | 264 | 0.33 |
| 97 | 8.82 | 32.583 | 3.84 | 25.28 | 125 | 7.49 | 33.42 | 26.13 | 191 | 0.39 |
| 121 | 7.62 | 33.341 | 3.02 | 26.05 | 150 | 7.16 | 33.71 | 26.40 | 166 | 0.43 |
| 145 | 7.16 | 33.602 | 2.71 | 26.32 | | | | | | |
| 152 | (7.17)b) | 33.756 | 2.61 | (26.44) | | | | | | |

47

CNAV WHITETHROAT; November 21, 1958; 1825 GCT; 51°49'N, 128°32'W; sounding, 72 fm; wind, 160°, 10 kt; weather, overcast; sea, calm.[c]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.00 | 31.865 | 6.72 | 24.69 | 0 | 9.00 | 31.86 | 24.69 | 326 | 0.00 |
| 2 | 9.17 | 31.700 | 7.21 | 24.53 | 10 | 9.19 | 31.70 | 24.53 | 342 | 0.03 |
| 6 | 9.16 | 31.708 | 6.67 | 24.54 | 20 | 9.22 | 31.72 | 24.54 | 340 | 0.07 |
| 10 | 9.19 | 31.696 | 6.79 | 24.53 | 30 | 9.27 | 31.75 | 24.56 | 340 | 0.10 |
| 19 | 9.22 | 31.720 | 6.96 | 24.54 | 50 | 9.38 | 31.79 | 24.57 | 338 | 0.17 |
| 48 | 9.37 | 31.784 | 6.53 | 24.57 | 75 | 9.40 | 31.81 | 24.58 | 338 | 0.26 |
| 72 | 9.39 | 31.804 | 6.79 | 24.58 | 100 | 9.51 | 31.84 | 24.59 | 337 | 0.34 |
| 97 | 9.48 | 31.826 | 6.83 | 24.58 | | | | | | |
| 120 | 9.84 | 32.043 | 6.83 | 24.69 | | | | | | |

48

CNAV WHITETHROAT; November 21, 1958; 2142 GCT; 52°12.5'N, 128°53'W; sounding, 100-65 fm; wind, 200°, 10 kt; weather, overcast; sea, moderate.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.20 | 31.699 | 6.50 | 24.53 | 0 | 9.20 | 31.70 | 24.53 | 342 | 0.00 |
| 2 | 9.48 | 31.751 | 6.51 | 24.53 | 10 | 9.48 | 31.75 | 24.52 | 342 | 0.03 |
| 6 | 9.48 | 31.753 | 6.55 | 24.53 | 20 | 9.55 | 31.80 | 24.55 | 340 | 0.07 |
| 10 | 9.48 | 31.750 | 6.51 | 24.52 | 30 | 9.61 | 31.81 | 24.55 | 340 | 0.10 |
| 20 | 9.55 | 31.798 | 6.51 | 24.55 | 50 | 9.69 | 31.78 | 24.51 | 344 | 0.17 |
| 45 | 9.69 | 31.768 | 6.46 | 24.50 | 75 | 9.64 | 31.90 | 24.62 | 334 | 0.26 |
| 69 | 9.64 | 31.886 | 6.45 | 24.60 | 100 | 9.56 | 32.04 | 24.74 | 324 | 0.34 |
| 94 | 9.66 | 31.919 | 6.55 | 24.63 | | | | | | |
| 108 | 9.37 | 32.269 | 4.93 | 24.95 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 8.4; 4, 6.8; 14, 7.0; 43, 8.9; 67, 8.0; 91, 29.4; 114, 38.8; 138, 40.2; 161, 45.7; 184, 55.0; 229, 55.8; 276, 57.9; 322, 68,2; 369, 76.7 µg at/L.

b) Value extrapolated by three-point parabolic method.

c) The following silicate values were obtained for this station: 2 m, 50.6; 10, 49.3; 19, 49.1; 48, 49.4; 97, 48.1; 120, 48.2 µg at/L.

49 CNAV WHITETHROAT; November 22, 1958; 0256 GCT; 52°24'N, 130°00'W; sounding, 140 fm; wind, 280°, 10 kt; weather, partly cloudy; sea, rough.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 9.90 | 32.355 | 6.34 | 24.93 | 0 | 9.90 | 32.36 | 24.93 | 304 | 0.00 |
| 2 | 8.96 | 32.338 | 6.24 | 25.06 | 10 | 8.97 | 32.34 | 25.07 | 291 | 0.03 |
| 6 | 8.96 | 32.337 | 6.43 | 25.06 | 20 | 8.83 | 32.36 | 25.10 | 287 | 0.06 |
| 10 | 8.97 | 32.341 | 6.28 | 25.07 | 30 | 8.73 | 32.37 | 25.12 | 285 | 0.09 |
| 20 | 8.83 | 32.359 | 6.41 | 25.10 | 50 | 8.66 | 32.37 | 25.14 | 285 | 0.14 |
| 50 | 8.66 | 32.370 | 6.25 | 25.14 | 75 | 7.82 | 33.07 | 25.80 | 221 | 0.21 |
| 75 | 7.82 | 33.066 | 2.84 | 25.80 | 100 | 7.11 | 33.36 | 26.13 | 190 | 0.26 |
| 100 | 7.11 | 33.358 | 2.11 | 26.13 | 125 | 6.74 | 33.54 | 26.32 | 173 | 0.31 |
| 125 | 6.74 | 33.537 | 1.99 | 26.32 | 150 | 6.38 | 33.68 | 26.48 | 158 | 0.35 |
| 150 | 6.38 | 33.677 | 2.06 | 26.48 | 175 | 6.24 | 33.73 | 26.55 | 152 | 0.39 |
| 175 | 6.24 | 33.735 | 2.06 | 26.55 | 200 | 6.10 | 33.80 | 26.62 | 146 | 0.42 |
| 200 | 6.10 | 33.801 | 2.06 | 26.62 | 250 | 5.87 | 33.90 | 26.72 | 136 | 0.50 |
| 250 | 5.87 | 33.901 | 2.06 | 26.72 | | | | | | |

50 CNAV WHITETHROAT; November 22, 1958; 0723 GCT; 53°00'N, 130°19.5'W; sounding, 108 fm; wind, 290°, 5 kt; weather, missing; sea, calm.[a)]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.40 | 32.014 | 6.37 | 24.74 | 0 | 9.40 | 32.01 | 24.74 | 321 | 0.00 |
| 2 | 9.45 | 31.995 | 6.28 | 24.72 | 10 | 9.47 | 32.01 | 24.73 | 323 | 0.03 |
| 6 | 9.45 | 32.005 | 6.34 | 24.73 | 20 | 9.59 | 32.06 | 24.75 | 321 | 0.06 |
| 10 | 9.47 | 32.011 | 6.34 | 24.73 | 30 | 9.68 | 32.11 | 24.77 | 319 | 0.10 |
| 20 | 9.59 | 32.057 | 6.36 | 24.75 | 50 | 9.78 | 32.23 | 24.85 | 312 | 0.16 |
| 50 | 9.78 | 32.229 | 6.19 | 24.85 | 75 | 9.77 | 32.32 | 24.92 | 305 | 0.24 |
| 75 | 9.77 | 32.323 | 5.94 | 24.92 | 100 | 9.35 | 32.38 | 25.03 | 295 | 0.31 |
| 100 | 9.35 | 32.377 | 6.10 | 25.03 | 125 | 8.76 | 32.65 | 25.34 | 266 | 0.38 |
| 125 | 8.76 | 32.652 | 4.39 | 25.34 | 150 | 8.06 | 32.91 | 25.64 | 238 | 0.45 |
| 150 | 8.06 | 32.907 | 3.73 | 25.64 | 175 | 7.64 | 33.13 | 25.88 | 215 | 0.50 |
| 175 | 7.64 | 33.134 | 3.28 | 25.88 | | | | | | |

51 CNAV WHITETHROAT; November 22, 1958; 1150 GCT; 53°14.5'N, 131°12'W; sounding, 16 fm; wind, 260°, 7 kt; weather, partly cloudy; sea, calm.[b)]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.50 | 32.242 | 6.33 | 25.06 | 0 | 8.50 | 32.24 | 25.06 | 291 | 0.00 |
| 2 | 8.55 | 32.206 | 6.48 | 25.02 | 10 | 8.56 | 32.16 | 24.99 | 298 | 0.03 |
| 6 | 8.58 | 32.213 | 6.32 | 25.02 | 20 | 8.62 | 32.22 | 25.02 | 295 | 0.06 |
| 10 | 8.56 | 32.159 | 6.34 | 24.99 | | | | | | |
| 15 | 8.57 | 32.210 | 6.29 | 25.02 | | | | | | |
| 20 | 8.62 | 32.221 | 6.31 | 25.02 | | | | | | |
| 25 | 8.57 | 32.213 | 6.31 | 25.03 | | | | | | |

52 CNAV WHITETHROAT; November 22, 1958; 1508 GCT; 53°37.5'N, 130°44.5'W; sounding, 75 fm; wind, 210°, 2 kt; weather, partly cloudy; sea, missing.[c)]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.20 | 31.847 | 6.54 | 24.64 | 0 | 9.20 | 31.85 | 24.64 | 331 | 0.00 |
| 2 | 9.12 | 31.810 | 6.54 | 24.63 | 10 | 9.12 | 31.81 | 24.63 | 332 | 0.03 |
| 6 | 9.10 | 31.812 | 7.32 | 24.63 | 20 | 9.18 | 31.83 | 24.63 | 332 | 0.07 |
| 10 | 9.12 | 31.810 | 6.44 | 24.63 | 30 | 9.26 | 31.86 | 24.64 | 331 | 0.10 |
| 20 | 9.18 | 31.825 | 6.44 | 24.63 | 50 | 9.46 | 31.96 | 24.69 | 327 | 0.17 |
| 50 | 9.46 | 31.962 | 6.19 | 24.69 | 75 | 9.53 | 32.03 | 24.73 | 324 | 0.25 |
| 75 | 9.53 | 32.025 | 6.03 | 24.73 | 100 | 9.33 | 32.13 | 24.84 | 313 | 0.33 |
| 100 | 9.33 | 32.131 | 5.62 | 24.84 | 125 | 9.20 | 32.30 | 25.00 | 299 | 0.40 |
| 125 | 9.20 | 32.299 | 5.62 | 25.00 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 22.6; 2, 22.1; 10, 21.1; 20, 20.1; 50, 17.1; 100, 20.1; 150, 38.1; 175, 49.0 µg at/L and the following nitrate values: 0 m, 10.1; 6, 9.9; 10, 9.8; 20, 8.4; 50, 9.1; 175, 15.6 µg at/L.

b) The following silicate values were obtained for this station: 0 m, 21.1; 2, 22.0; 6, 22.7; 10, 19.2; 15, 17.3; 20, 21.1; 25, 48.0 µg at/L and the following nitrate values: 0 m, 11.4; 6, 13.0; 15, 11.8; 20, 10.1; 25, 11.0 µg at/L.

c) The following silicate values were obtained for this station: 0 m, 27.5; 6, 25.6; 10, 25.1; 20, 26.9; 75, 25.1; 100, 31.6; 125, 35.1 µg at/L and the following nitrate values: 0 m, 9.9; 6, 9.2; 10, 10.0; 20, 11.4; 50, 8.2; 125, 9.4 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

53

CNAV WHITETHROAT; November 22, 1958; 1720 GCT; 53°57'N, 131°00'W; sounding, 38 fm; wind, 300°, 5 kt; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.20 | 30.731 | 6.58 | 23.92 | 0 | 8.20 | 30.73 | 23.92 | 399 | 0.00 |
| 2 | 8.16 | 30.737 | 6.50 | 23.93 | 10 | 8.90 | 31.41 | 24.35 | 359 | 0.04 |
| 6 | 8.38 | 30.812 | 6.56 | 23.96 | 20 | 9.12 | 31.67 | 24.52 | 343 | 0.07 |
| 10 | 8.90 | 31.409 | 6.50 | 24.35 | 30 | 9.27 | 31.86 | 24.64 | 332 | 0.11 |
| 20 | 9.12 | 31.668 | 6.52 | 24.52 | 50 | 9.39 | 32.02 | 24.75 | 322 | 0.17 |
| 50 | 9.39 | 32.018 | 6.27 | 24.75 | 75 | 9.04 | 32.16 | 24.91 | 306 | 0.25 |
| 70 | 9.15 | 32.141 | 6.00 | 24.88 | | | | | | |
| 75 | (9.04)a) | (32.158)a) | - | (24.91) | | | | | | |

54

CNAV WHITETHROAT; November 22, 1958; 1945 GCT; 54°15.5'N, 131°06'W; sounding, 15 fm; wind, 160°, 3 kt; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.10 | 31.618 | 6.48 | 24.63 | 0 | 8.10 | 31.62 | 24.63 | 332 | 0.00 |
| 2 | 8.04 | 31.697 | 6.28 | 24.70 | 10 | 7.95 | 31.71 | 24.72 | 323 | 0.03 |
| 6 | 8.02 | 31.706 | 6.29 | 24.71 | 20 | 7.82 | 31.72 | 24.75 | 320 | 0.06 |
| 10 | 7.95 | 31.710 | 6.35 | 24.72 | | | | | | |
| 25 | 7.78 | 31.734 | 6.36 | 24.77 | | | | | | |

55

CNAV WHITETHROAT; November 22, 1958; 2057 GCT; 54°16.5'N, 131°01'W; sounding, 58 fm; wind, 160°, 5 kt; weather, cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.90 | 31.855 | 6.49 | 24.70 | 0 | 8.90 | 31.86 | 24.70 | 326 | 0.00 |
| 2 | 8.89 | 31.819 | 6.42 | 24.67 | 10 | 8.98 | 31.83 | 24.66 | 329 | 0.03 |
| 6 | 8.97 | 31.839 | 6.38 | 24.67 | 20 | 9.20 | 31.99 | 24.76 | 320 | 0.07 |
| 10 | 8.98 | 31.829 | 6.43 | 24.66 | 30 | 9.28 | 32.09 | 24.82 | 314 | 0.10 |
| 20 | 9.20 | 31.994 | 6.22 | 24.76 | 50 | 9.04 | 32.07 | 24.84 | 312 | 0.16 |
| 50 | 9.04 | 32.070 | 6.38 | 24.84 | 75 | 8.60 | 32.10 | 24.93 | 304 | 0.24 |
| 75 | 8.60 | 32.096 | 6.48 | 24.93 | 100 | 8.18 | 32.12 | 25.01 | 297 | 0.31 |
| 100 | 8.18 | 32.116 | 6.60 | 25.01 | | | | | | |

56

CNAV WHITETHROAT; November 23, 1958; 0415 GCT; 54°11'N, 132°30'W; sounding, 40 fm; wind, 250°, 6 kt; weather, intermittent slight rain; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.20 | 30.606 | 6.99 | 23.82 | 0 | 8.20 | 30.61 | 23.82 | 409 | 0.00 |
| 2 | 8.13 | 30.563 | 6.62 | 23.80 | 10 | 8.26 | 30.61 | 23.82 | 410 | 0.04 |
| 6 | 8.12 | 30.571 | 6.65 | 23.81 | 20 | 8.55 | 31.23 | 24.26 | 367 | 0.08 |
| 10 | 8.26 | 30.607 | 6.55 | 23.82 | 30 | 8.75 | 31.66 | 24.57 | 338 | 0.12 |
| 20 | (8.55)b) | 31.230 | 6.30 | (24.26) | 50 | 8.90 | 31.96 | 24.78 | 319 | 0.18 |
| 50 | 8.90 | 31.959 | 6.10 | 24.78 | 75 | 8.65 | 32.38 | 25.14 | 284 | 0.26 |
| 70 | 8.74 | 32.309 | 5.39 | 25.08 | | | | | | |
| 75 | (8.65)a) | (32.379)a) | - | (25.14) | | | | | | |

57

CNAV WHITETHROAT; November 23, 1958; 0523 GCT; 54°18.5'N, 133°03.5'W; sounding, 250 fm; wind, 280°, 5 kt; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.30 | 31.362 | 6.58 | 24.40 | 0 | 8.30 | 31.36 | 24.40 | 354 | 0.00 |
| 2 | 8.57 | 31.413 | 6.60 | 24.40 | 10 | 8.73 | 31.65 | 24.56 | 338 | 0.04 |
| 6 | 8.68 | 31.560 | 6.60 | 24.50 | 20 | 8.86 | 31.86 | 24.70 | 325 | 0.07 |
| 10 | 8.73 | 31.650 | 6.41 | 24.56 | 30 | 8.91 | 32.02 | 24.82 | 314 | 0.10 |
| 20 | 8.86 | 31.857 | 5.44 | 24.70 | 50 | 8.77 | 32.19 | 24.98 | 299 | 0.16 |
| 50 | 8.77 | 32.193 | 4.96 | 24.98 | 75 | 8.41 | 32.43 | 25.22 | 277 | 0.23 |
| 75 | 8.41 | 32.434 | 4.57 | 25.22 | 100 | 7.32 | 33.09 | 25.90 | 213 | 0.30 |
| 99 | 7.35 | 33.074 | 3.61 | 25.88 | 125 | 6.77 | 33.34 | 26.16 | 188 | 0.35 |
| 124 | 6.78 | 33.327 | 2.84 | 26.15 | 150 | 6.70 | 33.54 | 26.33 | 172 | 0.39 |
| 149 | 6.70 | 33.531 | 3.09 | 26.32 | 175 | 6.57 | 33.67 | 26.45 | 161 | 0.43 |
| 199 | 6.42 | 33.732 | 3.14 | 26.52 | 200 | 6.41 | 33.74 | 26.52 | 155 | 0.47 |
| 240 | 6.16 | 33.823 | 2.73 | 26.62 | 250 | 6.11 | 33.84 | 26.64 | 144 | 0.55 |
| 288 | 5.94 | 33.869 | 2.54 | 26.69 | 300 | 5.89 | 33.88 | 26.70 | 139 | 0.62 |
| 384 | 5.65 | 33.944 | 1.98 | 26.78 | 400 | 5.62 | 33.95 | 26.80 | 131 | 0.76 |
| 400 | (5.62)a) | (33.954)a) | - | (26.80) | | | | | | |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **58** | CNAV WHITETHROAT; November 23, 1958; 0731 GCT; 54°28'N, 133°04'W; sounding, 59 fm; wind, 280°, 6 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 8.30 | 30.601 | 6.82 | 23.81 | 0 | 8.30 | 30.60 | 23.81 | 410 | 0.00 |
| 2 | 8.12 | 30.603 | 6.65 | 23.83 | 10 | 8.38 | 31.58 | 24.56 | 339 | 0.04 |
| 6 | 8.34 | 31.155 | 6.50 | 24.23 | 20 | 8.39 | 31.87 | 24.79 | 317 | 0.07 |
| 10 | 8.38 | 31.581 | 6.50 | 24.56 | 30 | 8.39 | 32.04 | 24.91 | 305 | 0.10 |
| 20 | 8.39 | 31.871 | 6.31 | 24.79 | 50 | 8.38 | 31.99 | 24.88 | 309 | 0.16 |
| 50 | 8.38 | 31.988 | 6.52 | 24.88 | 75 | 7.83 | 32.67 | 25.49 | 251 | 0.23 |
| 75 | 7.83 | 32.668 | 4.72 | 25.49 | | | | | | |
| **59** | CNAV WHITETHROAT; November 23, 1958; 0908 GCT; 54°36'N, 132°59'W; sounding, 200 fm; wind, 280°, 8 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 8.00 | 30.123 | 6.65 | 23.48 | 0 | 8.00 | 30.12 | 23.48 | 442 | 0.00 |
| 2 | 7.96 | 30.094 | 6.56 | 23.46 | 10 | 8.57 | 30.66 | 23.81 | 410 | 0.04 |
| 6 | 8.02 | 30.143 | 6.54 | 23.49 | 20 | 8.72 | 31.01 | 24.07 | 386 | 0.08 |
| 10 | 8.57 | 30.659 | 6.45 | 23.81 | 30 | 8.76 | 31.33 | 24.30 | 363 | 0.12 |
| 20 | 8.72 | 31.012 | 6.35 | 24.07 | 50 | 8.54 | 31.83 | 24.73 | 323 | 0.19 |
| 49 | 8.54 | 31.812 | 6.38 | 24.72 | 75 | 8.67 | 32.03 | 24.87 | 310 | 0.27 |
| 73 | 8.67 | 32.022 | 6.23 | 24.86 | 100 | 8.55 | 32.09 | 24.93 | 304 | 0.35 |
| 98 | 8.57 | 32.079 | 6.05 | 24.92 | 125 | 8.12 | 32.35 | 25.20 | 280 | 0.42 |
| 122 | 8.21 | 32.287 | 5.63 | 25.14 | 150 | 7.17 | 33.06 | 25.89 | 214 | 0.48 |
| 146 | 7.26 | 32.997 | 3.36 | 25.83 | 175 | 6.99 | 33.16 | 26.00 | 204 | 0.54 |
| 171 | 7.04 | 33.128 | 2.97 | 25.96 | 200 | 6.57 | 33.42 | 26.26 | 180 | 0.58 |
| 196 | 6.62 | 33.388 | 2.71 | 26.22 | 250 | 6.31 | 33.67 | 26.49 | 159 | 0.67 |
| 246 | 6.33 | 33.658 | 2.58 | 26.47 | 300 | 6.11 | 33.74 | 26.57 | 152 | 0.75 |
| 296 | 6.12 | 33.737 | 2.42 | 26.56 | | | | | | |
| 346 | 6.02 | 33.786 | 2.35 | 26.61 | | | | | | |
| **60** | CNAV WHITETHROAT; November 23, 1958; 1045 GCT; 54°38'N, 132°49'W; sounding, 110 fm; wind, calm; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 8.00 | 29.952 | 6.66 | 23.34 | 0 | 8.00 | 29.95 | 23.34 | 455 | 0.00 |
| 2 | 7.66 | 29.907 | 6.56 | 23.35 | 10 | 8.27 | 30.67 | 23.87 | 405 | 0.04 |
| 6 | 8.22 | 30.323 | 6.47 | 23.60 | 20 | 8.65 | 30.92 | 24.00 | 392 | 0.08 |
| 10 | 8.27 | 30.672 | 6.58 | 23.87 | 30 | 8.92 | 31.18 | 24.17 | 376 | 0.12 |
| 20 | 8.65 | 30.919 | 6.39 | 24.00 | 50 | 9.11 | 31.75 | 24.58 | 337 | 0.19 |
| 50 | 9.11 | 31.753 | 6.17 | 24.58 | 75 | 8.81 | 31.91 | 24.75 | 322 | 0.28 |
| 75 | 8.81 | 31.906 | 6.05 | 24.75 | 100 | 8.66 | 32.06 | 24.89 | 309 | 0.36 |
| 100 | 8.66 | 32.055 | 5.92 | 24.89 | 125 | 8.28 | 32.37 | 25.19 | 280 | 0.43 |
| 125 | 8.28 | 32.370 | 4.98 | 25.19 | 150 | 6.96 | 33.18 | 26.01 | 202 | 0.49 |
| 150 | 6.96 | 33.178 | 3.02 | 26.01 | 175 | 6.42 | 33.52 | 26.35 | 170 | 0.54 |
| 175 | 6.42 | 33.519 | 2.60 | 26.35 | 200 | 6.22 | 33.63 | 26.47 | 160 | 0.58 |
| 200 | 6.22 | 33.631 | 2.51 | 26.47 | | | | | | |
| **61** | CNAV WHITETHROAT; November 23, 1958; 1459 GCT; 54°42'N, 131°56.5'W; sounding, 202 fm; wind, 180°, 3 kt; weather, partly cloudy; sea, missing. | | | | | | | | | |
| 0 | 7.70 | 28.834 | 6.70 | 22.51 | 0 | 7.70 | 28.83 | 22.51 | 534 | 0.00 |
| 2 | 7.32 | 28.580 | 6.21 | 22.36 | 10 | 8.34 | 29.91 | 23.26 | 462 | 0.05 |
| 6 | 8.21 | 29.180 | 6.42 | 22.71 | 20 | 8.34 | 29.97 | 23.30 | 459 | 0.10 |
| 10 | 8.34 | 29.912 | 6.51 | 23.26 | 30 | 8.43 | 30.16 | 23.44 | 445 | 0.14 |
| 20 | 8.34 | 29.966 | 6.58 | 23.30 | 50 | 8.86 | 30.97 | 24.02 | 391 | 0.23 |
| 50 | 8.86 | 30.974 | - | 24.02 | 75 | 9.06 | 31.55 | 24.44 | 352 | 0.32 |
| 75 | 9.06 | 31.554 | 6.24 | 24.44 | 100 | 9.08 | 31.78 | 24.61 | 335 | 0.40 |
| 100 | 9.08 | 31.780 | 6.18 | 24.61 | 125 | 8.50 | 32.16 | 24.99 | 299 | 0.48 |
| 125 | 8.50 | 32.158 | 5.63 | 24.99 | 150 | 7.60 | 32.53 | 25.42 | 259 | 0.56 |
| 150 | 7.60 | 32.532 | 4.41 | 25.42 | 175 | 6.92 | 32.94 | 25.83 | 220 | 0.62 |
| 200 | 6.47 | 33.377 | 2.60 | 26.23 | 200 | 6.47 | 33.38 | 26.23 | 182 | 0.67 |
| 250 | 6.05 | 33.583 | 2.39 | 26.45 | 250 | 6.05 | 33.58 | 26.45 | 162 | 0.75 |
| 300 | 5.85 | 33.678 | 2.14 | 26.55 | 300 | 5.85 | 33.68 | 26.55 | 153 | 0.83 |
| 350 | 5.76 | 33.713 | 2.10 | 26.59 | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

62

CNAV WHITETHROAT; November 23, 1958; 1626 GCT; 54°43.5'N, 131°41.5'W; sounding, 235 fm; wind, 150°, 4 kt; weather, cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.20 | 29.157 | 6.88 | 22.83 | 0 | 7.20 | 29.16 | 22.83 | 504 | 0.00 |
| 2 | 7.49 | 29.208 | 6.91 | 22.83 | 10 | 7.73 | 29.62 | 23.12 | 476 | 0.05 |
| 6 | 7.62 | 29.440 | 6.76 | 22.99 | 20 | 8.15 | 30.14 | 23.47 | 443 | 0.10 |
| 10 | 7.73 | 29.662 | 6.78 | 23.12 | 30 | 8.52 | 30.60 | 23.78 | 414 | 0.14 |
| 20 | 8.15 | 30.145 | 6.62 | 23.47 | 50 | 9.10 | 31.32 | 24.25 | 369 | 0.22 |
| 50 | 9.10 | 31.316 | 6.42 | 24.25 | 75 | 8.78 | 31.83 | 24.69 | 327 | 0.30 |
| 75 | 8.78 | 31.828 | 6.08 | 24.69 | 100 | 8.32 | 32.36 | 25.18 | 281 | 0.38 |
| 100 | 8.32 | 32.361 | 3.97 | 25.18 | 125 | 7.76 | 32.76 | 25.57 | 244 | 0.45 |
| 125 | 7.76 | 32.758 | 2.97 | 25.57 | 150 | 6.94 | 33.19 | 26.03 | 201 | 0.50 |
| 150 | 6.94 | 33.192 | 2.29 | 26.03 | 175 | 6.47 | 33.44 | 26.29 | 177 | 0.55 |
| 200 | 6.36 | 33.513 | 2.32 | 26.35 | 200 | 6.36 | 33.51 | 26.35 | 170 | 0.59 |
| 250 | 6.15 | 33.655 | 2.21 | 26.49 | 250 | 6.15 | 33.66 | 26.49 | 158 | 0.68 |
| 300 | 5.90 | 33.742 | 2.26 | 26.59 | 300 | 5.90 | 33.74 | 26.59 | 149 | 0.76 |
| 400 | 6.21 | 33.820 | - | 26.62 | 400 | 6.21 | 33.82 | 26.62 | 148 | 0.90 |

63

CNAV WHITETHROAT; November 23, 1958; 1833 GCT; 54°46'N, 131°18.5'W; sounding, 89 fm; wind, 180°, 5 kt; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.30 | 31.775 | 6.54 | 24.72 | 0 | 8.30 | 31.78 | 24.72 | 323 | 0.00 |
| 2 | 8.54 | 31.772 | 6.48 | 24.69 | 10 | 8.62 | 31.80 | 24.69 | 326 | 0.03 |
| 6 | 8.50 | 31.771 | 6.24 | 24.69 | 20 | 8.72 | 31.83 | 24.71 | 325 | 0.06 |
| 10 | 8.62 | 31.797 | 6.48 | 24.69 | 30 | 8.77 | 31.85 | 24.72 | 324 | 0.10 |
| 20 | 8.72 | 31.832 | 6.42 | 24.71 | 50 | 8.75 | 31.86 | 24.72 | 324 | 0.16 |
| 50 | 8.75 | 31.860 | 6.41 | 24.72 | 75 | 8.69 | 31.94 | 24.79 | 318 | 0.24 |
| 75 | 8.69 | 31.936 | 6.29 | 24.79 | 100 | 8.57 | 32.00 | 24.86 | 312 | 0.32 |
| 99 | 8.58 | 31.993 | 6.31 | 24.85 | | | | | | |
| 124 | 8.24 | 32.320 | 5.13 | 25.16 | | | | | | |

64

CNAV WHITETHROAT; November 23, 1958; 2013 GCT; 54°48'N, 130°59.5'W; sounding, 57 fm; wind, 340°, 5 kt; weather, cloudy; sea, calm.[a]

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 29.677 | 6.69 | 23.19 | 0 | 7.50 | 29.68 | 23.19 | 469 | 0.00 |
| 2 | 7.55 | 29.640 | 6.72 | 23.16 | 10 | 7.58 | 29.68 | 23.19 | 470 | 0.05 |
| 6 | 7.60 | 29.664 | 6.73 | 23.17 | 20 | 8.65 | 30 22 | 23.46 | 444 | 0.09 |
| 10 | 7.58 | 29.684 | 6.75 | 23.19 | 30 | 9.28 | 30.70 | 23.74 | 418 | 0.14 |
| 20 | 8.65 | 30.225 | 6.65 | 23.46 | 50 | 9.24 | 31.45 | 24.33 | 362 | 0.21 |
| 50 | 9.24 | 31.450 | 6.02 | 24.33 | 75 | 9.00 | 31.91 | 24.72 | 324 | 0.30 |
| 75 | 9.00 | 31.906 | 3.82 | 24.72 | | | | | | |

65

CNAV WHITETHROAT; November 23, 1958; 2102 GCT; 54°45'N, 130°53'W; sounding, 95 fm; wind, 060°, 4 kt; weather, cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 29.313 | 6.70 | 22.91 | 0 | 7.50 | 29.31 | 22.91 | 496 | 0.00 |
| 2 | 7.66 | 29.305 | 6.64 | 22.88 | 10 | 7.83 | 29.36 | 22.90 | 497 | 0.05 |
| 6 | 7.66 | 29.299 | 6.60 | 22.88 | 20 | 8.25 | 29.76 | 23.16 | 472 | 0.10 |
| 10 | 7.83 | 29.357 | 6.53 | 22.90 | 30 | 8.59 | 30.17 | 23.42 | 447 | 0.14 |
| 20 | 8.25 | 29.763 | 6.44 | 23.16 | 50 | 9.02 | 30.96 | 23.98 | 394 | 0.23 |
| 50 | 9.02 | 30.964 | 6.32 | 23.98 | 75 | 9.26 | 31.77 | 24.58 | 338 | 0.32 |
| 75 | 9.26 | 31.773 | 6.08 | 24.58 | 100 | 9.00 | 31.91 | 24.73 | 324 | 0.40 |
| 100 | 9.00 | 31.914 | 6.16 | 24.73 | 125 | 8.92 | 32.09 | 24.87 | 311 | 0.48 |
| 125 | 8.92 | 32.086 | 5.55 | 24.87 | 150 | 8.25 | 32.50 | 25.30 | 271 | 0.56 |
| 150 | 8.25 | 32.496 | 4.14 | 25.30 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 34.9; 2, 36.0; 6, 36.5; 10, 35.5; 20, 34.5; 50, 32.5; 75, 34.1 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 66 | CNAV WHITETHROAT; November 23, 1958; 2240 GCT; 54°39'N, 130°47'W; sounding, 130 fm; wind, 030°, 5 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 7.80 | 29.951 | 6.60 | 23.37 | 0 | 7.80 | 29.95 | 23.37 | 452 | 0.00 |
| 2 | 7.80 | 29.575 | 6.57 | 23.07 | 10 | 8.22 | 31.10 | 24.21 | 372 | 0.04 |
| 6 | 8.08 | 30.366 | 6.53 | 23.65 | 20 | 8.50 | 31.49 | 24.47 | 348 | 0.08 |
| 10 | 8.22 | 31.101 | 6.60 | 24.21 | 30 | 8.67 | 31.64 | 24.56 | 339 | 0.11 |
| 20 | 8.50 | 31.487 | 6.46 | 24.47 | 50 | 8.89 | 31.76 | 24.63 | 333 | 0.18 |
| 34 | 8.70 | 31.634 | 6.41 | 24.55 | 75 | 9.05 | 31.91 | 24.72 | 325 | 0.26 |
| 59 | 8.98 | 31.820 | 6.29 | 24.66 | 100 | 9.03 | 32.01 | 24.80 | 318 | 0.34 |
| 84 | 9.06 | 31.957 | 6.22 | 24.75 | 125 | 8.75 | 32.11 | 24.92 | 307 | 0.42 |
| 108 | 9.00 | 32.023 | 5.27 | 24.81 | 150 | 8.20 | 32.34 | 25.18 | 282 | 0.50 |
| 133 | 8.57 | 32.155 | 5.54 | 24.98 | 175 | 7.55 | 32.76 | 25.61 | 242 | 0.56 |
| 183 | 7.32 | 32.936 | 3.38 | 25.77 | 200 | 7.06 | 33.07 | 25.91 | 212 | 0.62 |
| 208 | 6.96 | 33.109 | 2.90 | 25.96 | | | | | | |
| 67 | CNAV WHITETHROAT; November 24, 1958; 0010 GCT; 54°38'N, 130°36'W; sounding, 225 fm; wind, 060°, 14 kt; weather, partly cloudy; sea, slight.[a] | | | | | | | | | |
| 0 | 7.30 | 29.293 | 6.58 | 22.92 | 0 | 7.30 | 29.29 | 22.92 | 495 | 0.00 |
| 2 | 7.69 | 29.281 | 6.51 | 22.86 | 10 | 7.98 | 29.51 | 23.00 | 488 | 0.05 |
| 6 | 7.84 | 29.366 | 6.52 | 22.90 | 20 | 8.76 | 31.36 | 24.33 | 360 | 0.09 |
| 10 | 7.98 | 29.512 | 6.51 | 23.00 | 30 | 9.19 | 32.34 | 25.03 | 294 | 0.12 |
| 20 | 8.76 | 31.362 | 6.50 | 24.33 | 50 | 9.00 | 31.68 | 24.54 | 341 | 0.19 |
| 50 | 9.00 | 31.678 | 6.44 | 24.54 | 75 | 9.10 | 31.83 | 24.65 | 332 | 0.27 |
| 75 | (9.10)b) | (31.828)b) | 6.50 | (24.65) | 100 | 9.09 | 31.89 | 24.69 | 327 | 0.36 |
| 99 | 9.10 | 31.874 | 6.35 | 24.68 | 125 | 8.56 | 32.62 | 25.35 | 266 | 0.43 |
| 125 | 8.56 | 32.623 | 4.93 | 25.35 | 150 | 7.69 | 32.76 | 25.58 | 244 | 0.50 |
| 150 | 7.69 | 32.758 | 3.90 | 25.58 | 175 | 7.21 | 32.90 | 25.76 | 227 | 0.55 |
| 200 | 7.11 | 33.054 | 2.98 | 25.89 | 200 | 7.11 | 33.05 | 25.89 | 214 | 0.61 |
| 249 | 6.92 | 33.134 | 2.71 | 25.98 | 250 | 6.92 | 33.14 | 25.98 | 206 | 0.72 |
| 299 | 6.67 | 33.186 | 2.68 | 26.06 | 300 | 6.67 | 33.19 | 26.06 | 200 | 0.82 |
| 349 | 6.46 | 33.279 | 2.51 | 26.16 | 400 | 5.37 | 33.30 | 26.31 | 177 | 1.01 |
| 399 | 5.40 | 33.297 | 2.42 | 26.30 | | | | | | |
| 400 | (5.37)c) | (33.297)c) | - | (26.31) | | | | | | |
| 68 | CNAV WHITETHROAT; November 24, 1958; 0252 GCT; 54°19.5'N, 130°36.5'W; sounding, 66 fm; wind, 360°, 4 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 7.50 | 28.962 | 6.43 | 22.63 | 0 | 7.50 | 28.96 | 22.63 | 522 | 0.00 |
| 3 | 8.09 | 29.244 | 6.38 | 22.78 | 10 | 8.61 | 30.31 | 23.53 | 437 | 0.05 |
| 13 | 8.46 | 30.939 | 6.42 | 24.05 | 20 | 8.65 | 31.68 | 24.60 | 335 | 0.09 |
| 43 | 8.86 | 31.515 | 6.33 | 24.44 | 30 | 8.82 | 32.10 | 24.90 | 307 | 0.12 |
| 68 | 9.01 | 31.660 | 6.33 | 24.53 | 50 | 8.92 | 31.59 | 24.48 | 347 | 0.18 |
| 93 | 9.02 | 31.703 | 6.28 | 24.56 | 75 | 9.03 | 31.68 | 24.54 | 341 | 0.27 |
| 100 | (9.00)c) | (31.697)c) | - | (24.56) | 100 | 9.00 | 31.70 | 24.56 | 340 | 0.36 |
| 69 | CNAV WHITETHROAT; November 24, 1958; 0433 GCT; 54°10'N, 130°32.5'W; sounding, 67 fm; wind, 060°, 7 kt; weather, partly cloudy; sea, calm. | | | | | | | | | |
| 0 | 8.30 | 31.134 | 6.38 | 24.22 | 0 | 8.30 | 31.13 | 24.22 | 371 | 0.00 |
| 2 | 8.30 | 31.134 | 6.33 | 24.22 | 10 | 8.70 | 31.24 | 24.25 | 369 | 0.04 |
| 6 | 8.46 | 31.156 | 6.38 | 24.22 | 20 | 8.61 | 31.29 | 24.30 | 363 | 0.07 |
| 10 | 8.70 | 31.239 | 6.28 | 24.25 | 30 | 8.63 | 31.35 | 24.34 | 360 | 0.11 |
| 20 | 8.61 | 31.294 | 6.36 | 24.30 | 50 | 9.03 | 31.44 | 24.35 | 359 | 0.18 |
| 50 | 9.03 | 31.442 | 6.58 | 24.35 | 75 | 9.16 | 31.59 | 24.45 | 350 | 0.27 |
| 75 | 9.16 | 31.589 | 6.13 | 24.45 | 100 | 9.13 | 31.65 | 24.50 | 346 | 0.36 |
| 100 | 9.13 | 31.652 | 6.13 | 24.50 | | | | | | |

a) The following silicate values were obtained for this station: 0 m, 36.6; 10, 37.6; 20, 32.1; 50, 30.7; 99, 30.7; 150, 55.1; 200, 61.6; 299, 65.1; 399, 67.1 μg at/L.

b) Value interpolated by three-point parabolic method.

c) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

70

CNAV WHITETHROAT; November 25, 1958; 2157 GCT; 54°18'N, 130°52'W; sounding, 90 fm; wind, 040°, 8 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.10 | 31.217 | 6.60 | 24.32 | 0 | 8.10 | 31.22 | 24.32 | 362 | 0.00 |
| 2 | 8.29 | 31.217 | 6.52 | 24.29 | 10 | 8.40 | 31.42 | 24.43 | 351 | 0.04 |
| 6 | 8.28 | 31.218 | 6.53 | 24.29 | 20 | 8.60 | 31.69 | 24.61 | 334 | 0.07 |
| 10 | 8.40 | 31.416 | 6.58 | 24.43 | 30 | 8.74 | 31.83 | 24.70 | 326 | 0.10 |
| 20 | 8.60 | 31.690 | 6.48 | 24.61 | 50 | 8.86 | 31.69 | 24.57 | 338 | 0.17 |
| 50 | 8.86 | 31.689 | 6.32 | 24.57 | 75 | 8.93 | 31.85 | 24.69 | 327 | 0.25 |
| 75 | 8.93 | 31.854 | 6.27 | 24.69 | 100 | 8.94 | 31.91 | 24.73 | 324 | 0.34 |
| 100 | 8.94 | 31.911 | 6.28 | 24.73 | 125 | 8.98 | 31.97 | 24.78 | 320 | 0.42 |
| 125 | 8.98 | 31.972 | 6.27 | 24.78 | 150 | 8.98 | 31.99 | 24.79 | 319 | 0.50 |
| 150 | 8.98 | 31.988 | 6.27 | 24.79 | | | | | | |

71

CNAV WHITETHROAT; November 25, 1958; 2255 GCT; 54°23.5'N, 130°54.5'W; sounding, 80 fm; wind, 030°, 12 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.20 | 31.367 | 6.65 | 24.42 | 0 | 8.20 | 31.37 | 24.42 | 352 | 0.00 |
| 2 | 8.30 | 31.338 | 6.60 | 24.38 | 10 | 8.37 | 31.34 | 24.38 | 356 | 0.04 |
| 6 | 8.31 | 31.339 | 6.53 | 24.38 | 20 | 8.54 | 31.48 | 24.46 | 349 | 0.07 |
| 10 | 8.37 | 31.343 | 6.49 | 24.38 | 30 | 8.67 | 31.58 | 24.51 | 343 | 0.11 |
| 20 | 8.54 | 31.479 | 6.47 | 24.46 | 50 | 8.80 | 31.66 | 24.56 | 339 | 0.17 |
| 50 | 8.80 | 31.661 | 6.45 | 24.56 | 75 | 8.89 | 31.74 | 24.61 | 335 | 0.26 |
| 74 | 8.89 | 31.740 | 6.31 | 24.61 | 100 | 8.93 | 31.78 | 24.64 | 333 | 0.34 |
| 99 | 8.93 | 31.782 | 6.31 | 24.64 | 125 | 8.94 | 31.88 | 24.71 | 326 | 0.43 |
| 124 | 8.94 | 31.879 | 6.23 | 24.71 | 150 | 8.98 | 31.92 | 24.73 | 324 | 0.51 |
| 139 | 8.96 | 31.909 | 6.29 | 24.73 | | | | | | |
| 150 | (8.98)a) | (31.918)a) | - | (24.73) | | | | | | |

72

CNAV WHITETHROAT; November 26, 1958; 0450 GCT; 54°33'N, 132°28'W; sounding, 180 fm; wind, 070°, 10 kt; weather, partly cloudy; sea, moderate.b)

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 7.50 | 29.080 | 6.46 | 22.73 | 0 | 7.50 | 29.08 | 22.73 | 514 | 0.00 |
| 2 | 7.74 | 29.055 | 6.26 | 22.68 | 10 | 7.79 | 29.15 | 22.74 | 512 | 0.05 |
| 5 | 7.76 | 29.063 | 6.13 | 22.68 | 20 | 8.15 | 29.69 | 23.11 | 477 | 0.10 |
| 9 | 7.78 | 29.120 | 5.59 | 22.72 | 30 | 8.72 | 30.53 | 23.69 | 422 | 0.15 |
| 27 | 8.63 | 30.358 | 5.98 | 23.57 | 50 | 8.93 | 31.46 | 24.38 | 356 | 0.22 |
| 49 | 8.93 | 31.429 | 5.74 | 24.36 | 75 | 8.46 | 31.82 | 24.74 | 323 | 0.31 |
| 72 | 8.49 | 31.762 | 5.74 | 24.69 | 100 | 8.35 | 32.34 | 25.16 | 283 | 0.39 |
| 94 | 8.40 | 32.267 | 5.08 | 25.09 | 125 | 8.00 | 32.48 | 25.32 | 268 | 0.46 |
| 117 | 8.12 | 32.411 | 4.70 | 25.25 | 150 | 7.58 | 32.74 | 25.58 | 244 | 0.52 |
| 162 | 7.35 | 32.895 | 3.49 | 25.74 | 175 | 7.05 | 33.09 | 25.93 | 210 | 0.58 |
| 207 | 6.16 | 33.686 | 2.21 | 26.52 | 200 | 6.37 | 33.54 | 26.38 | 168 | 0.62 |

73

CNAV WHITETHROAT; November 26, 1958; 1003 GCT; 54°59'N, 133°21'W; sounding, 100 fm; wind, 040°, 2 kt; weather, clear; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.10 | 30.700 | 6.62 | 23.91 | 0 | 8.10 | 30.70 | 23.91 | 400 | 0.00 |
| 2 | 8.04 | 30.714 | 6.59 | 23.93 | 10 | 8.20 | 30.75 | 23.94 | 398 | 0.04 |
| 6 | 8.08 | 30.714 | 6.58 | 23.93 | 20 | 8.26 | 30.79 | 23.96 | 396 | 0.08 |
| 10 | 8.20 | 30.749 | 6.50 | 23.94 | 30 | 8.34 | 30.92 | 24.05 | 388 | 0.12 |
| 20 | 8.26 | 30.792 | 6.45 | 23.96 | 50 | 8.58 | 31.41 | 24.39 | 355 | 0.19 |
| 50 | 8.58 | 31.405 | 6.49 | 24.39 | 75 | 8.74 | 31.67 | 24.58 | 338 | 0.28 |
| 75 | 8.74 | 31.669 | 6.11 | 24.58 | 100 | 8.75 | 31.94 | 24.79 | 319 | 0.36 |
| 100 | 8.75 | 31.940 | 5.45 | 24.79 | 125 | 8.42 | 32.48 | 25.26 | 274 | 0.44 |
| 124 | 8.44 | 32.460 | 4.60 | 25.24 | 150 | 7.87 | 32.88 | 25.65 | 237 | 0.50 |
| 149 | 7.89 | 32.870 | 3.67 | 25.64 | | | | | | |
| 174 | 7.62 | 33.016 | 3.45 | 25.79 | | | | | | |

a) Value extrapolated by three-point parabolic method.

b) The following silicate values were obtained for this station: 0 m, 35.0; 2, 35.6; 5, 35.5; 9, 36.9; 27, 36.8; 49, 34.9; 72, 35.6; 94, 43.4; 117, 46.3; 207, 63.9 µg at/L.

| | OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| | m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 74 | CNAV WHITETHROAT; November 26, 1958; 1142 GCT; 54°58'N, 133°38'W; sounding, 70-55 fm; wind, calm; weather, partly cloudy; sea, missing. | | | | | | | | | | |
| | 0 | 8.40 | 31.146 | 6.42 | 24.22 | 0 | 8.40 | 31.15 | 24.22 | 371 | 0.00 |
| | 2 | 8.42 | 31.073 | 6.40 | 24.16 | 10 | 8.54 | 31.17 | 24.22 | 371 | 0.04 |
| | 12 | 8.58 | 31.294 | 6.30 | 24.31 | 20 | 8.67 | 31.42 | 24.39 | 355 | 0.07 |
| | 42 | 8.71 | 31.558 | 6.25 | 24.49 | 30 | 8.72 | 31.52 | 24.47 | 348 | 0.11 |
| | 66 | 8.78 | 31.697 | 6.20 | 24.59 | 50 | 8.74 | 31.61 | 24.53 | 342 | 0.18 |
| | 91 | 8.75 | 32.103 | 5.40 | 24.91 | 75 | 8.78 | 31.81 | 24.68 | 328 | 0.26 |
| | 116 | 8.74 | 32.410 | 5.00 | 25.15 | 100 | 8.74 | 32.22 | 25.01 | 297 | 0.34 |
| 75 | CNAV WHITETHROAT; November 26, 1958; 1323 GCT; 54°58.5'N, 134°01'W; sounding, 70 fm; wind, 130°, 3 kt; weather, partly cloudy; sea, slight. | | | | | | | | | | |
| | 0 | 8.20 | 30.912 | 6.78 | 24.06 | 0 | 8.20 | 30.91 | 24.06 | 386 | 0.00 |
| | 2 | 7.91 | 30.886 | 6.86 | 24.08 | 10 | 8.21 | 31.21 | 24.30 | 364 | 0.04 |
| | 6 | 7.99 | 30.938 | 6.73 | 24.11 | 20 | 8.78 | 31.54 | 24.47 | 348 | 0.07 |
| | 10 | 8.21 | 31.213 | 6.68 | 24.30 | 30 | 9.09 | 31.77 | 24.60 | 336 | 0.11 |
| | 20 | 8.78 | 31.537 | 6.52 | 24.47 | 50 | 8.96 | 31.93 | 24.75 | 321 | 0.17 |
| | 50 | 8.96 | 31.934 | 6.34 | 24.75 | 75 | 9.10 | 32.14 | 24.89 | 309 | 0.25 |
| | 75 | 9.10 | 32.136 | 6.25 | 24.89 | 100 | 9.06 | 32.19 | 24.93 | 304 | 0.33 |
| | 100 | 9.06 | 32.192 | 6.10 | 24.93 | | | | | | |
| 76 | CNAV WHITETHROAT; November 26, 1958; 1927 GCT; 55°02'N, 135°02'W; sounding, 1400 fm; wind, 120°, 15 kt; weather, partly cloudy; sea, slight. | | | | | | | | | | |
| | 0 | 8.20 | 31.971 | 6.56 | 24.89 | 0 | 8.20 | 31.97 | 24.89 | 307 | 0.00 |
| | 10 | 8.20 | 31.954 | 6.55 | 24.88 | 10 | 8.20 | 31.95 | 24.88 | 308 | 0.03 |
| | 20 | 8.21 | 31.937 | 6.50 | 24.86 | 20 | 8.21 | 31.94 | 24.86 | 310 | 0.06 |
| | 30 | 8.43 | 32.017 | 6.29 | 24.89 | 30 | 8.43 | 32.02 | 24.89 | 307 | 0.09 |
| | 50 | 8.77 | 32.304 | 6.13 | 25.07 | 50 | 8.77 | 32.30 | 25.07 | 291 | 0.15 |
| | 74 | 8.43 | 32.560 | 5.54 | 25.32 | 75 | 8.40 | 32.57 | 25.33 | 266 | 0.22 |
| | 99 | 7.23 | 32.912 | 5.30 | 25.77 | 100 | 7.19 | 32.93 | 25.78 | 224 | 0.28 |
| | 124 | 6.63 | 33.241 | 4.76 | 26.11 | 125 | 6.61 | 33.25 | 26.12 | 192 | 0.34 |
| | 149 | 6.38 | 33.508 | 4.19 | 26.35 | 150 | 6.37 | 33.52 | 26.36 | 170 | 0.38 |
| | 199 | 6.16 | 33.839 | 2.86 | 26.64 | 175 | 6.22 | 33.71 | 26.53 | 153 | 0.42 |
| | 248 | 5.89 | 33.916 | 2.46 | 26.73 | 200 | 6.16 | 33.84 | 26.64 | 143 | 0.46 |
| | 286 | 5.55 | 33.966 | 2.04 | 26.81 | 250 | 5.87 | 33.92 | 26.74 | 135 | 0.53 |
| | 381 | 4.98 | 34.025 | 1.33 | 26.93 | 300 | 5.44 | 33.98 | 26.84 | 126 | 0.60 |
| | 478 | 4.69 | 34.044 | 1.11 | 26.97 | 400 | 4.90 | 34.03 | 26.94 | 116 | 0.72 |
| | 574 | 4.29 | 34.141 | 0.85 | 27.10 | 500 | 4.61 | 34.06 | 27.00 | 112 | 0.83 |
| | 668 | 4.04 | 34.180 | 0.82 | 27.15 | 600 | 4.21 | 34.16 | 27.12 | 101 | 0.94 |
| | 764 | 3.77 | (34.226)a) | 0.81 | (27.22) | 700 | 3.95 | 34.19 | 27.17 | 96 | 1.04 |
| | 955 | 3.29 | 34.334 | 0.73 | 27.35 | 800 | 3.67 | 34.24 | 27.24 | 90 | 1.14 |
| | 1148 | 2.95 | 34.405 | 0.76 | 27.44 | 1000 | 3.20 | 34.35 | 27.37 | 78 | 1.31 |
| | 1440 | 2.51 | 34.483 | 0.72 | 27.54 | 1200 | 2.87 | 34.42 | 27.46 | 71 | 1.46 |
| | 1500 | (2.43)b) | (34.495)b) | - | (27.55) | 1500 | 2.43 | 34.49 | 27.55 | 62 | 1.66 |

a) Value interpolated by three-point parabolic method.
b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| CNAV WHITETHROAT; November 27, 1958; 0035 GCT; 55°02'N, 136°00'W; sounding, 1500 fm; wind, 100°, 15 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | | 77 |
| 0 | 7.40 | 32.397 | 7.07 | 25.34 | 0 | 7.40 | 32.40 | 25.34 | 264 | 0.00 |
| 10 | 7.34 | 32.382 | 7.07 | 25.34 | 10 | 7.34 | 32.38 | 25.34 | 265 | 0.03 |
| 19 | 7.31 | 32.373 | 7.11 | 25.33 | 20 | 7.31 | 32.37 | 25.33 | 265 | 0.05 |
| 29 | 7.35 | 32.361 | 6.89 | 25.32 | 30 | 7.35 | 32.36 | 25.32 | 267 | 0.08 |
| 48 | 7.39 | 32.381 | 6.91 | 25.33 | 50 | 7.39 | 32.39 | 25.33 | 266 | 0.13 |
| 72 | 7.41 | 32.487 | 6.73 | 25.41 | 75 | 7.35 | 32.54 | 25.46 | 254 | 0.20 |
| 95 | 6.60 | 33.117 | 5.22 | 26.01 | 100 | 6.51 | 33.22 | 26.10 | 193 | 0.26 |
| 119 | 6.41 | 33.463 | 4.28 | 26.31 | 125 | 6.32 | 33.53 | 26.37 | 168 | 0.30 |
| 143 | 5.94 | 33.667 | 3.90 | 26.53 | 150 | 5.83 | 33.71 | 26.58 | 148 | 0.34 |
| 191 | 5.45 | 33.853 | 3.05 | 26.74 | 175 | 5.55 | 33.82 | 26.70 | 137 | 0.38 |
| 239 | 5.18 | 33.909 | 2.47 | 26.81 | 200 | 5.38 | 33.87 | 26.76 | 132 | 0.41 |
| 295 | 4.66 | 33.937 | 1.94 | 26.89 | 250 | 5.10 | 33.92 | 26.83 | 126 | 0.48 |
| 395 | 4.29 | 34.019 | 1.31 | 27.00 | 300 | 4.62 | 33.94 | 26.90 | 119 | 0.54 |
| 495 | 4.14 | 34.102 | 0.85 | 27.08 | 400 | 4.28 | 34.02 | 27.00 | 110 | 0.65 |
| 595 | 3.90 | 34.179 | 0.72 | 27.17 | 500 | 4.13 | 34.11 | 27.08 | 103 | 0.76 |
| 695 | 3.71 | (34.241)a) | - | (27.23) | 600 | 3.89 | 34.18 | 27.17 | 96 | 0.86 |
| 795 | 3.52 | 34.287 | 0.60 | 27.29 | 700 | 3.70 | 34.24 | 27.24 | 90 | 0.96 |
| 994 | 3.12 | 34.378 | 0.55 | 27.40 | 800 | 3.51 | 34.29 | 27.29 | 85 | 1.04 |
| 1192 | 2.79 | 34.434 | 0.38 | 27.47 | 1000 | 3.11 | 34.38 | 27.40 | 75 | 1.21 |
| 1490 | 2.40 | 34.506 | 0.38 | 27.57 | 1200 | 2.78 | 34.44 | 27.48 | 69 | 1.35 |
| 1500 | (2.39)b) | (34.508)b) | - | (27.57) | 1500 | 2.39 | 34.51 | 27.57 | 61 | 1.55 |
| CNAV WHITETHROAT; November 27, 1958; 2043 GCT; 53°55'N, 135°23'W; sounding, 1500 fm; wind, 170°, 20 kt; weather, overcast; sea, rough. | | | | | | | | | | 78 |
| 0 | 8.40 | 32.433 | 6.68 | 25.22 | 0 | 8.40 | 32.43 | 25.22 | 275 | 0.00 |
| 10 | 8.07 | 32.380 | 6.68 | 25.23 | 10 | 8.07 | 32.38 | 25.23 | 275 | 0.03 |
| 20 | 8.06 | 32.392 | 6.68 | 25.24 | 20 | 8.06 | 32.39 | 25.24 | 274 | 0.06 |
| 30 | 8.09 | 32.374 | 6.69 | 25.22 | 30 | 8.09 | 32.37 | 25.22 | 276 | 0.08 |
| 50 | 8.10 | 32.427 | 6.70 | 25.26 | 50 | 8.10 | 32.43 | 25.26 | 272 | 0.14 |
| 75 | 8.03 | 32.537 | 6.67 | 25.36 | 75 | 8.03 | 32.54 | 25.36 | 264 | 0.20 |
| 99 | 6.98 | 32.889 | 5.74 | 25.78 | 100 | 6.95 | 32.90 | 25.80 | 222 | 0.27 |
| 124 | 6.48 | 33.236 | 5.02 | 26.12 | 125 | 6.47 | 33.25 | 26.13 | 190 | 0.32 |
| 149 | 6.28 | 33.547 | 4.54 | 26.39 | 150 | 6.27 | 33.56 | 26.40 | 165 | 0.36 |
| 199 | 5.78 | 33.860 | 3.31 | 26.70 | 175 | 6.04 | 33.76 | 26.59 | 148 | 0.40 |
| 248 | 5.28 | 33.923 | 2.50 | 26.81 | 200 | 5.77 | 33.86 | 26.71 | 137 | 0.44 |
| 293 | 4.97 | 33.939 | 2.06 | 26.86 | 250 | 5.26 | 33.92 | 26.81 | 127 | 0.50 |
| 390 | 4.49 | 34.056 | 1.23 | 27.01 | 300 | 4.93 | 33.94 | 26.87 | 122 | 0.57 |
| 487 | 4.18 | 34.109 | 0.87 | 27.08 | 400 | 4.45 | 34.06 | 27.02 | 109 | 0.68 |
| 585 | 3.90 | 34.174 | 0.86 | 27.16 | 500 | 4.14 | 34.12 | 27.09 | 102 | 0.79 |
| 682 | 3.66 | 34.240 | 0.49 | 27.24 | 600 | 3.86 | 34.18 | 27.17 | 95 | 0.89 |
| 780 | 3.48 | 34.274 | 0.50 | 27.28 | 700 | 3.62 | 34.25 | 27.25 | 89 | 0.98 |
| 975 | 3.21 | 34.349 | 0.50 | 27.37 | 800 | 3.45 | 34.28 | 27.29 | 85 | 1.07 |
| 1171 | 2.87 | 34.427 | 0.50 | 27.46 | 1000 | 3.17 | 34.36 | 27.38 | 78 | 1.24 |
| 1466 | 2.50 | 34.496 | 0.49 | 27.55 | 1200 | 2.83 | 34.44 | 27.47 | 69 | 1.39 |
| 1500 | (2.47)b) | (34.500)b) | - | (27.56) | 1500 | 2.47 | 34.50 | 27.56 | 62 | 1.59 |

a) Value interpolated by three-point parabolic method.
b) Value extrapolated by three-point parabolic method.

POG

CS-58-I

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 79 | CNAV WHITETHROAT; November 28, 1958; 0010 GCT; 53°55'N, 134°09'W; sounding, 1500 fm; wind, 170°, 15 kt; weather, overcast; sea, rough. | | | | | | | | | |
| 0 | 8.40 | 32.428 | 6.78 | 25.22 | 0 | 8.40 | 32.43 | 25.22 | 276 | 0.00 |
| 10 | 8.20 | 32.456 | 6.80 | 25.27 | 10 | 8.20 | 32.46 | 25.27 | 271 | 0.03 |
| 20 | 8.20 | 32.448 | 6.78 | 25.27 | 20 | 8.20 | 32.45 | 25.27 | 272 | 0.06 |
| 30 | 8.22 | 32.448 | 6.80 | 25.26 | 30 | 8.22 | 32.45 | 25.26 | 272 | 0.08 |
| 50 | 8.27 | 32.457 | 6.68 | 25.26 | 50 | 8.27 | 32.46 | 25.26 | 272 | 0.14 |
| 74 | 8.21 | 32.457 | 6.69 | 25.27 | 75 | 8.18 | 32.47 | 25.28 | 271 | 0.20 |
| 99 | 6.91 | 33.069 | 5.21 | 25.93 | 100 | 6.88 | 33.09 | 25.95 | 208 | 0.26 |
| 124 | 6.63 | 33.428 | 4.52 | 26.25 | 125 | 6.63 | 33.44 | 26.26 | 178 | 0.31 |
| 149 | 6.69 | 33.803 | 3.11 | 26.54 | 150 | 6.69 | 33.81 | 26.55 | 152 | 0.36 |
| 198 | 6.18 | 33.906 | 3.02 | 26.69 | 175 | 6.52 | 33.96 | 26.69 | 139 | 0.39 |
| 248 | 5.34 | 33.901 | 2.60 | 26.79 | 200 | 6.15 | 33.91 | 26.69 | 138 | 0.43 |
| 297 | 5.64 | 33.919 | 2.32 | 26.77 | 250 | 5.33 | 33.90 | 26.79 | 130 | 0.50 |
| 396 | 4.78 | 33.983 | 1.67 | 26.92 | 300 | 5.64 | 33.92 | 26.77 | 132 | 0.56 |
| 495 | 4.40 | 34.074 | 0.99 | 27.03 | 400 | 4.76 | 33.99 | 26.92 | 118 | 0.69 |
| 594 | 3.97 | 34.153 | 0.85 | 27.14 | 500 | 4.38 | 34.08 | 27.04 | 108 | 0.80 |
| 693 | 3.75 | 34.207 | 0.90 | 27.20 | 600 | 3.95 | 34.16 | 27.14 | 98 | 0.91 |
| 792 | 3.58 | 34.269 | 0.59 | 27.27 | 700 | 3.74 | 34.21 | 27.21 | 93 | 1.00 |
| 889 | 3.21 | 34.354 | 0.59 | 27.37 | 800 | 3.56 | 34.28 | 27.28 | 87 | 1.09 |
| 1187 | 2.91 | 34.415 | 0.60 | 27.45 | 1000 | 2.95 | 34.41 | 27.44 | 71 | 1.25 |
| 1486 | 2.48 | 34.495 | 0.81 | 27.55 | 1200 | 2.89 | 34.42 | 27.45 | 72 | 1.40 |
| 1500 | (2.46)a) | (34.499)a) | - | (27.56) | 1500 | 2.46 | 34.50 | 27.56 | 62 | 1.60 |
| 80 | CNAV WHITETHROAT; November 28, 1958; 0643 GCT; 54°00'N, 133°16'W; sounding, 33 fm; wind, 130°, 15 kt; weather, intermittent slight drizzle; sea, rough. | | | | | | | | | |
| 0 | 9.10 | 32.234 | 6.62 | 24.96 | 0 | 9.10 | 32.23 | 24.96 | 300 | 0.00 |
| 10 | 8.78 | 32.246 | 7.92 | 25.02 | 10 | 8.78 | 32.25 | 25.02 | 295 | 0.03 |
| 20 | 8.81 | 32.233 | 7.92 | 25.01 | 20 | 8.81 | 32.23 | 25.01 | 296 | 0.06 |
| 40 | 8.88 | 32.239 | 6.69 | 25.00 | 30 | 8.84 | 32.23 | 25.00 | 297 | 0.09 |
| 81 | CNAV WHITETHROAT; November 28, 1958; 1302 GCT; 53°15'N, 133°02'W; sounding, 390 fm; wind, 340°, 3 kt; weather, intermittent slight rain; sea, calm. | | | | | | | | | |
| 0 | 9.10 | 32.260 | 6.62 | 24.98 | 0 | 9.10 | 32.26 | 24.98 | 298 | 0.00 |
| 10 | 8.85 | 32.303 | 6.48 | 25.05 | 10 | 8.85 | 32.30 | 25.05 | 292 | 0.03 |
| 20 | 8.84 | 32.279 | 6.70 | 25.04 | 20 | 8.84 | 32.28 | 25.04 | 294 | 0.06 |
| 30 | 8.87 | 32.289 | 6.60 | 25.04 | 30 | 8.87 | 32.29 | 25.04 | 293 | 0.09 |
| 50 | 8.86 | 32.296 | 6.55 | 25.05 | 50 | 8.86 | 32.30 | 25.05 | 293 | 0.15 |
| 75 | 7.71 | 32.757 | 5.48 | 25.58 | 75 | 7.71 | 32.76 | 25.58 | 243 | 0.22 |
| 100 | 7.24 | 33.287 | 3.75 | 26.06 | 100 | 7.24 | 33.29 | 26.06 | 197 | 0.27 |
| 125 | 6.83 | 33.489 | 3.52 | 26.27 | 125 | 6.83 | 33.49 | 26.27 | 177 | 0.32 |
| 150 | 6.71 | 33.662 | 3.46 | 26.43 | 150 | 6.71 | 33.66 | 26.43 | 163 | 0.36 |
| 200 | 6.39 | 33.853 | 3.20 | 26.62 | 175 | 6.56 | 33.78 | 26.54 | 153 | 0.40 |
| 250 | 6.04 | 33.946 | 1.32 | 26.74 | 200 | 6.39 | 33.85 | 26.62 | 146 | 0.44 |
| 299 | 5.75 | 33.950 | 1.72 | 26.78 | 250 | 6.04 | 33.95 | 26.74 | 135 | 0.51 |
| 398 | 5.10 | 33.994 | 1.66 | 26.89 | 300 | 5.74 | 33.95 | 26.78 | 132 | 0.58 |
| 498 | 4.72 | 34.090 | 1.01 | 27.01 | 400 | 5.09 | 34.00 | 26.89 | 121 | 0.70 |
| 500 | (4.72)a) | (34.092)a) | - | (27.01) | 500 | 4.72 | 34.09 | 27.01 | 111 | 0.82 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| CNAV WHITETHROAT; November 28, 1958; 1510 GCT; 53°18'N, 132°52'W; sounding, 200 fm; wind, 270°, 8 kt; weather, moderate to heavy drizzle and snow; sea, slight. | | | | | | | | | | 82 |
| 0 | 9.40 | 32.226 | 6.95 | 24.91 | 0 | 9.40 | 32.23 | 24.91 | 305 | 0.00 |
| 10 | 8.76 | 32.276 | 6.70 | 25.05 | 10 | 8.76 | 32.28 | 25.05 | 292 | 0.03 |
| 20 | 8.72 | 32.284 | 6.62 | 25.06 | 20 | 8.72 | 32.28 | 25.06 | 291 | 0.06 |
| 30 | 8.68 | 32.296 | 6.67 | 25.07 | 30 | 8.68 | 32.30 | 25.07 | 290 | 0.09 |
| 50 | 8.66 | 32.315 | 6.65 | 25.09 | 50 | 8.66 | 32.31 | 25.09 | 289 | 0.15 |
| 75 | 8.70 | 32.389 | 5.65 | 25.14 | 75 | 8.70 | 32.39 | 25.14 | 284 | 0.22 |
| 100 | 7.79 | 32.980 | 4.68 | 25.74 | 100 | 7.79 | 32.98 | 25.74 | 228 | 0.28 |
| 125 | 7.34 | 33.201 | 4.02 | 25.98 | 125 | 7.34 | 33.20 | 25.98 | 206 | 0.34 |
| 150 | 6.86 | 33.459 | 4.15 | 26.25 | 150 | 6.86 | 33.46 | 26.25 | 180 | 0.39 |
| 200 | 6.61 | 33.740 | 3.12 | 26.50 | 175 | 6.62 | 33.64 | 26.42 | 164 | 0.43 |
| 249 | 6.30 | 33.864 | 2.84 | 26.64 | 200 | 6.61 | 33.74 | 26.50 | 157 | 0.47 |
| 299 | 5.82 | 33.927 | 2.40 | 26.75 | 250 | 6.29 | 33.87 | 26.64 | 144 | 0.55 |
| 300 | (5.81)a) | (33.928)a) | - | (26.75) | 300 | 5.81 | 33.93 | 26.75 | 134 | 0.62 |
| CNAV WHITETHROAT; November 28, 1958; 1657 GCT; 53°18'N, 132°49'W; sounding, 170 fm; wind, 350°, 12 kt; weather, intermittent slight drizzle; sea, slight. | | | | | | | | | | 83 |
| 0 | 8.90 | 32.186 | 6.45 | 24.95 | 0 | 8.90 | 32.19 | 24.95 | 301 | 0.00 |
| 10 | 8.57 | 32.241 | 6.18 | 25.05 | 10 | 8.57 | 32.24 | 25.05 | 292 | 0.03 |
| 20 | 8.67 | 32.315 | 6.52 | 25.09 | 20 | 8.67 | 32.31 | 25.09 | 288 | 0.06 |
| 30 | 8.72 | 32.327 | 6.32 | 25.09 | 30 | 8.72 | 32.33 | 25.09 | 288 | 0.09 |
| 50 | 8.73 | 32.354 | 6.25 | 25.11 | 50 | 8.73 | 32.35 | 25.11 | 287 | 0.15 |
| 75 | 8.56 | (32.515)b) | 5.32 | (25.26) | 75 | 8.56 | 32.52 | 25.26 | 273 | 0.22 |
| 99 | 8.19 | 32.804 | 5.42 | 25.55 | 100 | 8.17 | 32.82 | 25.56 | 245 | 0.28 |
| 124 | 7.45 | 33.080 | 4.35 | 25.87 | 125 | 7.43 | 33.09 | 25.88 | 215 | 0.34 |
| 149 | 7.20 | 33.295 | 4.07 | 26.07 | 150 | 7.19 | 33.30 | 26.08 | 196 | 0.39 |
| 199 | 6.76 | 33.646 | 3.36 | 26.41 | 175 | 6.96 | 33.49 | 26.26 | 180 | 0.44 |
| 249 | 6.24 | 33.860 | 2.72 | 26.64 | 200 | 6.75 | 33.65 | 26.41 | 165 | 0.48 |
| 250 | (6.23)a) | (33.863)a) | - | (26.65) | 250 | 6.23 | 33.86 | 26.65 | 143 | 0.56 |
| CNAV WHITETHROAT; December 2, 1958; 1013 GCT; 51°53'N, 131°11'W; sounding, 400 fm; wind, 210°, 20 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | | 84 |
| 0 | 9.00 | 32.228 | 6.99 | 24.97 | 0 | 9.00 | 32.23 | 24.97 | 299 | 0.00 |
| 10 | 8.90 | 32.200 | 6.50 | 24.97 | 10 | 8.90 | 32.20 | 24.97 | 300 | 0.03 |
| 20 | 8.82 | 32.354 | 6.70 | 25.10 | 20 | 8.82 | 32.35 | 25.10 | 288 | 0.06 |
| 30 | 8.72 | 32.402 | 6.32 | 25.15 | 30 | 8.72 | 32.40 | 25.15 | 283 | 0.09 |
| 49 | 8.56 | 32.532 | 5.38 | 25.28 | 50 | 8.55 | 32.54 | 25.28 | 270 | 0.14 |
| 74 | 8.39 | 32.702 | 5.24 | 25.44 | 75 | 8.38 | 32.71 | 25.44 | 256 | 0.21 |
| 123 | 8.02 | 32.948 | 4.33 | 25.68 | 100 | 8.20 | 32.85 | 25.58 | 243 | 0.27 |
| 148 | 7.40 | 33.029 | 4.18 | 25.83 | 125 | 7.98 | 32.96 | 25.69 | 233 | 0.33 |
| 190 | 7.14 | 33.278 | 3.52 | 26.07 | 150 | 7.37 | 33.04 | 25.85 | 218 | 0.39 |
| 239 | 6.69 | 33.393 | 3.55 | 26.22 | 175 | 7.12 | 33.17 | 25.99 | 205 | 0.44 |
| 278 | 6.36 | 33.660 | 2.74 | 26.47 | 200 | 7.06 | 33.32 | 26.11 | 194 | 0.49 |
| 373 | 5.92 | 33.794 | 2.76 | 26.63 | 250 | 6.59 | 33.45 | 26.28 | 179 | 0.59 |
| 467 | 5.60 | 33.884 | 2.74 | 26.74 | 300 | 6.21 | 33.76 | 26.57 | 152 | 0.67 |
| 562 | 4.86 | 33.965 | - | 26.89 | 400 | 5.82 | 33.82 | 26.67 | 143 | 0.82 |
| 658 | 4.32 | 34.166 | 0.84 | 27.11 | 500 | 5.39 | 33.91 | 26.79 | 132 | 0.96 |
| 700 | (4.15)a) | (34.292)a) | - | (27.23) | 600 | 4.62 | 34.03 | 26.97 | 115 | 1.08 |
| | | | | | 700 | 4.15 | 34.29 | 27.23 | 91 | 1.19 |
| CNAV WHITETHROAT; December 2, 1958; 1140 GCT; 51°57'N, 131°03'W; sounding, 110 fm; wind, 210°, 20 kt; weather, cloudy; sea, moderate. | | | | | | | | | | 85 |
| 0 | 9.10 | 32.237 | 7.05 | 24.96 | 0 | 9.10 | 32.24 | 24.96 | 300 | 0.00 |
| 9 | 8.87 | 32.218 | 6.08 | 24.98 | 10 | 8.86 | 32.22 | 24.99 | 298 | 0.03 |
| 19 | 8.88 | 32.228 | 6.66 | 24.99 | 20 | 8.88 | 32.23 | 24.99 | 298 | 0.06 |
| 46 | 8.84 | 32.308 | 5.92 | 25.06 | 30 | 8.88 | 32.25 | 25.01 | 296 | 0.09 |
| 69 | 8.76 | 32.381 | 5.89 | 25.13 | 50 | 8.83 | 32.32 | 25.07 | 291 | 0.15 |
| 93 | 8.42 | 32.722 | 4.92 | 25.45 | 75 | 8.70 | 32.44 | 25.18 | 280 | 0.22 |
| 116 | 8.22 | 32.840 | 4.56 | 25.57 | 100 | 8.35 | 32.78 | 25.50 | 250 | 0.29 |
| 139 | 7.86 | 33.031 | 4.30 | 25.77 | 125 | 8.10 | 32.91 | 25.64 | 238 | 0.35 |
| 185 | 7.52 | 33.210 | 3.80 | 25.96 | 150 | 7.73 | 33.10 | 25.84 | 219 | 0.41 |
| | | | | | 175 | 7.55 | 33.19 | 25.94 | 210 | 0.46 |

a) Value extrapolated by three-point parabolic method.
b) Value interpolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 86 | CNAV WHITETHROAT; December 2, 1958; 1508 GCT; 51°48'N, 131°26'W; sounding, 1000 fm; wind, 240°, 5 kt; weather, partly cloudy; sea, moderate. | | | | | | | | | |
| 0 | 8.90 | 32.318 | 6.59 | 25.06 | 0 | 8.90 | 32.32 | 25.06 | 291 | 0.00 |
| 10 | 8.77 | 32.324 | 6.66 | 25.08 | 10 | 8.77 | 32.32 | 25.08 | 289 | 0.03 |
| 20 | 8.78 | 32.361 | 6.16 | 25.11 | 20 | 8.78 | 32.36 | 25.11 | 286 | 0.06 |
| 30 | 8.74 | 32.376 | 6.11 | 25.13 | 30 | 8.74 | 32.38 | 25.13 | 285 | 0.09 |
| 50 | 8.68 | 32.451 | 5.87 | 25.20 | 50 | 8.68 | 32.45 | 25.20 | 279 | 0.14 |
| 75 | 8.62 | 32.489 | 5.61 | 25.23 | 75 | 8.62 | 32.49 | 25.23 | 276 | 0.21 |
| 100 | 8.22 | 32.761 | 4.83 | 25.51 | 100 | 8.22 | 32.76 | 25.51 | 250 | 0.28 |
| 125 | 7.84 | 33.013 | 4.23 | 25.76 | 125 | 7.84 | 33.01 | 25.76 | 226 | 0.34 |
| 150 | 7.54 | 33.159 | 3.81 | 25.92 | 150 | 7.54 | 33.16 | 25.92 | 212 | 0.39 |
| 199 | 6.18 | 33.608 | 4.72 | 26.45 | 175 | 6.97 | 33.36 | 26.15 | 189 | 0.44 |
| 249 | 5.91 | 33.830 | 3.92 | 26.66 | 200 | 6.16 | 33.61 | 26.46 | 160 | 0.49 |
| 298 | 5.53 | 33.885 | 3.05 | 26.75 | 250 | 5.90 | 33 83 | 26.66 | 142 | 0.56 |
| 396 | 5.13 | 34.014 | 1.56 | 26.90 | 300 | 5.52 | 33.89 | 26.76 | 133 | 0.64 |
| 490 | 4.83 | 34.068 | 0.99 | 26.98 | 400 | 5.12 | 34.02 | 26.91 | 120 | 0.76 |
| 585 | 4.43 | 34.150 | 0.91 | 27.09 | 500 | 4.79 | 34.08 | 26.99 | 113 | 0.88 |
| 682 | 4.14 | 34.259 | 0.55 | 27.20 | 600 | 4.38 | 34.17 | 27.10 | 102 | 0.99 |
| 779 | 3.90 | 34.276 | 0.77 | 27.24 | 700 | 4.09 | 34.27 | 27.22 | 92 | 1.09 |
| 978 | 3.38 | 34.313 | 0.41 | 27.32 | 800 | 3.85 | 34.28 | 27.25 | 90 | 1.18 |
| 1175 | 2.98 | 34.504 | 0.64 | 27.51 | 1000 | 3.33 | 34.33 | 27.34 | 82 | 1.35 |
| 1474 | 2.42 | 34.504 | 0.69 | 27.56 | 1200 | 2.93 | 34.52 | 27.53 | 64 | 1.50 |
| 1500 | (2.37)a) | (34.487)a) | - | (27.55) | 1500 | 2.37 | 34.49 | 27.55 | 62 | 1.69 |
| 87 | CNAV WHITETHROAT; December 3, 1958; 0034 GCT; 51°16'N, 133°02'W; sounding, 1600 fm; wind, 320°, 15 kt; weather, cloudy; sea, slight.[b] | | | | | | | | | |
| 0 | 9.00 | 32.322 | 6.62 | 25.05 | 0 | 9.00 | 32.32 | 25.05 | 292 | 0.00 |
| 9 | 8.82 | 32.407 | 6.59 | 25.14 | 10 | 8.81 | 32.41 | 25.14 | 283 | 0.03 |
| 18 | 8.80 | 32.399 | 6.58 | 25.14 | 20 | 8.80 | 32.40 | 25.14 | 284 | 0.06 |
| 27 | 8.81 | 32.401 | 6.60 | 25.14 | 30 | 8.81 | 32.40 | 25.14 | 284 | 0.09 |
| 45 | 8.82 | 32.415 | 6.53 | 25.15 | 50 | 8.79 | 32.44 | 25.17 | 281 | 0.14 |
| 67 | 8.56 | 32.601 | 5.73 | 25.33 | 75 | 8.28 | 32.76 | 25.50 | 250 | 0.21 |
| 90 | 7.50 | 33.199 | 3.73 | 25.95 | 100 | 7.25 | 33.35 | 26.11 | 193 | 0.26 |
| 112 | 7.12 | 33.452 | 3.42 | 26.21 | 125 | 6.97 | 33.67 | 26.39 | 166 | 0.31 |
| 135 | 6.90 | 33.863 | 3.37 | 26.56 | 150 | 6.77 | 33.99 | 26.68 | 139 | 0.35 |
| 180 | 6.54 | 33.927 | 2.72 | 26.66 | 175 | 6.58 | 33.97 | 26.69 | 139 | 0.38 |
| 225 | 6.13 | 33.966 | 2.30 | 26.74 | 200 | 6.36 | 33.95 | 26.70 | 138 | 0.42 |
| 269 | 5.88 | 33.983 | 2.05 | 26.79 | 250 | 5.97 | 33.98 | 26.77 | 132 | 0.49 |
| 358 | 5.56 | 34.017 | 1.88 | 26.85 | 300 | 5.74 | 33.99 | 26.81 | 128 | 0.55 |
| 446 | 5.20 | 34.080 | - | 26.95 | 400 | 5.39 | 34.04 | 26.89 | 122 | 0.68 |
| 536 | 4.86 | 34.148 | 0.99 | 27.04 | 500 | 4.99 | 34.12 | 27.00 | 112 | 0.80 |
| 628 | 4.46 | 34.216 | 0.94 | 27.14 | 600 | 4.59 | 34.20 | 27.11 | 103 | 0.90 |
| 719 | 4.18 | 34.339 | 0.54 | 27.26 | 700 | 4.23 | 34.31 | 27.23 | 91 | 1.00 |
| 910 | 3.53 | 34.407 | 0.39 | 27.38 | 800 | 3.91 | 34.40 | 27.34 | 82 | 1.09 |
| 1102 | 3.05 | 34.444 | 0.52 | 27.46 | 1000 | 3.28 | 34.43 | 27.42 | 74 | 1.25 |
| 1400 | 2.59 | 34.462 | 0.59 | 27.51 | 1200 | 2.86 | 34.46 | 27.48 | 68 | 1.39 |
| 1500 | (2.51)a) | (34.457)a) | - | (27.52) | 1500 | 2.51 | 34.46 | 27.52 | 66 | 1.60 |

a) Value extrapolated by three-point parabolic method.

b) The following silicate values were obtained for this station: 0 m, 10.0; 9, 9.1; 18, 10.0; 27, 10.0; 45, 7.8; 67, 19.3; 90, 19.6; 135, 46.1; 180, 56.3; 269, 62.3; 536, 55.2; 910, 122.6; 1102, 141.3; 1400, 67.6 µg at/L.

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CNAV WHITETHROAT; December 3, 1958; 0846 GCT; 50°36'N, 134°20'W; sounding, 1800 fm; wind, 300°, 10 kt; weather, partly cloudy; sea, slight.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| 0 | 9.40 | 32.338 | 6.90 | 25.00 | 0 | 9.40 | 32.34 | 25.00 | 297 | 0.00 |
| 10 | 9.04 | 32.326 | 6.76 | 25.04 | 10 | 9.04 | 32.33 | 25.04 | 293 | 0.03 |
| 20 | 9.02 | 32.345 | 6.83 | 25.06 | 20 | 9.02 | 32.34 | 25.06 | 291 | 0.06 |
| 30 | 9.00 | 32.324 | 6.64 | 25.05 | 30 | 9.00 | 32.32 | 25.05 | 293 | 0.09 |
| 50 | 9.28 | 32.348 | 6.24 | 25.02 | 50 | 9.28 | 32.35 | 25.02 | 295 | 0.15 |
| 75 | 8.42 | 32.504 | 6.46 | 25.28 | 75 | 8.42 | 32.50 | 25.28 | 272 | 0.22 |
| 100 | 7.68 | 32.864 | 5.51 | 25.67 | 100 | 7.68 | 32.86 | 25.67 | 235 | 0.28 |
| 125 | 7.15 | 33.340 | 4.43 | 26.11 | 125 | 7.15 | 33.34 | 26.11 | 193 | 0.34 |
| 150 | 7.06 | 33.662 | 3.37 | 26.38 | 150 | 7.06 | 33.66 | 26.38 | 168 | 0.38 |
| 200 | 6.54 | 33.862 | 2.91 | 26.61 | 175 | 6.86 | 33.84 | 26.54 | 152 | 0.42 |
| 250 | 5.91 | 33.958 | 2.37 | 26.76 | 200 | 6.54 | 33.86 | 26.61 | 147 | 0.46 |
| 290 | 5.62 | 33.977 | 2.06 | 26.81 | 250 | 5.91 | 33.96 | 26.76 | 132 | 0.53 |
| 390 | 4.92 | 33.999 | 1.89 | 26.91 | 300 | 5.55 | 33.98 | 26.83 | 127 | 0.60 |
| 489 | 4.48 | 34.090 | 1.04 | 27.03 | 400 | 4.86 | 34.01 | 26.92 | 118 | 0.72 |
| 589 | 4.20 | 34.157 | 0.71 | 27.12 | 500 | 4.44 | 34.10 | 27.05 | 107 | 0.83 |
| 688 | 4.01 | 34.235 | 0.58 | 27.20 | 600 | 4.17 | 34.17 | 27.13 | 100 | 0.94 |
| 788 | 3.70 | 34.283 | 0.59 | 27.27 | 700 | 3.98 | 34.24 | 27.21 | 93 | 1.04 |
| 987 | 3.28 | 34.374 | 0.50 | 27.38 | 800 | 3.67 | 34.29 | 27.28 | 87 | 1.13 |
| 1184 | 2.86 | 34.435 | 0.50 | 27.47 | 1000 | 3.25 | 34.38 | 27.39 | 77 | 1.29 |
| 1482 | 2.42 | 34.498 | 0.51 | 27.56 | 1200 | 2.83 | 34.44 | 27.47 | 69 | 1.44 |
| 1500 | (2.40)a) | (34.501)a) | - | (27.56) | 1500 | 2.40 | 34.50 | 27.56 | 61 | 1.64 |

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CNAV WHITETHROAT; December 3, 1958; 2007 GCT; 50°24'N, 131°50'W; sounding, 1800 fm; wind, 300°, 5 kt; weather, partly cloudy; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.10 | 32.440 | 6.48 | 24.96 | 0 | 10.10 | 32.44 | 24.96 | 300 | 0.00 |
| 10 | 10.08 | 32.417 | 6.48 | 24.95 | 10 | 10.08 | 32.42 | 24.95 | 302 | 0.03 |
| 20 | 10.06 | 32.424 | 6.52 | 24.95 | 20 | 10.06 | 32.42 | 24.95 | 301 | 0.06 |
| 30 | 10.05 | 32.417 | 6.44 | 24.95 | 30 | 10.05 | 32.42 | 24.95 | 302 | 0.09 |
| 49 | 10.07 | 32.426 | 6.64 | 24.95 | 50 | 10.07 | 32.43 | 24.95 | 302 | 0.15 |
| 74 | 10.11 | 32.428 | 6.70 | 24.95 | 75 | 10.06 | 32.44 | 24.96 | 302 | 0.23 |
| 98 | 7.75 | 32.789 | 5.77 | 25.60 | 100 | 7.62 | 32.81 | 25.64 | 238 | 0.30 |
| 123 | 6.92 | 33.048 | 5.71 | 25.92 | 125 | 6.86 | 33.07 | 25.94 | 209 | 0.35 |
| 148 | 6.29 | 33.425 | 5.79 | 26.29 | 150 | 6.25 | 33.45 | 26.32 | 173 | 0.40 |
| 197 | 6.07 | 33.753 | 4.80 | 26.58 | 175 | 6.00 | 33.67 | 26.53 | 154 | 0.44 |
| 246 | 5.78 | 33.860 | 4.09 | 26.70 | 200 | 6.05 | 33.77 | 26.59 | 148 | 0.48 |
| 296 | 5.22 | 33.910 | 2.90 | 26.81 | 250 | 5.75 | 33.87 | 26.71 | 137 | 0.55 |
| 396 | 4.55 | 33.994 | 1.66 | 26.95 | 300 | 5.18 | 33.91 | 26.82 | 128 | 0.62 |
| 495 | 4.29 | 34.086 | 1.26 | 27.05 | 400 | 4.53 | 34.00 | 26.96 | 115 | 0.74 |
| 594 | 4.12 | 34.166 | 0.71 | 27.13 | 500 | 4.28 | 34.09 | 27.06 | 106 | 0.85 |
| 690 | 3.79 | 34.232 | 0.71 | 27.22 | 600 | 4.10 | 34.17 | 27.14 | 99 | 0.96 |
| 789 | 3.57 | 34.300 | 0.66 | 27.29 | 700 | 3.76 | 34.24 | 27.23 | 91 | 1.05 |
| 990 | 3.16 | 34.381 | 0.63 | 27.40 | 800 | 3.55 | 34.31 | 27.30 | 84 | 1.14 |
| 1191 | 2.78 | - | 0.66 | | 1000 | 3.14 | | | | |
| 1492 | 2.41 | - | 0.67 | | 1200 | 2.77 | | | | |
| 1500 | (2.40)a) | - | - | | 1500 | 2.40 | | | | |

a) Value extrapolated by three-point parabolic method.

POG

CS-58-I

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **90** | CNAV WHITETHROAT; December 4, 1958; 0548 GCT; 50°23'N, 130°00'W; sounding, 900 fm; wind, 360°, 15 kt; weather, partly cloudy; sea, slight.[a] | | | | | | | | | |
| 0 | 10.00 | 32.336 | 6.86 | 24.90 | 0 | 10.00 | 32.34 | 24.90 | 307 | 0.00 |
| 7 | 9.41 | 32.305 | 6.66 | 24.97 | 10 | 9.37 | 32.30 | 24.97 | 300 | 0.03 |
| 13 | 9.47 | 32.305 | 6.80 | 24.96 | 20 | 9.44 | 32.31 | 24.96 | 300 | 0.06 |
| 20 | 9.44 | 32.305 | 6.08 | 24.96 | 30 | 9.44 | 32.31 | 24.97 | 300 | 0.09 |
| 33 | 9.45 | 32.320 | 5.97 | 24.97 | 50 | 8.87 | 32.52 | 25.22 | 277 | 0.15 |
| 50 | 8.87 | 32.518 | 5.27 | 25.22 | 75 | 7.16 | 33.30 | 26.08 | 195 | 0.21 |
| 67 | 7.37 | 33.134 | 4.75 | 25.92 | 100 | 7.35 | 33.58 | 26.28 | 177 | 0.26 |
| 84 | 7.30 | 33.402 | 4.34 | 26.14 | 125 | 7.32 | 33.77 | 26.43 | 163 | 0.30 |
| 100 | 7.35 | 33.583 | 3.88 | 26.28 | 150 | 7.17 | 33.87 | 26.53 | 154 | 0.34 |
| 134 | 7.27 | 33.806 | 3.18 | 26.46 | 175 | 6.96 | 33.92 | 26.60 | 148 | 0.38 |
| 168 | 7.01 | 33.909 | 2.90 | 26.58 | 200 | 6.81 | 33.94 | 26.63 | 144 | 0.41 |
| 216 | 6.73 | 33.935 | 2.68 | 26.64 | 250 | 6.43 | 33.96 | 26.70 | 139 | 0.48 |
| 287 | 6.02 | 33.986 | 2.15 | 26.77 | 300 | 5.91 | 33.99 | 26.79 | 130 | 0.55 |
| 359 | 5.46 | 34.005 | 1.78 | 26.86 | 400 | 5.28 | 34.03 | 26.90 | 121 | 0.68 |
| 428 | 5.21 | 34.063 | 1.62 | 26.93 | 500 | 4.87 | 34.09 | 26.99 | 113 | 0.80 |
| 498 | 4.88 | 34.093 | 0.97 | 26.99 | 600 | 4.56 | 34.16 | 27.08 | 105 | 0.91 |
| 569 | 4.67 | 34.144 | 0.79 | 27.06 | 700 | 4.15 | 34.22 | 27.17 | 97 | 1.01 |
| 710 | 4.10 | 34.222 | 0.76 | 27.18 | 800 | 3.85 | 34.29 | 27.26 | 89 | 1.10 |
| 850 | 3.74 | 34.326 | 0.73 | 27.30 | 1000 | 3.34 | 34.40 | 27.39 | 77 | 1.27 |
| 1060 | 3.17 | 34.414 | 0.71 | 27.42 | | | | | | |
| **91** | CNAV WHITETHROAT; December 4, 1958; 1442 GCT; 49°43'N, 128°22'W; sounding, 1200 fm; wind, 360°, 15 kt; weather, partly cloudy; sea, slight. | | | | | | | | | |
| 0 | 9.90 | 32.431 | 6.48 | 24.99 | 0 | 9.90 | 32.43 | 24.99 | 298 | 0.00 |
| 10 | 10.10 | 32.320 | 6.52 | 24.87 | 10 | 10.10 | 32.32 | 24.87 | 310 | 0.03 |
| 20 | 10.17 | 32.320 | 6.38 | 24.86 | 20 | 10.17 | 32.32 | 24.86 | 311 | 0.06 |
| 30 | 10.14 | 32.322 | 6.50 | 24.86 | 30 | 10.14 | 32.32 | 24.86 | 310 | 0.09 |
| 50 | 10.13 | 32.322 | 6.40 | 24.86 | 50 | 10.13 | 32.32 | 24.86 | 311 | 0.16 |
| 75 | 7.67 | 32.931 | 5.12 | 25.72 | 75 | 7.67 | 32.93 | 25.72 | 229 | 0.22 |
| 100 | 7.07 | 33.340 | 4.69 | 26.12 | 100 | 7.07 | 33.34 | 26.12 | 191 | 0.28 |
| 125 | 7.47 | 33.668 | 3.68 | 26.33 | 125 | 7.47 | 33.67 | 26.33 | 172 | 0.32 |
| 150 | 7.40 | 33.779 | 2.42 | 26.42 | 150 | 7.40 | 33.78 | 26.42 | 164 | 0.36 |
| 200 | 7.05 | 33.919 | 2.25 | 26.58 | 175 | 7.26 | 33.86 | 26.51 | 156 | 0.40 |
| 250 | 6.58 | 33.974 | 2.08 | 26.69 | 200 | 7.05 | 33.92 | 26.58 | 149 | 0.44 |
| 300 | 5.96 | 33.994 | 2.04 | 26.78 | 250 | 6.58 | 33.97 | 26.69 | 140 | 0.52 |
| 400 | 5.37 | 34.039 | 1.32 | 26.89 | 300 | 5.96 | 33.99 | 26.78 | 131 | 0.58 |
| 500 | 4.95 | 34.122 | 0.76 | 27.01 | 400 | 5.37 | 34.04 | 26.89 | 122 | 0.71 |
| 600 | 4.30 | 34.170 | 0.91 | 27.12 | 500 | 4.95 | 34.12 | 27.01 | 111 | 0.83 |
| 700 | 4.02 | 34.390 | 0.36 | 27.32 | 600 | 4.30 | 34.17 | 27.12 | 101 | 0.94 |
| 800 | 3.81 | 34.250 | 0.42 | 27.23 | 700 | 4.02 | 34.39 | 27.32 | 83 | 1.03 |
| 1000 | 3.41 | 34.307 | 0.36 | 27.32 | 800 | 3.81 | 34.25 | 27.23 | 91 | 1.12 |
| 1200 | 2.97 | 34.457 | 0.41 | 27.48 | 1000 | 3.41 | 34.31 | 27.32 | 84 | 1.30 |
| 1500 | 2.46 | 34.525 | 0.97 | 27.58 | 1200 | 2.97 | 34.46 | 27.48 | 70 | 1.45 |
| | | | | | 1500 | 2.46 | 34.53 | 27.58 | 60 | 1.65 |

a) The following silicate values were obtained for this station: 0 m, 10.7; 7, 10.3; 13, 10.9; 20, 11.1; 33, 11.8; 67, 31.0; 100, 38.2; 134, 38.0; 216, 43.5; 287, 52.0; 359, 60.0; 428, 69.2; 710, 92.0; 850, 103.0; 1060, 124.0 µg at/L.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

92

CNAV WHITETHROAT; December 4, 1958; 1719 GCT; 49°53'N, 128°03'W; sounding, 700 fm; wind, 330°, 15 kt; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.80 | 31.783 | 6.68 | 24.33 | 0 | 10.80 | 31.78 | 24.33 | 360 | 0.00 |
| 10 | 9.10 | 31.641 | 6.61 | 24.50 | 10 | 9.10 | 31.64 | 24.50 | 344 | 0.04 |
| 20 | 9.64 | 32.138 | 6.72 | 24.80 | 20 | 9.64 | 32.14 | 24.80 | 316 | 0.07 |
| 30 | 9.70 | 32.208 | 6.90 | 24.85 | 30 | 9.70 | 32.21 | 24.85 | 312 | 0.10 |
| 50 | 9.72 | 32.212 | 6.66 | 24.85 | 50 | 9.72 | 32.21 | 24.85 | 312 | 0.16 |
| 74 | 9.22 | 32.557 | - | 25.19 | 75 | 9.18 | 32.57 | 25.21 | 278 | 0.24 |
| 99 | 7.81 | 33.082 | 5.06 | 25.82 | 100 | 7.77 | 33.10 | 25.84 | 219 | 0.30 |
| 124 | 7.15 | 33.267 | 5.06 | 26.06 | 125 | 7.14 | 33.28 | 26.07 | 197 | 0.35 |
| 149 | 7.04 | 33.515 | 5.06 | 26.27 | 150 | 7.04 | 33.52 | 26.27 | 178 | 0.40 |
| 198 | 6.87 | 33.864 | 4.15 | 26.56 | 175 | 6.94 | 33.72 | 26.44 | 162 | 0.44 |
| 248 | 6.46 | 33.978 | 3.34 | 26.71 | 200 | 6.86 | 33.87 | 26.57 | 150 | 0.48 |
| 300 | 5.93 | 33.951 | 3.00 | 26.75 | 250 | 6.44 | 33.98 | 26.71 | 138 | 0.55 |
| 400 | 5.43 | 34.021 | 1.78 | 26.87 | 300 | 5.93 | 33.95 | 26.75 | 134 | 0.62 |
| 500 | 5.00 | 34.099 | 1.06 | 26.98 | 400 | 5.43 | 34.02 | 26.87 | 124 | 0.75 |
| 600 | 8.51 | (34.180)a) | - | (26.57) | 500 | 5.00 | 34.10 | 26.98 | 114 | 0.87 |
| 700 | 4.14 | 34.263 | 0.54 | 27.21 | 600 | 8.51 | 34.18 | 26.57 | 158 | 1.01 |
| 800 | 3.82 | 34.332 | 0.50 | 27.30 | 700 | 4.14 | 34.26 | 27.21 | 93 | 1.14 |
| 1000 | 3.51 | 34.384 | 0.48 | 27.37 | 800 | 3.82 | 34.33 | 27.30 | 86 | 1.23 |
| | | | | | 1000 | 3.51 | 34.38 | 27.37 | 80 | 1.39 |

93

CNAV WHITETHROAT; December 4, 1958; 1909 GCT; 49°57'N, 127°54'W; sounding, 270 fm; wind, 360°, 10 kt; weather, partly cloudy; sea, missing.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.40 | 31.198 | 6.55 | 24.11 | 0 | 9.40 | 31.20 | 24.11 | 382 | 0.00 |
| 10 | 9.25 | 31.374 | 6.34 | 24.27 | 10 | 9.25 | 31.37 | 24.27 | 367 | 0.04 |
| 20 | 9.57 | 32.131 | 6.20 | 24.81 | 20 | 9.57 | 32.13 | 24.81 | 315 | 0.07 |
| 30 | 9.65 | 32.199 | 6.12 | 24.85 | 30 | 9.65 | 32.20 | 24.85 | 312 | 0.10 |
| 50 | 9.64 | 32.347 | 5.62 | 24.96 | 50 | 9.64 | 32.35 | 24.96 | 301 | 0.17 |
| 75 | 8.86 | 32.795 | 4.48 | 25.44 | 75 | 8.86 | 32.80 | 25.44 | 256 | 0.24 |
| 100 | 8.33 | 33.047 | 4.06 | 25.71 | 100 | 8.33 | 33.05 | 25.71 | 230 | 0.30 |
| 124 | 7.69 | 33.428 | 3.49 | 26.11 | 125 | 7.67 | 33.44 | 26.12 | 192 | 0.35 |
| 149 | 7.50 | 33.575 | 3.24 | 26.25 | 150 | 7.49 | 33.58 | 26.25 | 180 | 0.40 |
| 199 | 7.48 | 33.662 | 2.78 | 26.32 | 175 | 7.43 | 33.65 | 26.32 | 174 | 0.44 |
| 249 | 7.16 | 33.842 | 2.50 | 26.51 | 200 | 7.48 | 33.66 | 26.32 | 174 | 0.48 |
| 298 | 6.34 | 33.957 | 2.38 | 26.71 | 250 | 7.15 | 33.84 | 26.51 | 157 | 0.57 |
| 398 | 5.38 | 34.027 | 1.54 | 26.88 | 300 | 6.31 | 33.96 | 26.71 | 138 | 0.64 |
| 400 | (5.37)b) | (34.026)b) | - | (26.88) | 400 | 5.37 | 34.03 | 26.88 | 122 | 0.77 |

94

CNAV WHITETHROAT; December 5, 1958; 0903 GCT; 49°02.5'N, 126°49'W; sounding, 150 fm; wind, 300°, 7 kt; weather, partly cloudy; sea, calm.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.40 | 32.106 | 6.55 | 24.81 | 0 | 9.40 | 32.11 | 24.81 | 314 | 0.00 |
| 10 | 9.60 | 32.102 | 6.50 | 24.78 | 10 | 9.60 | 32.10 | 24.78 | 318 | 0.03 |
| 20 | 9.74 | 32.118 | 6.42 | 24.77 | 20 | 9.74 | 32.12 | 24.77 | 319 | 0.06 |
| 30 | 9.82 | 32.149 | 6.17 | 24.78 | 30 | 9.82 | 32.15 | 24.78 | 318 | 0.10 |
| 50 | 8.84 | 32.625 | 5.69 | 25.31 | 50 | 8.84 | 32.63 | 25.31 | 268 | 0.16 |
| 75 | 7.68 | 33.005 | 5.72 | 25.78 | 75 | 7.68 | 33.00 | 25.78 | 224 | 0.22 |
| 100 | 7.74 | 33.381 | 4.24 | 26.06 | 100 | 7.74 | 33.38 | 26.06 | 197 | 0.27 |
| 125 | 7.73 | 33.681 | 2.78 | 26.30 | 125 | 7.73 | 33.68 | 26.30 | 175 | 0.32 |
| 150 | 7.60 | 33.747 | 2.30 | 26.37 | 150 | 7.60 | 33.75 | 26.37 | 169 | 0.36 |
| 200 | 7.46 | 33.840 | 2.45 | 26.46 | 175 | 7.51 | 33.80 | 26.42 | 164 | 0.40 |
| 250 | 6.78 | 33.966 | 2.30 | 26.66 | 200 | 7.46 | 33.84 | 26.46 | 161 | 0.44 |
| | | | | | 250 | 6.78 | 33.97 | 26.66 | 143 | 0.52 |

a) Value interpolated by three-point parabolic method.
b) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |
| **95** | CNAV WHITETHROAT; December 5, 1958; 1361 GCT; 48°27'N, 126°11'W; sounding, 140 fm; wind, 040°, 15 kt; weather, intermittent slight drizzle; sea, slight. | | | | | | | | | |
| 0 | 9.10 | 32.211 | 6.52 | 24.94 | 0 | 9.10 | 32.21 | 24.94 | 302 | 0.00 |
| 10 | 9.58 | 32.203 | 6.56 | 24.86 | 10 | 9.58 | 32.20 | 24.86 | 310 | 0.03 |
| 20 | 9.62 | 32.203 | 6.50 | 24.85 | 20 | 9.62 | 32.20 | 24.85 | 311 | 0.06 |
| 29 | 9.61 | 32.209 | 6.45 | 24.86 | 30 | 9.58 | 32.22 | 24.88 | 309 | 0.09 |
| 49 | 8.19 | 32.941 | 5.14 | 25.65 | 50 | 8.15 | 32.97 | 25.68 | 233 | 0.15 |
| 73 | 7.88 | 33.288 | 4.45 | 25.97 | 75 | 7.87 | 33.32 | 25.99 | 204 | 0.20 |
| 98 | 7.94 | 33.627 | 3.40 | 26.23 | 100 | 7.94 | 33.65 | 26.24 | 180 | 0.25 |
| 122 | 7.82 | 33.811 | 2.67 | 26.39 | 125 | 7.81 | 33.83 | 26.40 | 165 | 0.29 |
| 147 | 7.70 | 33.883 | 2.30 | 26.46 | 150 | 7.68 | 33.89 | 26.47 | 160 | 0.34 |
| 196 | 7.41 | 33.930 | 2.27 | 26.54 | 175 | 7.54 | 33.93 | 26.52 | 155 | 0.38 |
| 220 | 7.14 | 33.943 | 2.13 | 26.59 | 200 | 7.37 | 33.93 | 26.55 | 153 | 0.41 |
| **96** | CNAV WHITETHROAT; December 5, 1958; 1524 GCT; 48°34.5'N, 125°57'W; sounding, 60 fm; wind, 040°, 10 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 9.70 | 32.126 | 6.41 | 24.78 | 0 | 9.70 | 32.13 | 24.78 | 317 | 0.00 |
| 10 | 9.50 | 32.065 | 6.43 | 24.77 | 10 | 9.50 | 32.06 | 24.77 | 319 | 0.03 |
| 19 | 9.56 | 32.075 | 6.42 | 24.76 | 20 | 9.56 | 32.08 | 24.76 | 320 | 0.06 |
| 29 | 9.56 | 32.066 | 6.45 | 24.76 | 30 | 9.56 | 32.08 | 24.77 | 319 | 0.10 |
| 49 | 9.82 | 32.831 | 5.03 | 25.31 | 50 | 9.80 | 32.86 | 25.34 | 265 | 0.16 |
| 73 | 8.37 | 33.354 | 3.47 | 25.95 | 75 | 8.30 | 33.38 | 25.98 | 205 | 0.21 |
| 97 | 8.12 | 33.424 | 3.23 | 26.04 | 100 | 8.17 | 33.40 | 26.01 | 202 | 0.26 |
| 100 | (8.17)a) | (33.401)a) | - | (26.01) | | | | | | |
| **97** | CNAV WHITETHROAT; December 5, 1958; 1758 GCT; 48°51.5'N, 125°39'W; sounding, 25 fm; wind, 100°, 20 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 9.10 | 30.363 | 6.63 | 23.50 | 0 | 9.10 | 30.36 | 23.50 | 439 | 0.00 |
| 10 | 9.42 | 30.349 | 6.64 | 23.44 | 10 | 9.42 | 30.35 | 23.44 | 445 | 0.04 |
| 20 | 9.94 | 31.138 | 6.55 | 23.97 | 20 | 9.94 | 31.14 | 23.97 | 395 | 0.09 |
| 30 | 10.01 | 31.928 | 5.93 | 24.58 | 30 | 10.01 | 31.93 | 24.58 | 338 | 0.12 |
| **98** | CNAV WHITETHROAT; December 5, 1958; 2117 GCT; 48°37'N, 125°01'W; sounding, 30 fm; wind, 090°, 15 kt; weather, cloudy; sea, slight. | | | | | | | | | |
| 0 | 8.90 | 30.281 | 6.47 | 23.47 | 0 | 8.90 | 30.28 | 23.47 | 443 | 0.00 |
| 10 | 9.67 | 30.242 | 6.61 | 23.32 | 10 | 9.67 | 30.24 | 23.32 | 457 | 0.04 |
| 20 | 10.03 | 30.569 | 6.50 | 23.52 | 20 | 10.03 | 30.57 | 23.52 | 438 | 0.09 |
| 30 | 10.83 | 31.597 | 6.38 | 24.18 | 30 | 10.83 | 31.60 | 24.18 | 375 | 0.13 |
| 50 | 10.86 | 31.872 | 6.32 | 24.39 | 50 | 10.86 | 31.87 | 24.39 | 356 | 0.20 |
| **99** | CNAV WHITETHROAT; December 5, 1958; 2253 GCT; 48°28'N, 124°49'W; sounding, 150 fm; wind, 090°, 18 kt; weather, overcast; sea, slight. | | | | | | | | | |
| 0 | 9.10 | 30.072 | 6.70 | 23.28 | 0 | 9.10 | 30.07 | 23.28 | 461 | 0.00 |
| 10 | 9.67 | 30.145 | 6.83 | 23.24 | 10 | 9.67 | 30.14 | 23.24 | 464 | 0.05 |
| 20 | 9.86 | 30.275 | 6.35 | 23.32 | 20 | 9.86 | 30.28 | 23.32 | 458 | 0.09 |
| 30 | 10.34 | 30.799 | 6.41 | 23.64 | 30 | 10.34 | 30.80 | 23.64 | 426 | 0.14 |
| 50 | 9.97 | 31.207 | 5.40 | 24.02 | 50 | 9.97 | 31.21 | 24.02 | 391 | 0.22 |
| 75 | 9.52 | 31.877 | 4.95 | 24.62 | 75 | 9.52 | 31.88 | 24.62 | 334 | 0.31 |
| 99 | 8.47 | 32.908 | 3.78 | 25.58 | 100 | 8.44 | 32.94 | 25.61 | 240 | 0.38 |
| 124 | 8.21 | 33.236 | 3.16 | 25.88 | 125 | 8.21 | 33.24 | 25.89 | 214 | 0.44 |
| 149 | 8.24 | 33.345 | 3.12 | 25.96 | 150 | 8.24 | 33.35 | 25.97 | 207 | 0.49 |
| 199 | 7.88 | 33.614 | 2.50 | 26.23 | 175 | 8.12 | 33.48 | 26.08 | 197 | 0.54 |
| 249 | 7.48 | 33.809 | 2.20 | 26.44 | 200 | 7.87 | 33.62 | 26.23 | 183 | 0.59 |
| 250 | (7.47)a) | (33.812)a) | - | (26.44) | 250 | 7.47 | 33.81 | 26.44 | 164 | 0.68 |

a) Value extrapolated by three-point parabolic method.

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

CNAV WHITETHROAT; December 6, 1958; 0307 GCT; 48°18'N, 124°02.5'W; sounding, 100 fm; wind, 090°, 12 kt; weather, intermittent slight rain; sea, slight.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.00 | 30.376 | 6.40 | 23.53 | 0 | 9.00 | 30.38 | 23.53 | 437 | 0.00 |
| 10 | 9.46 | 30.355 | 6.39 | 23.44 | 10 | 9.46 | 30.36 | 23.44 | 445 | 0.04 |
| 20 | 9.53 | 30.487 | 6.20 | 23.53 | 20 | 9.53 | 30.49 | 23.53 | 437 | 0.09 |
| 30 | 9.52 | 30.574 | 6.18 | 23.60 | 30 | 9.52 | 30.57 | 23.60 | 430 | 0.13 |
| 50 | 8.79 | 30.993 | 5.84 | 24.04 | 50 | 8.79 | 30.99 | 24.04 | 389 | 0.21 |
| 75 | 8.58 | 31.511 | 4.91 | 24.48 | 75 | 8.58 | 31.51 | 24.48 | 348 | 0.31 |
| 100 | 8.33 | 32.212 | 4.21 | 25.06 | 100 | 8.33 | 32.21 | 25.06 | 292 | 0.39 |
| 125 | 8.30 | 32.462 | 3.86 | 25.26 | 125 | 8.30 | 32.46 | 25.26 | 274 | 0.46 |
| 150 | 7.88 | 33.522 | 2.67 | 26.15 | 150 | 7.88 | 33.52 | 26.15 | 190 | 0.52 |
| 175 | 7.86 | 33.593 | 2.56 | 26.21 | 175 | 7.86 | 33.59 | 26.21 | 184 | 0.56 |

| OBSERVED | | | COMPUTED | INTERPOLATED | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $\sigma_t$ | Z | T | S | $\sigma_t$ | $\delta$ | $\Delta$D |
| m | °C | ‰ | g/L | m | °C | ‰ | g/L | cl/ton | dyn m |

3

USS BURTON ISLAND; September 12, 1958; 0000 GCT; 65°44'N, 168°44'W; sounding, 42 m; wind, 340°, force 1; weather, fog; sea, calm.[a)]

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.87 | 31.60 | 24.91 | 0 | 5.87 | 31.60 | 24.91 | 305 | 0.00 |
| 5 | 5.72 | 31.62 | 24.94 | 10 | 5.16 | 31.69 | 25.06 | 291 | 0.03 |
| 10 | 5.16 | 31.69 | 25.06 | 20 | 4.94 | 31.73 | 25.12 | 286 | 0.06 |
| 15 | 5.00 | 31.72 | 25.10 | 30 | 4.79 | 31.75 | 25.15 | 283 | 0.09 |
| 20 | 4.94 | 31.73 | 25.12 | 50 | 4.79 | 31.76 | 25.16 | 282 | 0.14 |
| 30 | 4.79 | 31.75 | 25.15 | | | | | | |
| 50 | 4.79 | 31.76 | 25.16 | | | | | | |

4

USS BURTON ISLAND; September 12, 1958; 0300 GCT; 65°43'N, 168°34'W; sounding, 42 m; wind, 010°, force 1; weather, intermittent slight drizzle; sea, calm.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.31 | 31.64 | 24.89 | 0 | 6.31 | 31.64 | 24.89 | 307 | 0.00 |
| 5 | 5.70 | 31.67 | 24.98 | 10 | 5.44 | 31.68 | 25.02 | 295 | 0.03 |
| 10 | 5.44 | 31.68 | 25.02 | 20 | 5.43 | 31.71 | 25.05 | 292 | 0.06 |
| 15 | 5.44 | 31.68 | 25.02 | 30 | 5.43 | 31.68 | 25.02 | 295 | 0.09 |
| 20 | 5.43 | 31.71 | 25.05 | 50 | 5.34 | 31.68 | 25.03 | 294 | 0.15 |
| 30 | 5.43 | 31.68 | 25.02 | | | | | | |
| 50 | 5.34 | 31.68 | 25.03 | | | | | | |

5

USS BURTON ISLAND; September 12, 1958; 0500 GCT; 65°42'N, 168°26'W; sounding, 46 m; wind, 010°, force 1; weather, intermittent slight drizzle; sea, calm.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.93 | 30.45 | 23.60 | 0 | 8.93 | 30.45 | 23.60 | 430 | 0.00 |
| 5 | 8.17 | 30.95 | 24.10 | 10 | 7.14 | 31.47 | 24.65 | 330 | 0.04 |
| 10 | 7.14 | 31.47 | 24.65 | 20 | 6.75 | 31.53 | 24.75 | 321 | 0.07 |
| 15 | 6.94 | 31.53 | 24.72 | 30 | 6.51 | 31.56 | 24.80 | 316 | 0.10 |
| 20 | 6.75 | 31.53 | 24.75 | 50 | 5.95 | 31.56 | 24.87 | 310 | 0.16 |
| 30 | 6.51 | 31.56 | 24.80 | | | | | | |
| 50 | 5.95 | 31.56 | 24.87 | | | | | | |

6

USS BURTON ISLAND; September 12, 1958; 0900 GCT; 65°41'N, 168°17'W; sounding, 40 m; wind, 190°, force 4; weather, fog; sea, calm.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.61 | 29.18 | 22.50 | 0 | 9.61 | 29.18 | 22.50 | 535 | 0.00 |
| 5 | 9.64 | 29.26 | 22.56 | 10 | 9.65 | 29.76 | 22.95 | 492 | 0.05 |
| 10 | 9.65 | 29.76 | 22.95 | 20 | 8.86 | 30.66 | 23.77 | 414 | 0.10 |
| 15 | 9.55 | 30.08 | 23.21 | 30 | 8.57 | 30.96 | 24.05 | 388 | 0.14 |
| 20 | 8.86 | 30.66 | 23.77 | | | | | | |
| 30 | 8.57 | 30.96 | 24.05 | | | | | | |
| 45 | 8.51 | 31.00 | 24.09 | | | | | | |

2

USS BURTON ISLAND; September 12, 1958; 1400 GCT; 65°00'N, 168°30'W; sounding, 38 m; wind, 060°, force 3; weather, fog; sea, calm.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 6.23 | 31.28 | 24.61 | 0 | 6.23 | 31.28 | 24.61 | 333 | 0.00 |
| 5 | 6.16 | 31.31 | 24.65 | 10 | 4.75 | 31.57 | 25.01 | 296 | 0.03 |
| 10 | 4.75 | 31.57 | 25.01 | 20 | 3.70 | 31.87 | 25.35 | 263 | 0.06 |
| 15 | 3.74 | 31.87 | 25.35 | 30 | 3.50 | 31.91 | 25.40 | 259 | 0.09 |
| 20 | 3.70 | 31.87 | 25.35 | | | | | | |
| 30 | 3.50 | 31.91 | 25.40 | | | | | | |
| 45 | 3.35 | 31.93 | 25.43 | | | | | | |

1

USS BURTON ISLAND; September 13, 1958; 0100 GCT; 62°58'N, 168°00'W; sounding, 15 m; wind, 150°, force 4; weather, intermittent slight drizzle; sea, smooth.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 5.27 | 31.81 | 25.14 | 0 | 5.27 | 31.81 | 25.14 | 283 | 0.00 |
| 5 | 4.97 | 31.85 | 25.21 | 10 | 4.21 | 31.91 | 25.33 | 265 | 0.03 |
| 10 | 4.21 | 31.91 | 25.33 | 20 | 4.22 | 31.94 | 25.36 | 263 | 0.05 |
| 15 | 4.20 | 31.93 | 25.35 | | | | | | |
| 20 | 4.22 | 31.94 | 25.36 | | | | | | |

a) Stations 7 through 37, occupied in the Beaufort and Chuckchee Seas, are not included here because they are outside the area covered by this series. These data are available at the National Oceanographic Data Center in Washington, D. C.

UW

BB-188

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

188-001

BROWN BEAR; February 19, 1958; 2100 GCT;[a] 47°44'N, 122°25'W; sounding, 283 m; wind, calm; weather, cloudy; sea, smooth; wire angle, 00°, 00°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0b) | 8.82 | 28.15 | 5.71 | 2.33 | 21.82 | 0 | 8.82 | 28.15 | 5.71 | 2.33 | 21.82 | 600 | 0.00 |
| 5 | 8.79 | 28.31 | 5.73 | 2.37 | 21.95 | 10 | 8.75 | 28.68 | 5.68 | 2.38 | 22.24 | 560 | 0.06 |
| 10 | 8.75 | 28.68 | 5.68 | 2.38 | 22.24 | 20 | 8.70 | 29.35 | 5.48 | 2.44 | 22.77 | 510 | 0.11 |
| 20 | 8.70 | 29.35 | 5.48 | 2.44 | 22.77 | 30 | 8.69 | 29.42 | 5.47 | 2.33 | 22.83 | 504 | 0.16 |
| 30 | 8.69 | 29.42 | 5.47 | 2.33 | 22.83 | 50 | 8.63 | 29.49 | 5.23 | 2.24 | 22.89 | 498 | 0.26 |
| 49 | 8.63 | 29.49 | 5.22 | 2.25 | 22.89 | 75 | 8.60 | 29.53 | 5.31 | 2.22 | 22.93 | 495 | 0.39 |
| 74 | 8.60 | 29.53 | 5.31 | 2.21 | 22.93 | 100 | 8.60 | 29.56 | 5.30 | 2.38 | 22.95 | 493 | 0.51 |
| 99 | 8.60 | 29.55 | 5.31 | 2.38 | 22.94 | 150 | 8.64 | 29.76 | 5.08 | 2.41 | 23.10 | 480 | 0.75 |
| 148 | 8.64 | 29.76 | 5.08 | 2.41 | 23.10 | 200 | 8.71 | 29.81 | 5.03 | 2.39 | 23.13 | 478 | 0.99 |
| 197 | 8.71 | 29.81 | 5.03 | 2.39 | 23.13 | 250 | 8.73 | 29.82 | 5.01 | 2.45 | 23.13 | 478 | 1.23 |
| 238c) | 8.73 | 29.81 | 5.02 | 2.44 | 23.13 | | | | | | | | |
| 267 | 8.71 | 29.83 | 5.00 | 2.47 | 23.14 | | | | | | | | |

188-002

BROWN BEAR; February 19, 1958; 2300 GCT; 47°54'N, 122°28'W; sounding, 201 m; wind, 300°, force 2; weather, cloudy; sea, smooth; wire angle, 02°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.76 | 28.55 | 5.67 | 2.36 | 22.14 | 0 | 8.76 | 28.55 | 5.67 | 2.36 | 22.14 | 570 | 0.00 |
| 5 | 8.70 | 28.68 | 5.58 | 2.32 | 22.25 | 10 | 8.70 | 28.68 | 5.60 | 2.36 | 22.25 | 559 | 0.06 |
| 10 | 8.70 | 28.68 | 5.60 | 2.36 | 22.25 | 20 | 8.67 | 28.87 | 5.52 | 2.31 | 22.40 | 545 | 0.11 |
| 20 | 8.67 | 28.87 | 5.52 | 2.31 | 22.40 | 30 | 8.58 | 29.39 | 5.42 | 2.22 | 22.82 | 505 | 0.16 |
| 29 | 8.59 | 29.38 | 5.41 | 2.23 | 22.81 | 50 | 8.52 | 29.46 | 5.49 | 2.12 | 22.88 | 499 | 0.26 |
| 48 | 8.52 | 29.46 | 5.49 | 2.13 | 22.88 | 75 | 8.52 | 29.51 | 5.45 | 2.12 | 22.92 | 496 | 0.39 |
| 73 | 8.51 | 29.50 | 5.47 | 2.10 | 22.92 | 100 | 8.61 | 29.60 | 5.29 | 2.27 | 22.98 | 491 | 0.51 |
| 98 | 8.60 | 29.60 | 5.30 | 2.26 | 22.98 | 150 | 8.74 | 29.68 | 5.07 | 2.36 | 23.02 | 487 | 0.75 |
| 147 | 8.74 | 29.68 | 5.08 | 2.36 | 23.02 | | | | | | | | |
| 186 | 8.76 | 29.72 | 4.88 | 2.39 | 23.05 | | | | | | | | |

188-003

BROWN BEAR; February 20, 1958; 0100 GCT; 48°05'N, 122°39'W; sounding, 182 m; wind, calm; weather, partly cloudy; sea, smooth; wire angle, 00°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.52 | 29.90 | 5.60 | 1.96 | 23.23 | 0 | 8.52 | 29.90 | 5.60 | 1.96 | 23.23 | 466 | 0.00 |
| 5 | 8.50 | 29.94 | 5.63 | 1.94 | 23.26 | 10 | 8.51 | 29.96 | 5.64 | 1.95 | 23.28 | 461 | 0.05 |
| 10 | 8.51 | 29.96 | 5.64 | 1.95 | 23.28 | 20 | 8.50 | 29.97 | 5.61 | 2.01 | 23.28 | 460 | 0.09 |
| 20 | 8.50 | 29.97 | 5.61 | 2.01 | 23.28 | 30 | 8.52 | 29.97 | 5.60 | 2.09 | 23.28 | 461 | 0.14 |
| 30 | 8.52 | 29.97 | 5.60 | 2.09 | 23.28 | 50 | 8.52 | 30.00 | 5.67 | 1.97 | 23.31 | 459 | 0.23 |
| 50 | 8.52 | 30.00 | 5.67 | 1.97 | 23.31 | 75 | 8.53 | 30.04 | 5.60 | 2.03 | 23.34 | 456 | 0.34 |
| 74 | 8.53 | 30.04 | 5.60 | 2.03 | 23.34 | 100 | 8.52 | 30.05 | 5.66 | 2.08 | 23.34 | 456 | 0.46 |
| 99 | 8.52 | 30.04 | 5.66 | 2.08 | 23.34 | | | | | | | | |
| 123 | 8.54 | 30.14 | 5.60 | 2.04 | 23.41 | | | | | | | | |
| 148 | 8.52 | 30.18 | 5.60 | 2.05 | 23.45 | | | | | | | | |

188-004

BROWN BEAR; February 20, 1958; 0300 GCT; 48°12'N, 122°54'W; sounding, 91 m; wind, calm; weather, partly cloudy; sea, calm; wire angle, 03°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.50 | 30.20 | 5.66 | 2.11 | 23.46 | 0 | 8.50 | 30.20 | 5.66 | 2.11 | 23.46 | 443 | 0.00 |
| 5 | 8.48 | 30.33 | 5.60 | 2.12 | 23.57 | 10 | 8.47 | 30.46 | 5.58 | 1.99 | 23.67 | 423 | 0.04 |
| 10 | 8.47 | 30.46 | 5.58 | 1.99 | 23.67 | 20 | 8.54 | 30.70 | 5.57 | 1.96 | 23.85 | 407 | 0.08 |
| 20 | 8.54 | 30.70 | 5.57 | 1.96 | 23.85 | 30 | 8.62 | 30.97 | 5.54 | 1.86 | 24.05 | 388 | 0.12 |
| 30 | 8.62 | 30.97 | 5.54 | 1.86 | 24.05 | 50 | 8.67 | 31.11 | 5.50 | 1.80 | 24.15 | 378 | 0.20 |
| 50 | 8.67 | 31.11 | 5.50 | 1.80 | 24.15 | 75 | 8.76 | 31.31 | 5.48 | 1.76 | 24.29 | 365 | 0.30 |
| 75 | 8.76 | 31.31 | 5.48 | 1.76 | 24.29 | | | | | | | | |

a) Times reported are those of the messenger release of the shallow cast to the nearest hour (when half way between, to the nearest even hour). Wire angles are given in the numerical order of casts.

b) Second cast.

c) First cast.

UW BB-188

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

188-005 BROWN BEAR; February 20, 1958; 0500 GCT; 48°14'N, 123°14'W; sounding, 139 m; wind, 220°, force 1; weather, partly cloudy; sea, calm; wire angle, 04°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.43 | 30.46 | 5.73 | 1.97 | 23.68 | 0 | 8.43 | 30.46 | 5.73 | 1.97 | 23.68 | 423 | 0.00 |
| 5 | 8.52 | 30.55 | 5.68 | 1.97 | 23.73 | 10 | 8.61 | 30.64 | 5.69 | 1.92 | 23.79 | 412 | 0.04 |
| 10 | 8.61 | 30.64 | 5.69 | 1.92 | 23.79 | 20 | 8.56 | 30.66 | 5.66 | 1.93 | 23.81 | 410 | 0.08 |
| 20 | 8.56 | 30.66 | 5.66 | 1.93 | 23.81 | 30 | 8.52 | 30.73 | 5.67 | 1.96 | 23.88 | 404 | 0.12 |
| 30 | 8.52 | 30.73 | 5.67 | 1.96 | 23.88 | 50 | 8.60 | 31.02 | 5.48 | 1.82 | 24.09 | 384 | 0.20 |
| 49 | 8.60 | 31.01 | 5.48 | 1.82 | 24.08 | 75 | 8.76 | 31.29 | 5.42 | 1.86 | 24.28 | 367 | 0.30 |
| 74 | 8.75 | 31.27 | 5.42 | 1.86 | 24.26 | 100 | 8.96 | 31.61 | 5.40 | 1.79 | 24.50 | 346 | 0.39 |
| 99 | 8.96 | 31.60 | 5.40 | 1.79 | 24.49 | | | | | | | | |
| 129 | 8.98 | 31.71 | 5.34 | 1.78 | 24.57 | | | | | | | | |

188-006 BROWN BEAR; February 20, 1958; 0700 GCT; 48°16'N, 123°41'W; sounding, 183 m; wind, 300°, force 2; weather, partly cloudy; sea, calm; wire angle, 03°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.65 | 30.99 | 5.56 | 1.78 | 24.06 | 0 | 8.65 | 30.99 | 5.56 | 1.78 | 24.06 | 386 | 0.00 |
| 5 | 8.64 | 31.00 | 5.57 | 1.77 | 24.07 | 10 | 8.64 | 31.00 | 5.59 | 1.81 | 24.07 | 386 | 0.04 |
| 10 | 8.64 | 31.00 | 5.59 | 1.81 | 24.07 | 20 | 8.62 | 31.08 | 5.60 | 1.73 | 24.13 | 380 | 0.08 |
| 20 | 8.62 | 31.08 | 5.60 | 1.73 | 24.13 | 30 | 8.76 | 31.26 | 5.48 | 1.74 | 24.25 | 368 | 0.11 |
| 30 | 8.76 | 31.26 | 5.48 | 1.74 | 24.25 | 50 | 8.80 | 31.31 | 5.47 | 1.69 | 24.29 | 365 | 0.19 |
| 50 | 8.80 | 31.31 | 5.47 | 1.69 | 24.29 | 75 | 9.04 | 31.63 | 5.41 | 1.61 | 24.50 | 346 | 0.28 |
| 74 | 9.03 | 31.62 | 5.41 | 1.62 | 24.49 | 100 | 9.26 | 31.92 | 5.42 | 1.50 | 24.69 | 328 | 0.36 |
| 99 | 9.26 | 31.91 | 5.42 | 1.50 | 24.68 | 150 | 9.39 | 32.29 | 5.25 | 1.41 | 24.96 | 303 | 0.52 |
| 138 | 9.36 | 32.18 | 5.32 | 1.41 | 24.88 | | | | | | | | |
| 177 | 9.46 | 32.57 | 5.01 | 1.47 | 25.17 | | | | | | | | |

188-007 BROWN BEAR; February 20, 1958; 0800 GCT; 48°18'N, 124°03'W; sounding, 192 m; wind, 300°, force 3; weather, partly cloudy; sea, smooth; wire angle, 04°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 8.76 | 30.73 | 6.08 | 1.68 | 23.84 | 0 | 8.76 | 30.73 | 6.08 | 1.68 | 23.84 | 407 | 0.00 |
| 5 | 8.74 | 30.73 | 6.05 | 1.70 | 23.84 | 10 | 8.60 | 30.82 | 5.92 | 1.71 | 23.93 | 398 | 0.04 |
| 10 | 8.60 | 30.82 | 5.92 | 1.71 | 23.93 | 20 | 8.54 | 30.95 | 5.82 | 1.74 | 24.04 | 388 | 0.08 |
| 20 | 8.54 | 30.95 | 5.82 | 1.74 | 24.04 | 30 | 8.60 | 31.02 | 5.68 | 1.75 | 24.09 | 384 | 0.12 |
| 30 | 8.60 | 31.02 | 5.68 | 1.75 | 24.09 | 50 | 8.61 | 31.18 | 5.50 | 1.72 | 24.21 | 372 | 0.19 |
| 50 | 8.61 | 31.18 | 5.50 | 1.72 | 24.21 | 75 | 8.58 | 31.33 | 5.34 | 1.76 | 24.33 | 361 | 0.29 |
| 74 | 8.56 | 31.31 | 5.34 | 1.76 | 24.32 | 100 | 9.00 | 31.75 | 5.35 | 1.82 | 24.60 | 336 | 0.37 |
| 99 | 8.98 | 31.73 | 5.34 | 1.82 | 24.59 | 150 | 9.57 | 32.58 | 5.16 | 1.72 | 25.16 | 284 | 0.53 |
| 138 | 9.55 | 32.43 | 5.29 | 1.74 | 25.04 | | | | | | | | |
| 178 | 9.31 | 32.79 | 4.66 | 1.69 | 25.36 | | | | | | | | |

188-008 BROWN BEAR; February 20, 1958; 1300 GCT; 48°27'N, 124°31'W; sounding, 237 m; wind, 200°, force 3; weather, intermittent slight drizzle; sea, smooth; wire angle, 05°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.31 | 28.66 | | 0.90 | 21.99 | 0 | 10.31 | 28.66 | | 0.90 | 21.99 | 584 | 0.00 |
| 5 | 10.20 | 29.00 | | 1.08 | 22.27 | 10 | 10.02 | 29.74 | | 1.14 | 22.87 | 500 | 0.05 |
| 10 | 10.02 | 29.74 | | 1.14 | 22.87 | 20 | 9.70 | 30.10 | | 1.27 | 23.20 | 468 | 0.10 |
| 20 | 9.70 | 30.10 | | 1.27 | 23.20 | 30 | 9.29 | 30.28 | | 1.13 | 23.41 | 449 | 0.15 |
| 30 | 9.29 | 30.28 | | 1.13 | 23.41 | 50 | 8.82 | 31.11 | | 1.61 | 24.13 | 381 | 0.23 |
| 50 | 8.82 | 31.11 | | 1.61 | 24.13 | 75 | 9.13 | 31.69 | | 1.52 | 24.53 | 342 | 0.32 |
| 75 | 9.13 | 31.69 | | 1.52 | 24.53 | 100 | 9.46 | 32.29 | | 1.42 | 24.95 | 303 | 0.40 |
| 100 | 9.46 | 32.29 | | 1.42 | 24.95 | 150 | 9.65 | 32.88 | | 1.50 | 25.38 | 264 | 0.54 |
| 125 | 9.44 | 32.61 | | 1.43 | 25.20 | 200 | | 33.28 | | 1.71 | | | |
| 150 | 9.65 | 32.88 | | 1.50 | 25.38 | | | | | | | | |
| 175 | 9.30 | 33.08 | | 1.69 | 25.59 | | | | | | | | |
| 200 | 8.96 | 33.28 | | 1.71 | 25.80 | | | | | | | | |
| 225 | - | 33.28 | | 1.84 | | | | | | | | | |

188-009 BROWN BEAR; February 20, 1958; 1800 GCT; 48°28'N, 125°08'W; sounding, 153 m; wind, 140°, force 5; weather, intermittent slight rain; sea, moderate; wire angle, 12°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.23 | 32.52 | 6.04 | 0.93 | 25.00 | 0 | 10.23 | 32.52 | 6.04 | 0.93 | 25.00 | 297 | 0.00 |
| 10 | 10.21 | 32.52 | 6.00 | 0.96 | 25.00 | 10 | 10.21 | 32.52 | 6.00 | 0.96 | 25.00 | 296 | 0.03 |
| 20 | 10.21 | 32.51 | 5.98 | 0.94 | 25.00 | 20 | 10.21 | 32.51 | 5.98 | 0.94 | 25.00 | 297 | 0.06 |
| 30 | 10.22 | 32.56 | 5.96 | 0.93 | 25.03 | 30 | 10.22 | 32.56 | 5.96 | 0.93 | 25.03 | 294 | 0.09 |
| 50 | 10.20 | 32.61 | 5.91 | 0.90 | 25.08 | 50 | 10.20 | 32.61 | 5.91 | 0.90 | 25.08 | 290 | 0.15 |
| 74 | 10.16 | 32.63 | 5.89 | 0.90 | 25.10 | 75 | 10.16 | 32.63 | 5.89 | 0.90 | 25.10 | 289 | 0.22 |
| 99 | 10.12 | 32.72 | 5.73 | 0.99 | 25.17 | 100 | 10.12 | 32.72 | 5.72 | 1.00 | 25.17 | 282 | 0.29 |
| 129 | 9.87 | 32.86 | 5.34 | 1.39 | 25.33 | | | | | | | | |

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

188-010

BROWN BEAR; February 21, 1958; 0100 GCT; 48°00'N, 125°22'W; sounding, 630 m; wind, 160°, force 7; weather, overcast; sea, rough; wire angle, 35°, 35°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 10.58 | 32.72 | 6.12 | 0.96 | 25.10 | 0 | 10.58 | 32.72 | 6.12 | 0.96 | 25.10 | 288 | 0.00 |
| 10 | 10.57 | 32.71 | 6.05 | 0.85 | 25.09 | 10 | 10.57 | 32.71 | 6.05 | 0.85 | 25.09 | 288 | 0.03 |
| 19 | 10.56 | 32.72 | 6.05 | 0.80 | 25.10 | 20 | 10.56 | 32.72 | 6.05 | 0.79 | 25.10 | 288 | 0.06 |
| 28 | 10.56 | 32.72 | 6.06 | 0.74 | 25.10 | 30 | 10.56 | 32.72 | 6.06 | 0.74 | 25.10 | 288 | 0.09 |
| 48 | 10.58 | 32.72 | 6.06 | 0.77 | 25.10 | 50 | 10.59 | 32.72 | 6.06 | 0.76 | 25.09 | 289 | 0.14 |
| 72 | 10.57 | 32.74 | 5.94 | 0.77 | 25.11 | 75 | 10.54 | 32.75 | 5.93 | 0.78 | 25.13 | 286 | 0.22 |
| 96 | 10.27 | 32.87 | 5.59 | 0.96 | 25.27 | 100 | 10.22 | 32.93 | 5.41 | 1.03 | 25.32 | 268 | 0.29 |
| 120 | 9.76 | 33.19 | 4.67 | 1.32 | 25.60 | 150 | 8.45 | 33.39 | 4.17 | 1.68 | 25.96 | 208 | 0.40 |
| 144 | 8.68 | 33.37 | 4.16 | 1.60 | 25.91 | 200 | 7.78 | 33.67 | 3.36 | 1.98 | 26.28 | 178 | 0.50 |
| | | | | | | 250 | 7.53 | | | | | | |
| 152b) | 8.38 | 33.40 | 4.17 | 1.71 | 25.98 | 300 | 6.97 | | | | | | |
| | | | | | | 400 | 6.00 | | | | | | |
| 168a) | 7.78 | 33.45 | 4.14 | 1.86 | 26.11 | 500 | 5.21 | | | | | | |
| 236b) | 7.69 | 33.86 | 2.62 | 2.10 | 26.45 | | | | | | | | |
| 414 | 5.88 | 34.03 | 1.27 | 2.46 | 26.82 | | | | | | | | |
| 508 | 5.15 | - | 2.27u | 1.90u | | | | | | | | | |

188-011

BROWN BEAR; February 22, 1958; 0000 GCT; 47°36'N, 126°48'W; sounding, 2450 m; wind, 190°, force 5; weather, overcast; sea, moderate; wire angle, 05°, 06°, 05°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0c) | 9.02 | 31.96 | 6.37u | 0.81 | 24.76 | 0 | 9.02 | 31.96 | | 0.81 | 24.76 | 320 | 0.00 |
| 10 | 9.00 | 31.94 | 4.37u | 0.75 | 24.75 | 10 | 9.00 | 31.94 | | 0.75 | 24.75 | 321 | 0.03 |
| 20 | 9.00 | 31.97 | 2.70u | 0.77 | 24.77 | 20 | 9.00 | 31.97 | | 0.77 | 24.77 | 319 | 0.06 |
| 30 | 8.98 | 32.00 | 4.16u | 0.76 | 24.80 | 30 | 8.98 | 32.00 | | 0.76 | 24.80 | 316 | 0.10 |
| 50 | 8.98 | 32.01 | 4.21u | 0.83 | 24.81 | 50 | 8.98 | 32.01 | | 0.83 | 24.81 | 316 | 0.16 |
| 75 | 8.61 | 32.10 | 6.20u | 0.99 | 24.93 | 75 | 8.61 | 32.10 | | 0.99 | 24.93 | 304 | 0.24 |
| 100 | 7.22 | 32.65 | 3.25u | 1.24 | 25.56 | 100 | 7.22 | 32.65 | | 1.24 | 25.56 | 245 | 0.31 |
| 125 | 7.14 | 32.98 | 1.79u | 1.65 | 25.83 | 150 | 6.98 | 33.26 | | 1.82 | 26.07 | 197 | 0.42 |
| 150 | 6.98 | 33.26 | 1.79u | 1.82 | 26.07 | 200 | 6.69 | 33.61 | 3.51 | 2.05 | 26.39 | 168 | 0.51 |
| 175 | 6.92 | 33.40 | 1.76u | 1.85 | 26.19 | 250 | 6.16 | 33.63 | 2.76 | 2.10 | 26.47 | 160 | 0.59 |
| | | | | | | 300 | 5.76 | 33.65 | 2.13 | 2.16 | 26.54 | 154 | 0.67 |
| 192b) | 6.78 | 33.61 | 3.64 | 2.04 | 26.38 | 400 | 5.30 | 33.69 | 1.24 | 2.25 | 26.63 | 147 | 0.82 |
| 291 | 5.80 | - | 2.22 | 2.15 | | 500 | 4.88 | 33.73 | 0.61 | 2.39 | 26.70 | 140 | 0.96 |
| 491 | 4.92 | 33.73 | 0.65 | 2.37 | 26.70 | 600 | 4.51 | 33.76 | 0.29 | 2.64 | 26.77 | 134 | 1.10 |
| 738 | 4.06 | 33.86 | 0.06 | 2.90 | 26.89 | 700 | 4.18 | 33.82 | 0.10 | 2.84 | 26.85 | 127 | 1.23 |
| | | | | | | 800 | 3.90 | 33.94 | 0.10 | 2.98 | 26.98 | 115 | 1.35 |
| 983a) | 3.45 | 34.16 | 0.24 | 3.16 | 27.20 | 1000 | 3.41 | 34.17 | 0.25 | 3.19 | 27.21 | 94 | 1.56 |
| 1484 | 2.47 | 34.45 | 0.74 | 3.38 | 27.51 | 1200 | 2.97 | 34.30 | 0.44 | 3.40 | 27.35 | 81 | 1.73 |
| 1784 | 2.09 | 34.55 | 1.10 | 2.96 | 27.63 | 1500 | 2.45 | 34.46 | 0.76 | 3.37 | 27.52 | 65 | 1.95 |

a) Second cast.
b) First cast.
c) Third cast.

UW

BB-188

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| **188-012** | BROWN BEAR; February 22, 1958; 0800 GCT; 47°31'N, 127°34'W; sounding, 2615 m; wind, 180°, force 2; weather, partly cloudy; sea, moderate; wire angle, 27°, 18°. | | | | | | | | | | | | |
| 0a) | 9.10 | 32.40 | 6.12 | 0.81 | 25.09 | 0 | 9.10 | 32.40 | 6.12 | 0.81 | 25.09 | 288 | 0.00 |
| 10 | 9.09 | 32.40 | 6.29 | 0.75 | 25.09 | 10 | 9.09 | 32.40 | 6.29 | 0.75 | 25.09 | 288 | 0.03 |
| 20 | 9.08 | 32.37 | 6.26 | 0.77 | 25.07 | 20 | 9.08 | 32.37 | 6.26 | 0.77 | 25.07 | 290 | 0.06 |
| 30 | 9.07 | 32.38 | 6.23 | 0.76 | 25.08 | 30 | 9.07 | 32.38 | 6.23 | 0.76 | 25.08 | 290 | 0.09 |
| 50 | 9.09 | 32.40 | 6.28 | 0.83 | 25.09 | 50 | 9.09 | 32.40 | 6.28 | 0.83 | 25.09 | 289 | 0.14 |
| 75 | 7.75 | 32.64 | 5.95 | 0.99 | 25.48 | 75 | 7.75 | 32.64 | 5.95 | 0.99 | 25.48 | 252 | 0.21 |
| 100 | 7.19 | 32.98 | 5.29 | 1.24 | 25.83 | 100 | 7.19 | 32.98 | 5.29 | 1.24 | 25.83 | 220 | 0.27 |
| 120 | 7.22 | 33.37 | 4.76 | 1.65 | 26.13 | 150 | 7.12 | 33.66 | 3.98 | 1.86 | 26.37 | 169 | 0.37 |
| 142 | 7.09 | 33.62 | 4.21 | 1.82 | 26.34 | 200 | 6.76 | 33.81 | 3.46 | 2.04 | 26.54 | 154 | 0.45 |
| | | | | | | 250 | 6.23 | 33.87 | 3.21 | 2.16 | 26.65 | 143 | 0.52 |
| 164b) | 7.31 | 33.72 | 3.57 | 2.04 | 26.39 | 300 | 5.76 | 33.89 | 2.88 | 2.22 | 26.73 | 136 | 0.59 |
| | | | | | | 400 | 5.05 | 33.97 | 2.11 | 2.42 | 26.88 | 123 | 0.72 |
| 173a) | 6.98 | 33.78 | 2.31u | 1.85 | 26.48 | 500 | 4.63 | 34.09 | 1.17 | 2.72 | 27.02 | 110 | 0.84 |
| | | | | | | 600 | 4.30 | 34.17 | 0.60 | 2.93 | 27.12 | 101 | 0.94 |
| 239b) | 6.34 | 33.87 | 3.28 | 2.15 | 26.64 | 700 | 4.08 | 34.22 | 0.41 | 3.05 | 27.18 | 96 | 1.04 |
| 386 | 5.11 | 33.95 | 2.27 | 2.37 | 26.85 | 800 | 3.85 | 34.27 | 0.27 | 3.15 | 27.24 | 90 | 1.14 |
| 580 | 4.35 | 34.16 | 0.65 | 2.90 | 27.10 | 1000 | 3.35 | 34.37 | 0.18 | 3.39 | 27.37 | 79 | 1.31 |
| 806 | 3.84 | 34.27 | 0.26 | 3.16 | 27.24 | 1200 | 2.94 | 34.45 | 0.23 | 3.39 | 27.47 | 70 | 1.45 |
| 1214 | 2.91 | 34.45 | 0.24 | 3.38 | 27.48 | | | | | | | | |
| 1490 | 2.49 | 34.51 | 0.55 | 2.96 | 27.56 | | | | | | | | |
| **188-013** | BROWN BEAR; February 22, 1958; 1800 GCT; 46°55'N, 127°46'W; sounding, 2670 m; wind, 140°, force 2; weather, fog; sea, slight; wire angle, 12°, 06°. | | | | | | | | | | | | |
| 0a) | 9.10 | 32.40 | 6.36 | 0.90 | 25.09 | 0 | 9.10 | 32.40 | 6.36 | 0.90 | 25.09 | 288 | 0.00 |
| 10 | 9.09 | 32.42 | 6.38 | 0.84 | 25.11 | 10 | 9.09 | 32.42 | 6.38 | 0.84 | 25.11 | 287 | 0.03 |
| 20 | 9.07 | 32.44 | 6.29 | 0.97 | 25.13 | 20 | 9.07 | 32.44 | 6.29 | 0.97 | 25.13 | 285 | 0.06 |
| 30 | 9.04 | 32.41 | 6.38 | 0.88 | 25.11 | 30 | 9.04 | 32.41 | 6.38 | 0.88 | 25.11 | 287 | 0.09 |
| 50 | 9.02 | 32.41 | 6.27 | 0.84 | 25.11 | 50 | 9.02 | 32.41 | 6.27 | 0.84 | 25.11 | 287 | 0.14 |
| 75 | 8.30 | 32.51 | 6.12 | 0.91 | 25.30 | 75 | 8.30 | 32.51 | 6.12 | 0.91 | 25.30 | 269 | 0.21 |
| 100 | 6.44 | 32.91 | 5.80 | 1.23 | 25.87 | 100 | 6.44 | 32.91 | 5.80 | 1.23 | 25.87 | 215 | 0.28 |
| 125 | 6.44 | 33.22 | 5.51 | 1.56 | 26.11 | 150 | 6.74 | 33.52 | 4.85 | 1.74 | 26.31 | 174 | 0.37 |
| 144 | 6.70 | - | 5.05 | - | | 200 | 6.73 | 33.84 | 3.58 | 2.02 | 26.56 | 151 | 0.45 |
| 175 | 7.02 | 33.78 | 3.86 | 1.96 | 26.48 | 250 | 6.31 | 33.89 | 2.81 | 2.23 | 26.66 | 142 | 0.53 |
| | | | | | | 300 | 5.91 | 33.94 | 2.19 | 2.40 | 26.75 | 134 | 0.60 |
| 195b) | 6.70 | 33.86 | 3.81 | 1.94 | 26.58 | 400 | 5.14 | 34.01 | 1.42 | 2.56 | 26.90 | 121 | 0.72 |
| 295 | 5.95 | 33.94 | 2.23 | 2.39 | 26.74 | 500 | 4.58 | 34.08 | 0.87 | 2.69 | 27.02 | 110 | 0.84 |
| 488 | 4.62 | 34.07 | 0.91 | 2.68 | 27.00 | 600 | 4.26 | 34.14 | 0.58 | 2.78 | 27.10 | 103 | 0.95 |
| 738 | 3.90 | 34.24 | 0.32 | 2.89 | 27.21 | 700 | 3.99 | 34.21 | 0.38 | 2.86 | 27.18 | 96 | 1.04 |
| 985 | 3.45 | 34.43 | 0.26 | 3.05 | 27.41 | 800 | 3.79 | 34.29 | 0.29 | 2.95 | 27.27 | 88 | 1.14 |
| 1480 | 2.51 | 34.62 | 0.54 | 2.83 | 27.65 | 1000 | 3.42 | 34.44 | 0.26 | 3.04 | 27.42 | 74 | 1.30 |
| 1768 | 2.13 | 34.54 | 1.03 | 2.89 | 27.61 | 1200 | 3.00 | 34.56 | 0.29 | 2.90 | 27.56 | 62 | 1.44 |
| | | | | | | 1500 | 2.48 | 34.62 | 0.57 | 2.83 | 27.65 | 54 | 1.61 |

a) Second cast.
b) First cast.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

188-014

BROWN BEAR; February 23, 1958; 0400 GCT; 46°57'N, 126°57'W; sounding, 2650 m; wind, 190°, force 2; weather, cloudy; sea, slight; wire angle, 30°, 32°, 08°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 9.50 | 32.44 | 6.40 | 0.70 | 25.06 | 0 | 9.50 | 32.44 | 6.40 | 0.70 | 25.06 | 291 | 0.00 |
| 10 | 9.48 | 32.45 | 6.34 | 0.76 | 25.07 | 10 | 9.48 | 32.45 | 6.34 | 0.76 | 25.07 | 290 | 0.03 |
| 20 | 9.46 | 32.46 | 6.27 | 0.68 | 25.08 | 20 | 9.46 | 32.46 | 6.27 | 0.68 | 25.08 | 289 | 0.06 |
| 30 | 9.44 | 32.47 | 6.20 | 0.65 | 25.09 | 30 | 9.44 | 32.47 | 6.20 | 0.65 | 25.09 | 288 | 0.09 |
| 50 | 9.15 | 32.63 | 5.82 | 0.75 | 25.26 | 50 | 9.15 | 32.63 | 5.82 | 0.75 | 25.26 | 273 | 0.14 |
| 75 | 7.82 | 33.24 | 4.78 | 1.49 | 25.94 | 75 | 7.82 | 33.24 | 4.78 | 1.49 | 25.94 | 208 | 0.20 |
| 100 | 7.83 | 33.51 | 4.02 | 1.52 | 26.15 | 100 | 7.83 | 33.51 | 4.02 | 1.52 | 26.15 | 189 | 0.25 |
| 125 | 7.56 | 33.68 | 3.74 | 1.82 | 26.32 | 150 | 7.65 | 33.80 | 2.90 | 1.98 | 26.40 | 166 | 0.34 |
| 150 | 7.65 | 33.80 | 2.90 | 1.98 | 26.40 | 200 | 7.31 | 33.93 | 2.35 | 2.23 | 26.55 | 152 | 0.42 |
| | | | | | | 250 | 6.93 | 34.00 | 1.86 | 2.40 | 26.66 | 142 | 0.50 |
| 155b) | 7.56 | 33.88 | 2.87 | 2.07 | 26.48 | 300 | 6.55 | 34.05 | 1.45 | 2.52 | 26.75 | 134 | 0.56 |
| | | | | | | 400 | 5.82 | 34.10 | 0.89 | 2.69 | 26.89 | 122 | 0.69 |
| 175a) | 7.61 | 33.86 | 2.65 | 2.09 | 26.46 | 500 | 5.15 | 34.12 | 0.61 | 2.79 | 26.98 | 114 | 0.81 |
| | | | | | | 600 | 4.58 | 34.14 | 0.47 | 2.85 | 27.06 | 107 | 0.92 |
| 234b) | 7.05 | 33.98 | 2.00 | 2.36 | 26.63 | 700 | 4.10 | 34.17 | 0.43 | 2.87 | 27.14 | 100 | 1.02 |
| 377 | 5.99 | 34.10 | 0.97 | 2.66 | 26.86 | 800 | 3.81 | 34.24 | 0.36 | 2.88 | 27.22 | 92 | 1.12 |
| 568 | 4.75 | 34.13 | 0.49 | 2.84 | 27.04 | 1000 | 3.44 | 34.37 | 0.25 | 2.90 | 27.36 | 80 | 1.29 |
| | | | | | | 1200 | 3.10 | 34.45 | 0.29 | 2.93 | 27.46 | 71 | 1.44 |
| 747c) | 3.91 | 34.19 | 0.41 | 2.88 | 27.17 | | | | | | | | |
| 1153 | 3.18 | 34.44 | 0.27 | 2.92 | 27.44 | | | | | | | | |
| 1431 | 2.73 | 34.47 | 0.52 | 2.97 | 27.51 | | | | | | | | |

188-015

BROWN BEAR; February 23, 1958; 1200 GCT; 46°56'N, 126°20'W; sounding, 2560 m; wind, 160°, force 4; weather, fog in patches; sea, slight; wire angle, 12°, 25°, 15°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 9.45 | 32.47 | 6.31 | 0.95 | 25.09 | 0 | 9.45 | 32.47 | 6.31 | 0.95 | 25.09 | 288 | 0.00 |
| 10 | 9.45 | 32.47 | 6.31 | 1.09 | 25.09 | 10 | 9.45 | 32.47 | 6.31 | 1.09 | 25.09 | 288 | 0.03 |
| 20 | 9.46 | 32.41 | 6.35 | 0.84 | 25.04 | 20 | 9.46 | 32.41 | 6.35 | 0.84 | 25.04 | 293 | 0.06 |
| 30 | 9.46 | 32.48 | 6.28 | 0.83 | 25.10 | 30 | 9.46 | 32.48 | 6.28 | 0.83 | 25.10 | 288 | 0.09 |
| 50 | 9.53 | 32.50 | 6.22 | 0.87 | 25.10 | 50 | 9.53 | 32.50 | 6.22 | 0.87 | 25.10 | 288 | 0.14 |
| 75 | 9.97 | 32.79 | 5.75 | 0.98 | 25.25 | 75 | 9.97 | 32.79 | 5.75 | 0.98 | 25.25 | 274 | 0.22 |
| 100 | 8.61 | 33.30 | 4.57 | 1.54 | 25.87 | 100 | 8.61 | 33.30 | 4.57 | 1.54 | 25.87 | 216 | 0.28 |
| 125 | 8.12 | 33.48 | 4.04 | 2.04 | 26.08 | 150 | 7.55 | 33.57 | 4.10 | 2.00 | 26.24 | 181 | 0.38 |
| 150 | 7.55 | 33.57 | 4.10 | 2.00 | 26.24 | 200 | 7.21 | 33.95 | 2.31 | 2.42 | 26.58 | 149 | 0.46 |
| 175 | 7.64 | 33.78 | 3.35 | 2.11 | 26.39 | 250 | 6.82 | 33.97 | 1.92 | 2.55 | 26.65 | 143 | 0.53 |
| | | | | | | 300 | 6.46 | 34.00 | 1.58 | 2.67 | 26.73 | 137 | 0.60 |
| 200b) | 7.21 | 33.95 | 2.31 | 2.42 | 26.58 | 400 | 5.83 | 34.07 | 1.02 | 2.86 | 26.86 | 125 | 0.73 |
| 300 | 6.46 | 34.00 | 1.58 | 2.67 | 26.73 | 500 | 5.27 | 34.11 | 0.63 | 3.01 | 26.96 | 116 | 0.85 |
| 494 | 5.30 | 34.11 | 0.64 | 3.00 | 26.96 | 600 | 4.76 | 34.10 | 0.42 | 3.12 | 27.01 | 112 | 0.97 |
| | | | | | | 700 | 4.32 | 34.14 | 0.29 | 3.21 | 27.09 | 105 | 1.08 |
| 700c) | 4.32 | 34.14 | 0.29 | 3.21 | 27.09 | 800 | 3.99 | 34.25 | 0.25 | 3.26 | 27.21 | 94 | 1.17 |
| 920 | 3.63 | 34.36 | 0.24 | 3.30 | 27.34 | 1000 | 3.45 | 34.39 | 0.27 | 3.31 | 27.38 | 78 | 1.35 |
| 1420 | 2.66 | 34.51 | 0.56 | 3.28 | 27.55 | 1200 | 3.04 | 34.46 | 0.38 | 3.32 | 27.47 | 70 | 1.49 |
| 1710 | 2.27 | 34.54 | 0.88 | 3.15 | 27.60 | 1500 | 2.54 | 34.52 | 0.64 | 3.25 | 27.56 | 62 | 1.69 |

a) Third cast.
b) First cast.
c) Second cast.

UW

BB-188

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 188-016 | BROWN BEAR; February 23, 1958; 1900 GCT; 46°57'N, 125°45'W; sounding, 1884 m; wind, 150°, force 6; weather, intermittent slight rain; sea, moderate; wire angle, 48°, 14°, 13°. | | | | | | | | | | | | |
| 0a) | 9.88 | 32.52 | 4.80 | 1.04 | 25.06 | 0 | 9.88 | 32.52 | 4.80 | 1.04 | 25.06 | 291 | 0.00 |
| 10 | 9.89 | 32.52 | 5.89 | 0.97 | 25.06 | 10 | 9.89 | 32.52 | 5.89 | 0.97 | 25.06 | 291 | 0.03 |
| 20 | 9.88 | 32.47 | 6.24 | 0.92 | 25.02 | 20 | 9.88 | 32.47 | 6.24 | 0.92 | 25.02 | 295 | 0.06 |
| 30 | 9.87 | 32.50 | 6.20 | 0.88 | 25.05 | 30 | 9.87 | 32.50 | 6.20 | 0.88 | 25.05 | 293 | 0.09 |
| 50 | 9.89 | 32.61 | 6.06 | 0.89 | 25.13 | 50 | 9.89 | 32.61 | 6.06 | 0.89 | 25.13 | 286 | 0.14 |
| 75 | 9.88 | 32.65 | 5.92 | 0.90 | 25.16 | 75 | 9.88 | 32.65 | 5.92 | 0.90 | 25.16 | 283 | 0.22 |
| 100 | 9.17 | 33.31 | 4.39 | 1.51 | 25.79 | 100 | 9.17 | 33.31 | 4.39 | 1.51 | 25.79 | 223 | 0.28 |
| | | | | | | 150 | 8.37 | 33.68 | 3.06 | 2.00 | 26.20 | 185 | 0.38 |
| 115b) | 8.68 | 33.51 | 3.82 | 1.76 | 26.02 | 200 | 7.68 | 33.91 | 2.37 | 2.19 | 26.49 | 159 | 0.47 |
| 146 | 8.44 | 33.66 | 3.16 | 1.97 | 26.18 | 250 | 7.21 | 33.94 | 2.01 | 2.28 | 26.58 | 151 | 0.54 |
| 167 | 8.15 | 33.80 | 2.77 | 2.05 | 26.33 | 300 | 6.81 | 33.96 | 1.74 | 2.33 | 26.65 | 144 | 0.62 |
| | | | | | | 400 | 5.97 | 34.04 | 1.24 | 2.46 | 26.82 | 129 | 0.75 |
| 175c) | 8.10 | 33.86 | 2.72 | 2.04 | 26.39 | 500 | 5.20 | 34.12 | 0.77 | 2.73 | 26.98 | 114 | 0.88 |
| 212 | 7.50 | 33.93 | 2.22 | 2.25 | 26.53 | 600 | 4.66 | 34.20 | 0.45 | 2.94 | 27.10 | 103 | 0.99 |
| 340 | 6.49 | 33.98 | 1.53 | 2.38 | 26.71 | 700 | 4.36 | 34.26 | 0.33 | 2.95 | 27.18 | 96 | 1.09 |
| 460 | 5.50 | 34.09 | 0.97 | 2.58 | 26.92 | 800 | 4.09 | 34.31 | 0.26 | 2.97 | 27.25 | 90 | 1.18 |
| 576 | 4.73 | 34.18 | 0.48 | 2.94 | 27.08 | 1000 | 3.58 | 34.42 | 0.18 | 3.05 | 27.39 | 78 | 1.35 |
| 852 | 3.96 | 34.34 | 0.24 | 2.98 | 27.29 | 1200 | (3.03) | (34.38) | (0.00) | (3.06) | (27.41) | (76) | (1.50) |
| 1080 | 3.45 | 34.43 | 0.27 | 3.05 | 27.41 | 1500 | (2.58) | (34.47) | (0.36) | (2.97) | (27.52) | (66) | (1.71) |
| 188-017 | BROWN BEAR; February 24, 1958; 1600 GCT; 47°44'N, 126°05'W; sounding, 1646 m; wind, 180°, force 5; weather, overcast; sea, moderate; wire angle, 07°, 03°. | | | | | | | | | | | | |
| 0c) | 9.56 | 32.36 | 6.19 | 0.79 | 24.99 | 0 | 9.56 | 32.36 | 6.19 | 0.79 | 24.99 | 298 | 0.00 |
| 10 | 9.58 | 32.43 | 6.20 | 0.74 | 25.04 | 10 | 10.68 | 32.65 | 5.98 | 0.74 | 25.02 | 294 | 0.03 |
| 20 | 9.66 | 32.50 | 6.18 | 0.74 | 25.08 | 20 | 10.64 | 32.65 | 6.04 | 0.74 | 25.03 | 294 | 0.06 |
| 30 | 9.67 | 32.50 | 6.19 | 0.74 | 25.08 | 30 | 10.59 | 32.66 | 6.04 | 0.71 | 25.05 | 293 | 0.09 |
| 50 | 9.76 | 32.50 | 6.13 | 0.72 | 25.06 | 50 | 10.62 | 32.68 | 6.00 | 0.75 | 25.06 | 292 | 0.15 |
| 75 | 10.04 | 32.57 | 6.04 | 0.74 | 25.07 | 75 | 10.61 | 32.68 | 6.01 | 0.70 | 25.06 | 292 | 0.22 |
| 100 | 9.58 | 33.15 | 4.86 | 1.22 | 25.60 | 100 | 10.60 | 32.68 | 6.08 | 0.73 | 25.06 | 293 | 0.29 |
| 123 | 7.97 | 33.35 | 4.50 | 1.67 | 26.01 | 150 | 9.44 | 33.16 | 4.69 | 1.39 | 25.63 | 240 | 0.42 |
| 148 | 7.90 | 33.69 | 3.45 | 1.95 | 26.28 | 200 | 8.63 | 33.43 | 3.81 | 1.69 | 25.97 | 208 | 0.54 |
| 172 | 7.53 | 33.77 | 3.19 | 2.00 | 26.40 | 250 | 7.96 | 33.71 | 3.05 | 1.98 | 26.29 | 178 | 0.63 |
| 198d) | 7.38 | 33.87 | 2.65 | 2.14 | 26.50 | | | | | | | | |
| 298 | 6.30 | 33.96 | 1.81 | 2.42 | 26.71 | | | | | | | | |
| 497 | 5.24 | 34.11 | 0.73 | 2.77 | 26.96 | | | | | | | | |
| 746 | 4.06 | 34.22 | 0.20 | 2.84 | 27.18 | | | | | | | | |
| 996 | 3.55 | 34.42 | 0.31 | 3.13 | 27.39 | | | | | | | | |
| 1494 | 2.59 | 34.47 | 0.34 | 2.97 | 27.52 | | | | | | | | |
| 1594 | 2.52 | 34.54 | 0.73 | 2.94 | 27.58 | | | | | | | | |

a) Third cast.
b) Fourth cast.
c) Second cast.
d) First cast.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

188-018

BROWN BEAR; February 25, 1958; 0000 GCT; 47°26'N, 125°27'W; sounding, 1280 m; wind, 140°, force 3; weather, fog in patches; sea, moderate; wire angle, 43°, 42°, 15°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 10.66 | 32.68 | 6.03 | 0.77 | 25.05 | 0 | 10.66 | 32.68 | 6.03 | 0.77 | 25.05 | 292 | 0.00 |
| 10 | 10.66 | 32.70 | 6.06 | 0.78 | 25.07 | 10 | 10.66 | 32.70 | 6.06 | 0.78 | 25.07 | 290 | 0.03 |
| 20 | 10.66 | 32.70 | 6.06 | 0.85 | 25.07 | 20 | 10.66 | 32.70 | 6.06 | 0.85 | 25.07 | 291 | 0.06 |
| 30 | 10.66 | 32.74 | 6.03 | 0.75 | 25.10 | 30 | 10.66 | 32.74 | 6.03 | 0.75 | 25.10 | 288 | 0.09 |
| 50 | 10.69 | 32.75 | 5.94 | 0.76 | 25.10 | 50 | 10.69 | 32.75 | 5.94 | 0.76 | 25.10 | 288 | 0.14 |
| 75 | 10.67 | 32.75 | 5.88 | 0.79 | 25.10 | 75 | 10.67 | 32.75 | 5.88 | 0.79 | 25.10 | 288 | 0.22 |
| 100 | 10.34 | 32.97 | 5.24 | 1.15 | 25.33 | 100 | 10.34 | 32.97 | 5.24 | 1.15 | 25.33 | 267 | 0.29 |
| 111 | 9.46 | 33.42 | 3.85 | 1.69 | 25.83 | 150 | 9.00 | 33.59 | 3.18 | 1.93 | 26.04 | 201 | 0.40 |
| 142 | 8.99 | 33.57 | 3.16 | 1.95 | 26.02 | 200 | 8.79 | 33.66 | 2.86 | 2.07 | 26.12 | 194 | 0.50 |
| | | | | | | 250 | 8.68 | 33.71 | 2.68 | 2.11 | 26.18 | 189 | 0.60 |
| 148b) | 9.07 | 33.58 | 3.26 | 1.90 | 26.02 | 300 | 8.50 | 33.77 | 2.54 | 2.11 | 26.25 | 183 | 0.69 |
| | | | | | | 400 | 7.54 | 33.93 | 1.97 | 2.34 | 26.52 | 158 | 0.86 |
| 172a) | 8.88 | 33.62 | 3.06 | 1.98 | 26.08 | 500 | 6.34 | 34.04 | 1.31 | 2.59 | 26.77 | 135 | 1.01 |
| 222b) | 8.71 | 33.69 | 2.72 | 2.13 | 26.16 | | | | | | | | |
| 360c) | 8.08 | 33.84 | 2.28 | 2.18 | 26.37 | | | | | | | | |
| 494 | 6.34 | 34.05 | 1.30 | 2.61 | 26.78 | | | | | | | | |
| 554 | 5.64 | 34.07 | 0.93 | 2.71 | 26.88 | | | | | | | | |
| 574 | 5.07 | 34.13 | 0.57 | 2.88 | 27.00 | | | | | | | | |

188-019

BROWN BEAR; February 25, 1958; 0600 GCT; 48°11'N, 125°02'W; sounding, 271 m; wind, 100°, force 4; weather, overcast; sea, slight; wire angle, 10°, 12°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0d) | 10.69 | 32.60 | 6.06 | 0.76 | 24.98 | 0 | 10.69 | 32.60 | 6.06 | 0.76 | 24.98 | 298 | 0.00 |
| 10 | 10.68 | 32.65 | 5.98 | 0.74 | 25.02 | 10 | 10.68 | 32.65 | 5.98 | 0.74 | 25.02 | 294 | 0.03 |
| 20 | 10.64 | 32.65 | 6.04 | 0.74 | 25.03 | 20 | 10.64 | 32.65 | 6.04 | 0.74 | 25.03 | 294 | 0.06 |
| 29 | 10.59 | 32.66 | 6.04 | 0.71 | 25.05 | 30 | 10.59 | 32.66 | 6.04 | 0.71 | 25.05 | 293 | 0.09 |
| 49 | 10.62 | 32.68 | 6.00 | 0.75 | 25.06 | 50 | 10.62 | 32.68 | 6.00 | 0.75 | 25.06 | 292 | 0.15 |
| 73 | 10.61 | 32.68 | 6.00 | 0.70 | 25.06 | 75 | 10.61 | 32.68 | 6.01 | 0.70 | 25.06 | 292 | 0.22 |
| 98 | 10.57 | 32.69 | 6.05 | 0.74 | 25.08 | 100 | 10.60 | 32.68 | 6.08 | 0.73 | 25.06 | 293 | 0.29 |
| 122 | 10.53 | 32.72 | 5.96 | 0.82 | 25.11 | 150 | 9.44 | 33.16 | 4.69 | 1.39 | 25.63 | 240 | 0.42 |
| 146 | 9.53 | 33.11 | 4.82 | 1.34 | 25.58 | 200 | 8.63 | 33.43 | 3.81 | 1.69 | 25.97 | 208 | 0.54 |
| 171 | 9.03 | 33.33 | 4.18 | 1.58 | 25.83 | 250 | 7.96 | 33.71 | 3.05 | 1.98 | 26.29 | 178 | 0.63 |
| 190b) | 8.77 | 33.39 | 3.94 | 1.65 | 25.92 | | | | | | | | |
| 258 | 7.85 | 33.77 | 2.92 | 2.04 | 26.35 | | | | | | | | |

188-020

BROWN BEAR; February 25, 1958; 1800 GCT; 48°09'N, 125°50'W; sounding, 1024 m; wind, 280°, force 6; weather, intermittent heavy rain; sea, rough; wire angle, 26°, 15°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0d) | 10.24 | 32.55 | 6.18 | 0.68 | 25.02 | 0 | 10.24 | 32.55 | 6.18 | 0.68 | 25.02 | 294 | 0.00 |
| 10 | 10.23 | 32.57 | 6.13 | 0.77 | 25.04 | 10 | 10.23 | 32.57 | 6.13 | 0.77 | 25.04 | 293 | 0.03 |
| 19 | 10.25 | 32.58 | 6.14 | 0.71 | 25.04 | 20 | 10.24 | 32.57 | 6.14 | 0.71 | 25.04 | 293 | 0.06 |
| 29 | 10.18 | 32.54 | 6.17 | 0.71 | 25.02 | 30 | 10.19 | 32.54 | 6.17 | 0.71 | 25.02 | 295 | 0.09 |
| 48 | 10.28 | 32.57 | 6.15 | 0.71 | 25.03 | 50 | 10.31 | 32.57 | 6.15 | 0.70 | 25.03 | 295 | 0.15 |
| 72 | 10.40 | 32.70 | 5.91 | 0.76 | 25.11 | 75 | 10.39 | 32.74 | 5.83 | 0.79 | 25.14 | 284 | 0.22 |
| 96 | 10.06 | 33.03 | 5.21 | 1.07 | 25.43 | 100 | 9.92 | 33.09 | 5.02 | 1.17 | 25.50 | 251 | 0.28 |
| 120 | 9.21 | 33.31 | 4.36 | 1.55 | 25.78 | 150 | 8.23 | | 4.12 | 1.77 | | | |
| 144 | 8.29 | 33.42 | 4.24 | 1.76 | 26.01 | 200 | 7.79 | | 3.09 | 1.94 | | | |
| 168 | 8.03 | 33.62 | 3.76 | 1.80 | 26.21 | 250 | 7.36 | | 2.24 | 2.16 | | | |
| | | | | | | 300 | 6.93 | | 1.89 | 2.34 | | | |
| 171b) | 8.07 | - | 3.66 | 1.80 | | 400 | 6.14 | | 1.39 | 2.61 | | | |
| 258 | 7.29 | - | 2.13 | 2.19 | | 500 | 5.35 | | 1.00 | 2.73 | | | |
| 437 | 5.86 | - | 1.23 | 2.69 | | 600 | 4.71 | | 0.70 | 2.80 | | | |
| 663 | 4.40 | - | 0.54 | 2.85 | | 700 | 4.25 | | 0.46 | 2.88 | | | |
| 800 | 3.99 | - | 0.29 | 2.99 | | 800 | 3.99 | | 0.29 | 2.99 | | | |

a) Fourth cast.
b) First cast.
c) Third cast.
d) Second cast.

UW

BB-188

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

188-021 BROWN BEAR; February 26, 1958; 0300 GCT; 48°10'N, 126°32'W; sounding, 2463 m; wind, 280°, force 6; weather, partly cloudy; sea, rough; wire angle, 15°, 11°, 08°, 07°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 9.87 | 32.49 | 6.15 | 0.76 | 25.04 | 0 | 9.87 | 32.49 | 6.15 | 0.76 | 25.04 | 293 | 0.00 |
| 10 | 9.83 | 32.49 | 6.20 | 0.81 | 25.04 | 10 | 9.83 | 32.49 | 6.20 | 0.81 | 25.04 | 293 | 0.03 |
| 20 | 9.85 | 32.55 | 6.18 | 0.79 | 25.09 | 20 | 9.85 | 32.55 | 6.18 | 0.79 | 25.09 | 289 | 0.06 |
| | | | | | | 30 | 9.84 | 32.52 | 6.20 | 0.78 | 25.07 | 291 | 0.09 |
| 30b) | 9.84 | 32.52 | 6.20 | 0.78 | 25.07 | 50 | 9.99 | 32.62 | 6.14 | 0.82 | 25.12 | 286 | 0.14 |
| 50 | 9.99 | 32.62 | 6.14 | 0.82 | 25.12 | 75 | 9.65 | 32.87 | 5.25 | 1.17 | 25.37 | 263 | 0.21 |
| 74 | 9.75 | 32.85 | 5.26 | 1.15 | 25.34 | 100 | 8.02 | 33.28 | 4.78 | 1.55 | 25.94 | 209 | 0.27 |
| 99 | 8.03 | 33.27 | 4.80 | 1.54 | 25.93 | 150 | 7.89 | 33.72 | 3.24 | 2.05 | 26.31 | 175 | 0.37 |
| 124 | 7.87 | 33.52 | 4.14 | 1.83 | 26.15 | 200 | 7.36 | 33.87 | 2.71 | 2.19 | 26.50 | 157 | 0.45 |
| 149 | 7.89 | 33.71 | 3.25 | 2.05 | 26.30 | 250 | 6.94 | 33.98 | 2.11 | 2.47 | 26.65 | 144 | 0.53 |
| | | | | | | 300 | 6.53 | 34.05 | 1.62 | 2.67 | 26.76 | 134 | 0.60 |
| 173c) | 7.74 | 33.81 | 2.96 | 2.13 | 26.40 | 400 | 5.71 | 34.08 | 0.99 | 2.81 | 26.88 | 123 | 0.72 |
| 195 | 7.40 | 33.86 | 2.78 | 2.16 | 26.49 | 500 | 5.07 | 34.11 | 0.56 | 2.92 | 26.98 | 114 | 0.84 |
| 293 | 6.59 | 34.05 | 1.67 | 2.66 | 26.75 | 600 | 4.68 | 34.16 | 0.37 | 3.02 | 27.07 | 106 | 0.95 |
| 489 | 5.12 | 34.11 | 0.59 | 2.91 | 26.98 | 700 | 4.32 | 34.22 | 0.24 | 3.10 | 27.15 | 99 | 1.06 |
| 735 | 4.21 | 34.24 | 0.21 | 3.12 | 27.18 | 800 | 4.02 | 34.29 | 0.21 | 3.15 | 27.24 | 91 | 1.15 |
| 978 | 3.56 | 34.41 | 0.25 | 3.20 | 27.38 | 1000 | 3.51 | 34.42 | 0.26 | 3.19 | 27.40 | 77 | 1.32 |
| 1477 | 2.61 | 34.52 | 0.66 | 3.02 | 27.56 | 1200 | 3.10 | 34.47 | 0.40 | 3.11 | 27.48 | 70 | 1.47 |
| | | | | | | 1500 | 2.57 | 34.52 | 0.69 | 3.01 | 27.56 | 62 | 1.66 |
| 1775d) | 2.19 | 34.55 | 1.03 | 2.95 | 27.62 | | | | | | | | |

188-022 BROWN BEAR; February 26, 1958; 1600 GCT; 48°10'N, 127°17'W; sounding, 2560 m; wind, 260°, force 7; weather, partly cloudy; sea, moderate; wire angle, 10°, 12°, 04°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 8.82 | 32.34 | 6.29 | 0.72 | 25.09 | 0 | 8.82 | 32.34 | 6.29 | 0.72 | 25.09 | 288 | 0.00 |
| 10 | 8.82 | 32.37 | 6.32 | 0.71 | 25.11 | 10 | 8.82 | 32.37 | 6.32 | 0.71 | 25.11 | 286 | 0.03 |
| 20 | 8.82 | 32.35 | 6.29 | 0.75 | 25.10 | 20 | 8.82 | 32.35 | 6.29 | 0.75 | 25.10 | 288 | 0.06 |
| 30 | 8.82 | 32.36 | 6.25 | 0.70 | 25.10 | 30 | 8.82 | 32.36 | 6.25 | 0.70 | 25.10 | 287 | 0.09 |
| 50 | 8.84 | 32.34 | 6.31 | 0.72 | 25.08 | 50 | 8.84 | 32.34 | 6.31 | 0.72 | 25.08 | 290 | 0.14 |
| 75 | 7.61 | 33.05 | 5.12 | 1.32 | 25.82 | 75 | 7.61 | 33.05 | 5.12 | 1.32 | 25.82 | 220 | 0.21 |
| 100 | 7.37 | 33.40 | 4.36 | 1.64 | 26.13 | 100 | 7.37 | 33.40 | 4.36 | 1.64 | 26.13 | 191 | 0.26 |
| 125 | 7.37 | 33.59 | 3.81 | 1.88 | 26.28 | 150 | 7.32 | 33.85 | 2.91 | 2.12 | 26.49 | 157 | 0.35 |
| 150 | 7.32 | 33.85 | 2.91 | 2.12 | 26.49 | 200 | 6.96 | 33.93 | 2.30 | 2.27 | 26.60 | 147 | 0.42 |
| 175 | 7.22 | 33.87 | 2.41 | 2.23 | 26.52 | 250 | 6.41 | 33.95 | 2.01 | 2.40 | 26.69 | 139 | 0.50 |
| | | | | | | 300 | 5.97 | 33.98 | 1.72 | 2.52 | 26.77 | 132 | 0.56 |
| 194c) | 7.03 | 33.93 | 2.33 | 2.25 | 26.59 | 400 | 5.41 | 34.05 | 1.14 | 2.70 | 26.90 | 121 | 0.69 |
| | | | | | | 500 | 4.95 | 34.13 | 0.71 | 2.82 | 27.01 | 111 | 0.81 |
| 291d) | 6.03 | 33.97 | 1.78 | 2.50 | 26.76 | 600 | 4.61 | 34.21 | 0.42 | 2.87 | 27.12 | 102 | 0.91 |
| | | | | | | 700 | 4.29 | 34.28 | 0.24 | 2.93 | 27.21 | 94 | 1.01 |
| 482c) | 5.02 | 34.11 | 0.77 | 2.81 | 26.99 | 800 | 4.01 | 34.33 | 0.22 | 3.02 | 27.27 | 88 | 1.10 |
| 723 | 4.22 | 34.29 | 0.21 | 2.95 | 27.22 | 1000 | 3.51 | 34.39 | 0.21 | 3.12 | 27.37 | 79 | 1.27 |
| 968 | 3.59 | 34.40 | 0.24 | 3.13 | 27.37 | 1200 | 3.03 | 34.35 | 0.15 | 3.08 | 27.39 | 78 | 1.42 |
| 1465 | 2.52 | 34.40 | 0.39 | 3.00 | 27.47 | 1500 | 2.46 | 34.41 | 0.45 | 2.99 | 27.48 | 69 | 1.64 |
| 1763d) | 2.11 | 34.59 | 1.08 | 2.90 | 27.66 | | | | | | | | |

a) Third cast.
b) Fourth cast.
c) First cast.
d) Second cast.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

BROWN BEAR; February 26, 1958; 2300 GCT; 48°11'N, 128°00'W; sounding, 2401 m; wind, 260°, force 5; weather, partly cloudy; sea, slight; wire angle, 20°, 08°. 188-023

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 9.02 | 32.45 | 6.40 | 0.82 | 25.14 | 0 | 9.02 | 32.45 | 6.40 | 0.82 | 25.14 | 283 | 0.00 |
| 10 | 9.00 | 32.42 | 6.41 | 0.79 | 25.12 | 10 | 9.00 | 32.42 | 6.41 | 0.79 | 25.12 | 285 | 0.03 |
| 20 | 9.01 | 32.45 | 6.36 | 0.83 | 25.14 | 20 | 9.01 | 32.45 | 6.36 | 0.83 | 25.14 | 283 | 0.06 |
| 30 | 8.98 | 32.41 | 6.31 | 0.79 | 25.12 | 30 | 8.98 | 32.41 | 6.31 | 0.79 | 25.12 | 286 | 0.08 |
| 50 | 8.98 | 32.45 | 6.29 | 0.82 | 25.15 | 50 | 8.98 | 32.45 | 6.29 | 0.82 | 25.15 | 283 | 0.14 |
| 75 | 7.27 | 33.00 | 5.40 | 1.35 | 25.83 | 75 | 7.27 | 33.00 | 5.40 | 1.35 | 25.83 | 219 | 0.20 |
| 100 | 7.20 | 33.22 | 4.76 | 1.57 | 26.01 | 100 | 7.20 | 33.22 | 4.76 | 1.57 | 26.01 | 202 | 0.26 |
| 124 | 7.78 | 33.74 | 3.04 | 2.03 | 26.34 | 150 | 7.60 | 33.79 | 2.84 | 2.08 | 26.40 | 166 | 0.35 |
| 149 | 7.60 | 33.79 | 2.86 | 2.08 | 26.40 | 200 | 7.26 | 33.86 | 2.19 | 2.28 | 26.51 | 156 | 0.43 |
| 173 | 7.48 | 33.79 | 2.48 | 2.17 | 26.42 | 250 | 6.78 | 33.92 | 1.86 | 2.41 | 26.62 | 146 | 0.51 |
| | | | | | | 300 | 6.36 | 33.99 | 1.56 | 2.54 | 26.73 | 136 | 0.58 |
| 188b) | 7.44 | 33.88 | 2.17 | 2.26 | 26.50 | 400 | 5.62 | 34.11 | 1.07 | 2.78 | 26.92 | 119 | 0.70 |
| 281 | 6.51 | 33.96 | 1.67 | 2.49 | 26.69 | 500 | 5.03 | 34.16 | 0.69 | 2.89 | 27.03 | 110 | 0.82 |
| 466 | 5.21 | 34.16 | 0.80 | 2.88 | 27.01 | 600 | 4.56 | 34.17 | 0.43 | 2.91 | 27.09 | 104 | 0.93 |
| 693 | 4.22 | 34.20 | 0.27 | 2.95 | 27.15 | 700 | 4.20 | 34.21 | 0.27 | 2.96 | 27.16 | 98 | 1.03 |
| 928 | 3.73 | 34.38 | 0.25 | 3.11 | 27.34 | 800 | 3.99 | 34.29 | 0.25 | 3.04 | 27.24 | 90 | 1.12 |
| 1411 | 2.81 | 34.51 | 0.48 | 2.96 | 27.53 | 1000 | 3.58 | 34.40 | 0.24 | 3.08 | 27.37 | 79 | 1.29 |
| 1708 | 2.31 | 34.56 | 0.96 | 2.94 | 27.62 | 1200 | 3.20 | 34.46 | 0.30 | 3.01 | 27.46 | 72 | 1.44 |
| | | | | | | 1500 | 2.65 | 34.53 | 0.60 | 2.95 | 27.56 | 62 | 1.64 |

BROWN BEAR; February 27, 1958; 0500 GCT; 48°34'N, 127°57'W; sounding, 2523 m; wind, 260°, force 2; weather, partly cloudy; sea, slight; wire angle, 30°, 04°, 07°. 188-024

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 8.89 | 32.40 | 6.28 | 0.82 | 25.12 | 0 | 8.89 | 32.40 | 6.28 | 0.82 | 25.12 | 285 | 0.00 |
| 10 | 8.88 | 32.41 | 6.26 | 0.80 | 25.13 | 10 | 8.88 | 32.41 | 6.26 | 0.80 | 25.13 | 284 | 0.03 |
| | | | | | | 20 | 8.90 | 32.39 | 6.28 | 0.84 | 25.11 | 286 | 0.06 |
| 20c) | 8.90 | 32.39 | 6.28 | 0.84 | 25.11 | 30 | 8.89 | 32.42 | 6.27 | 0.80 | 25.14 | 284 | 0.09 |
| 30 | 8.89 | 32.42 | 6.27 | 0.80 | 25.14 | 50 | 8.92 | 32.43 | 6.28 | 0.78 | 25.14 | 284 | 0.14 |
| 50 | 8.92 | 32.43 | 6.28 | 0.78 | 25.14 | 75 | 8.61 | 32.89 | 5.19 | 1.19 | 25.55 | 246 | 0.21 |
| 75 | 8.61 | 32.89 | 5.19 | 1.19 | 25.55 | 100 | 8.09 | 33.50 | 3.57 | 1.79 | 26.10 | 193 | 0.26 |
| 100 | 8.09 | 33.50 | 3.57 | 1.79 | 26.10 | 150 | 7.74 | 33.84 | 2.16 | 2.32 | 26.42 | 164 | 0.35 |
| 124 | 7.92 | 33.73 | 2.62 | 2.18 | 26.31 | 200 | 7.46 | 33.88 | 1.83 | 2.40 | 26.49 | 158 | 0.43 |
| 149 | 7.74 | 33.84 | 2.17 | 2.32 | 26.42 | 250 | 7.14 | 33.90 | 1.86 | 2.36 | 26.55 | 153 | 0.51 |
| | | | | | | 300 | 6.71 | 33.95 | 1.69 | 2.48 | 26.65 | 144 | 0.58 |
| 166b) | 7.67 | 33.87 | 1.93 | 2.41 | 26.46 | 400 | 5.94 | 34.03 | 1.32 | 2.65 | 26.82 | 129 | 0.72 |
| | | | | | | 500 | 5.26 | 34.11 | 0.83 | 2.74 | 26.96 | 116 | 0.84 |
| 174c) | 7.60 | 33.78u | 1.75 | 2.46 | 26.40 | 600 | 4.73 | 34.19 | 0.51 | 2.85 | 27.09 | 105 | 0.96 |
| | | | | | | 700 | 4.37 | 34.25 | 0.38 | 3.00 | 27.17 | 97 | 1.06 |
| 245b) | 7.18 | 33.90 | 1.88 | 2.35 | 26.55 | 800 | 4.10 | 34.30 | 0.30 | 3.11 | 27.24 | 91 | 1.15 |
| 396 | 5.97 | 34.03 | 1.34 | 2.65 | 26.81 | 1000 | 4.36 | 34.40 | 0.29 | 3.04 | 27.29 | 89 | 1.33 |
| 590 | 4.77 | 34.18 | 0.52 | 2.83 | 27.07 | 1200 | 4.11 | 34.46 | 0.37 | 2.99 | 27.37 | 83 | 1.50 |
| 813 | 4.07 | 34.31 | 0.29 | 3.12 | 27.25 | 1500 | 2.65 | 34.49 | 0.63 | 2.99 | 27.53 | 65 | 1.72 |
| 1261 | 3.92 | 34.47 | 0.41 | 2.98 | 27.39 | | | | | | | | |
| 1530 | 2.43 | 34.49 | 0.67 | 2.99 | 27.55 | | | | | | | | |

a) Second cast.
b) First cast.
c) Third cast.

UW

BB-188

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| **188-025** | BROWN BEAR; February 27, 1958; 1200 GCT; 49°01'N, 127°58'W; sounding, 2468 m; wind, 270°, force 1; weather, partly cloudy; sea, slight; wire angle, 10°, 05°. | | | | | | | | | | | | |
| 0a) | 8.32 | 32.36 | 6.31 | 0.92 | 25.18 | 0 | 8.32 | 32.36 | 6.31 | 0.92 | 25.18 | 280 | 0.00 |
| 10 | 8.32 | 32.34 | 6.34 | 0.91 | 25.16 | 10 | 8.32 | 32.34 | 6.34 | 0.91 | 25.16 | 281 | 0.03 |
| 20 | 8.33 | 32.34 | 6.33 | 0.90 | 25.16 | 20 | 8.33 | 32.34 | 6.33 | 0.90 | 25.16 | 282 | 0.06 |
| 30 | 8.33 | 32.36 | 6.33 | 0.96 | 25.18 | 30 | 8.33 | 32.36 | 6.33 | 0.96 | 25.18 | 280 | 0.08 |
| 50 | 8.36 | 32.32 | 6.34 | 0.91 | 25.14 | 50 | 8.36 | 32.32 | 6.34 | 0.91 | 25.14 | 284 | 0.14 |
| 75 | 7.56 | 32.57 | 6.03 | 1.12 | 25.45 | 75 | 7.56 | 32.57 | 6.03 | 1.12 | 25.45 | 255 | 0.21 |
| 100 | 6.60 | 33.15 | 5.23 | 1.43 | 26.04 | 100 | 6.60 | 33.15 | 5.23 | 1.43 | 26.04 | 199 | 0.26 |
| 123 | 6.72 | 33.49 | 4.35 | 1.80 | 26.29 | 150 | 6.78 | 33.70 | 3.69 | 1.92 | 26.45 | 161 | 0.35 |
| 146 | 6.75 | 33.66 | 3.83 | 1.91 | 26.42 | 200 | 6.32 | 33.93 | 2.46 | 2.31 | 26.69 | 139 | 0.43 |
| 169 | 6.79 | 33.86 | - | 2.01 | 26.57 | 250 | 5.76 | 33.96 | 2.14 | 2.42 | 26.78 | 130 | 0.50 |
| | | | | | | 300 | 5.37 | 33.98 | 1.82 | 2.52 | 26.85 | 125 | 0.56 |
| 194b) | 6.40 | 33.93 | 2.50 | 2.30 | 26.68 | 400 | 5.10 | 34.04 | 1.18 | 2.69 | 26.93 | 118 | 0.68 |
| 292 | 5.39 | 33.98 | 1.88 | 2.50 | 26.84 | 500 | 4.80 | 34.10 | 0.70 | 2.82 | 27.01 | 111 | 0.80 |
| 487 | 4.85 | 34.09 | 0.75 | 2.81 | 26.99 | 600 | 4.47 | 34.18 | 0.39 | 2.89 | 27.11 | 102 | 0.90 |
| 732 | 4.06 | 34.27 | 0.15 | 2.97 | 27.22 | 700 | 4.16 | 34.25 | 0.19 | 2.95 | 27.20 | 95 | 1.00 |
| 978 | 3.41 | 34.36 | 0.25 | 3.09 | 27.36 | 800 | 3.87 | 34.30 | 0.17 | 3.02 | 27.26 | 88 | 1.09 |
| 1470 | 2.48 | 34.49 | 0.54 | 2.95 | 27.55 | 1000 | 3.36 | 34.37 | 0.25 | 3.08 | 27.37 | 79 | 1.26 |
| 1766 | 2.10 | 34.58 | 1.01 | 2.92 | 27.65 | 1200 | 2.94 | 34.42 | 0.30 | 3.01 | 27.45 | 72 | 1.41 |
| | | | | | | 1500 | 2.44 | 34.50 | 0.58 | 2.95 | 27.56 | 62 | 1.61 |
| **188-026** | BROWN BEAR; February 27, 1958; 1900 GCT; 48°52'N, 127°16'W; sounding, 2057 m; wind, 320°, force 1; weather, partly cloudy; sea, smooth; wire angle, 13°, 03°. | | | | | | | | | | | | |
| 0a) | 9.14 | 32.39 | 6.23 | 0.73 | 25.08 | 0 | 9.14 | 32.39 | 6.23 | 0.73 | 25.08 | 289 | 0.00 |
| 10 | 9.11 | 32.34 | 6.20 | 0.70 | 25.04 | 10 | 9.11 | 32.34 | 6.20 | 0.70 | 25.04 | 293 | 0.03 |
| 20 | 9.11 | 32.36 | 6.22 | 0.70 | 25.06 | 20 | 9.11 | 32.36 | 6.22 | 0.70 | 25.06 | 292 | 0.06 |
| 30 | 9.10 | 32.38 | 6.15 | 0.67 | 25.08 | 30 | 9.10 | 32.38 | 6.15 | 0.67 | 25.08 | 290 | 0.09 |
| 50 | 9.17 | 32.38 | 6.16 | 0.67 | 25.06 | 50 | 9.17 | 32.38 | 6.16 | 0.67 | 25.06 | 291 | 0.14 |
| 75 | 8.81 | 32.57 | 5.85 | 0.80 | 25.27 | 75 | 8.81 | 32.57 | 5.85 | 0.80 | 25.27 | 272 | 0.22 |
| 100 | 8.02 | 33.22 | 4.84 | 1.30u | 25.90 | 100 | 8.02 | 33.22 | 4.84 | | 25.90 | 213 | 0.28 |
| 123 | 8.20 | 33.49 | 3.73 | 1.05u | 26.08 | 150 | 7.98 | 33.70 | 2.81 | 1.98 | 26.28 | 178 | 0.37 |
| 146 | 8.03 | 33.69 | 2.87 | 1.95 | 26.26 | 200 | 7.44 | 33.94 | 2.29 | 2.17 | 26.54 | 153 | 0.46 |
| 170 | 7.75 | 33.78 | 2.55 | 2.09 | 26.37 | 250 | 7.13 | 34.00 | 1.97 | 2.29 | 26.63 | 145 | 0.53 |
| | | | | | | 300 | 6.78 | 34.04 | 1.68 | 2.42 | 26.71 | 138 | 0.60 |
| 194b) | 7.47 | 33.93 | 2.33 | 2.15 | 26.53 | 400 | 5.93 | 34.02 | 1.20 | 2.67 | 26.81 | 130 | 0.74 |
| 292 | 6.85 | 34.04 | 1.72 | 2.39 | 26.70 | 500 | 5.20 | 34.05 | 0.82 | 2.80 | 26.92 | 120 | 0.86 |
| 490 | 5.27 | 34.04 | 0.85 | 2.81 | 26.91 | 600 | 4.59 | 34.14 | 0.53 | 2.73 | 27.06 | 107 | 0.98 |
| 736 | 3.98 | 34.25 | 0.28 | 2.73 | 27.21 | 700 | 4.12 | 34.22 | 0.33 | 2.72 | 27.18 | 96 | 1.08 |
| 982 | 3.51 | 34.38 | 0.25 | 3.03 | 27.36 | 800 | 3.86 | 34.29 | 0.27 | 2.83 | 27.26 | 89 | 1.17 |
| 1476 | 2.55 | 34.34 | 0.18 | 2.94 | 27.42 | 1000 | 3.47 | 34.37 | 0.22 | 3.03 | 27.36 | 80 | 1.34 |
| 1773 | 2.17 | 34.52 | 1.02 | 2.87 | 27.60 | 1200 | 3.04 | 34.31 | 0.22 | 2.99 | 27.35 | 81 | 1.50 |
| | | | | | | 1500 | 2.51 | 34.35 | 0.22 | 2.93 | 27.43 | 74 | 1.73 |
| **188-027** | BROWN BEAR; February 28, 1958; 0100 GCT; 48°44'N, 126°34'W; sounding, 602 m; wind, 290°, force 1; weather, partly cloudy; sea, smooth; wire angle, 05°, 05°. | | | | | | | | | | | | |
| 0a) | 9.60 | 32.43 | 6.20 | 0.73 | 25.03 | 0 | 9.60 | 32.43 | 6.20 | 0.73 | 25.03 | 293 | 0.00 |
| 10 | 9.39 | 32.39 | 6.28 | 0.73 | 25.04 | 10 | 9.39 | 32.39 | 6.28 | 0.73 | 25.04 | 293 | 0.03 |
| 20 | 9.43 | 32.41 | 6.26 | 0.71 | 25.05 | 20 | 9.43 | 32.41 | 6.26 | 0.71 | 25.05 | 293 | 0.06 |
| 30 | 9.39 | 32.41 | 6.23 | 0.74 | 25.05 | 30 | 9.39 | 32.41 | 6.23 | 0.74 | 25.05 | 292 | 0.09 |
| 50 | 9.48 | 32.41 | 6.23 | 0.76 | 25.04 | 50 | 9.48 | 32.41 | 6.23 | 0.76 | 25.04 | 294 | 0.15 |
| 75 | 9.78 | 32.86 | 5.52 | 1.00 | 25.34 | 75 | 9.78 | 32.86 | 5.52 | 1.00 | 25.34 | 266 | 0.22 |
| 100 | 8.51 | 33.21 | 4.67 | 1.47 | 25.81 | 100 | 8.51 | 33.21 | 4.67 | 1.47 | 25.81 | 221 | 0.28 |
| 123 | 7.71 | 33.30 | 4.66 | 1.64 | 26.00 | 150 | 7.18 | 33.49 | 4.39 | 1.79 | 26.23 | 182 | 0.38 |
| 147 | 7.13 | 33.46 | 4.49 | 1.77 | 26.21 | 200 | 7.31 | | 3.25 | 2.04 | | | |
| 173 | 7.38 | 33.64 | 3.75 | 1.91 | 26.32 | 250 | 7.12 | | 2.33 | 2.28 | | | |
| | | | | | | 300 | 6.87 | | 1.63 | 2.48 | | | |
| 196b) | 7.32 | 33.70 | 3.33 | 2.02 | 26.37 | 400 | 6.21 | | 0.90 | 2.73 | | | |
| 295 | 6.90 | 34.02 | 1.69 | 2.46 | 26.68 | | | | | | | | |
| 494 | 5.38 | 33.95u | 1.01 | 2.81 | 26.82 | | | | | | | | |

a) Second cast.
b) First cast.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

188-028

BROWN BEAR; February 28, 1958; 0400 GCT; 48°39'N, 125°51'W; sounding, 71 m; wind, 320°, force 3; weather, partly cloudy; sea, smooth; wire angle, 05°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.18 | 29.23 | 6.46 | 0.72 | 22.45 | 0 | 10.18 | 29.23 | 6.46 | 0.72 | 22.45 | 540 | 0.00 |
| 10 | 10.10 | 32.03 | 6.19 | 0.85 | 24.64 | 10 | 10.10 | 32.03 | 6.19 | 0.85 | 24.64 | 331 | 0.04 |
| 20 | 10.04 | 32.36 | 6.14 | 0.85 | 24.91 | 20 | 10.04 | 32.36 | 6.14 | 0.85 | 24.91 | 306 | 0.08 |
| 30 | 10.09 | 32.47 | 5.97 | 0.88 | 24.99 | 30 | 10.09 | 32.47 | 5.97 | 0.88 | 24.99 | 299 | 0.11 |
| 50 | 10.16 | 32.56 | 5.95 | 0.90 | 25.04 | 50 | 10.16 | 32.56 | 5.95 | 0.90 | 25.04 | 294 | 0.16 |
| 60 | 10.29 | 32.59 | 5.99 | 0.84 | 25.05 | | | | | | | | |

188-029

BROWN BEAR; February 28, 1958; 0900 GCT; 48°28'N, 125°07'W; sounding, 162 m; wind, calm; weather, missing; sea, smooth; wire angle, 10°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.03 | 28.04 | 6.45 | 0.78 | 21.55 | 0 | 10.03 | 28.04 | 6.45 | 0.78 | 21.55 | 626 | 0.00 |
| 10 | 10.63 | 32.59 | 6.07 | 0.83 | 24.99 | 10 | 10.63 | 32.59 | 6.07 | 0.83 | 24.99 | 298 | 0.05 |
| 20 | 10.58 | 32.74 | 6.00 | 0.84 | 25.11 | 20 | 10.58 | 32.74 | 6.00 | 0.84 | 25.11 | 286 | 0.08 |
| 30 | 10.56 | 32.79 | 6.04 | 0.81 | 25.15 | 30 | 10.56 | 32.79 | 6.04 | 0.81 | 25.15 | 283 | 0.10 |
| 50 | 10.56 | 32.86 | 6.06 | 0.83 | 25.21 | 50 | 10.56 | 32.86 | 6.06 | 0.83 | 25.21 | 278 | 0.16 |
| 75 | - | 32.85 | - | 0.81 | | 75 | 10.53 | 32.85 | 6.10 | 0.81 | 25.21 | 279 | 0.23 |
| 100 | 10.41 | 32.85 | 6.00 | 0.83 | 25.23 | 100 | 10.41 | 32.85 | 6.00 | 0.83 | 25.23 | 277 | 0.30 |
| 130 | 10.16 | 32.99 | 5.68 | 1.00 | 25.38 | | | | | | | | |

| OBSERVED | | | | COMPUTED | INTERPOLATED | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $\sigma_t$ | Z | T | S | $O_2$ | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | g/L | m | °C | ‰ | ml/L | g/L | cl/ton | dyn m |

BROWN BEAR; April 16, 1958; 2100 GCT;[a] 48°09'N, 125°48'W; sounding, 1097 m; wind, 160°, force 4; weather, cloudy; sea, moderate; wire angle, 08°, 12°. 193-001

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0b) | 9.55 | 32.56 | 6.47 | 25.14 | 0 | 9.55 | 32.56 | 6.47 | 25.14 | 283 | 0.00 |
| 10 | 9.32 | 32.39 | 6.46 | 25.05 | 10 | 9.32 | 32.39 | 6.46 | 25.05 | 292 | 0.03 |
| 19 | 9.34 | 32.33 | 6.50 | 25.00 | 20 | 9.33 | 32.33 | 6.50 | 25.00 | 297 | 0.06 |
| 28 | 9.30 | 32.36 | 6.51 | 25.03 | 30 | 9.30 | 32.36 | 6.52 | 25.03 | 294 | 0.09 |
| 48 | 9.26 | 32.37 | 6.51 | 25.04 | 50 | 9.28 | 32.35 | 6.52 | 25.02 | 295 | 0.15 |
| 72 | 8.95 | 32.38 | 6.33 | 25.10 | 75 | 8.66 | 32.47 | 6.19 | 25.21 | 278 | 0.22 |
| 97 | 7.28 | 32.99 | 5.32 | 25.82 | 100 | 7.26 | 33.01 | 5.28 | 25.84 | 218 | 0.28 |
| 121 | 7.31 | 33.25 | 4.65 | 26.02 | 150 | 7.72 | 33.71 | 3.11 | 26.32 | 173 | 0.38 |
| 145 | 7.78 | 33.68 | 3.21 | 26.29 | 200 | 7.14 | 33.84 | 2.52 | 26.51 | 156 | 0.46 |
| 169 | 7.50 | 33.79 | 2.82 | 26.42 | 250 | 6.71 | 33.90 | 2.03 | 26.61 | 147 | 0.54 |
| 192 | 7.21 | 33.86 | 2.51 | 26.51 | 300 | 6.27 | 33.96 | 1.84 | 26.72 | 137 | 0.61 |
| | | | | | 400 | 5.28 | 33.98 | 1.53 | 26.86 | 125 | 0.74 |
| 195c) | 7.19 | 33.83 | 2.68 | 26.49 | 500 | 4.85 | 34.06 | 0.89 | 26.97 | 115 | 0.86 |
| 245 | 6.74 | 33.89 | 2.06 | 26.60 | 600 | 4.43 | 34.17 | 0.49 | 27.10 | 103 | 0.97 |
| 293 | 6.37 | 33.96 | 1.84 | 26.71 | 700 | 4.08 | 34.24 | 0.30 | 27.20 | 94 | 1.07 |
| 391 | 5.32 | 33.98 | 1.60 | 26.85 | 800 | 3.77 | 34.33 | 0.30 | 27.30 | 85 | 1.16 |
| 487 | 4.91 | 34.04 | 0.96 | 26.95 | | | | | | | |
| 581 | 4.50 | 34.16 | 0.55 | 27.09 | | | | | | | |
| 676 | - | 34.21 | 0.32 | | | | | | | | |
| 776 | 3.84 | 34.31 | 0.29 | 27.28 | | | | | | | |
| 974 | 3.35 | 34.40 | 0.53 | 27.40 | | | | | | | |

BROWN BEAR; April 17, 1958; 0400 GCT; 48°11'N, 125°54'W; sounding, 732 m; wind, 140°, force 7; weather, overcast, precipitation within sight; sea, moderate; wire angle, 12°. 193-002

| | | | | |
|---|---|---|---|---|
| 88 | 8.88 | 32.85 | 5.35 | 25.48 |
| 99 | 8.05 | 32.88 | 5.47 | 25.63 |
| 112 | 8.20 | 33.33 | 4.39 | 25.96 |
| 118 | 8.24 | 33.43 | 4.42 | 26.03 |

a) Times reported are those of the messenger release of the shallow cast to the nearest hour (when half way between, to the nearest even hour). Wire angles are given in the numerical order of casts.
b) Third cast.
c) First cast.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 2, 1958; 0900 GCT;[a] 48°42'N, 127°43'W; sounding, 2542 m; wind, 340°, force 4; weather, partly cloudy; sea, smooth. | | | | | | | | | | | | | | | | |
| 0b) | 14.88 | 31.97 | 5.94 | 0.33 | 0 | 8.07 | 2.20 | 23.69 | 0 | 14.88 | 31.97 | 5.94 | 0.33 | 23.69 | 422 | 0.00 |
| 10 | 14.88 | 31.96 | 6.00 | 0.56 | 0 | 8.05 | 2.14 | 23.68 | 10 | 14.88 | 31.96 | 6.00 | 0.56 | 23.68 | 423 | 0.04 |
| 20 | 12.59 | 32.04 | 6.36 | 0.61 | 0 | 8.03 | 2.17 | 24.20 | 20 | 12.59 | 32.04 | 6.36 | 0.61 | 24.20 | 373 | 0.08 |
| 30 | 10.14 | 32.23 | 6.21 | 0.87 | 0 | 8.00 | 2.19 | 24.79 | 30 | 10.14 | 32.23 | 6.21 | 0.87 | 24.79 | 317 | 0.12 |
| 50 | - | 32.46 | 6.37 | 1.09 | 3 | 8.04 | 2.19 | | 50 | 9.35 | 32.46 | 6.37 | 1.09 | 25.10 | 288 | 0.18 |
| 75 | 8.36 | 32.76 | 5.29 | 1.42 | 12 | 7.96 | 2.23 | 25.49 | 75 | 8.36 | 32.76 | 5.29 | 1.42 | 25.49 | 252 | 0.24 |
| 101 | 7.57 | 33.14 | 4.85 | 1.87 | 22 | 7.87 | 2.24 | 25.90 | 100 | 7.59 | 33.13 | 4.87 | 1.86 | 25.89 | 214 | 0.30 |
| 126 | 7.18 | 33.41 | 4.32 | 1.87 | 26 | 7.82 | 2.26 | 26.16 | 150 | 7.00 | 33.60 | 3.86 | 2.17 | 26.34 | 172 | 0.40 |
| 151 | 7.00 | 33.61 | 3.84 | 2.18 | 29 | 7.78 | 2.28 | 26.35 | 200 | 6.75 | 33.90 | 2.70 | 2.25 | 26.61 | 147 | 0.48 |
| 176 | 6.94 | 33.81 | - | 2.29 | 39 | 7.70 | 2.28 | 26.51 | 250 | 6.34 | 33.98 | 2.22 | 2.70 | 26.73 | 136 | 0.55 |
| 202 | 6.73 | 33.91 | 2.67 | 2.26 | 39 | 7.70 | 2.30 | 26.62 | 300 | 5.65 | 34.00 | 1.84 | 2.57 | 26.83 | 127 | 0.62 |
| | | | | | | | | | 400 | 5.01 | 34.06 | | 2.89 | 26.95 | 116 | 0.74 |
| 244c) | 6.31 | 33.98 | 2.20 | 2.65 | 44 | - | 2.33 | 26.73 | 500 | 4.60 | 34.13 | | 2.74 | 27.05 | 107 | 0.85 |
| | | | | | | | | | 600 | 4.30 | 34.21 | | 3.09 | 27.15 | 98 | 0.95 |
| 252b) | 6.16 | 33.97 | 2.27 | 2.79 | - | 7.60 | - | 26.74 | 700 | 4.01 | 34.28 | | 3.29 | 27.23 | 91 | 1.04 |
| | | | | | | | | | 800 | 3.81 | 34.33 | | 3.30 | 27.29 | 86 | 1.13 |
| 291c) | 5.72 | 33.99 | 1.87 | 2.50 | 68 | 7.57 | 2.35 | 26.81 | 1000 | 3.41 | 34.42 | | 3.39 | 27.41 | 76 | 1.29 |
| 388 | 5.07 | 34.05 | 1.41 | 2.96 | 78 | 7.48 | 2.35 | 26.94 | 1200 | 2.99 | 34.47 | | 3.43 | 27.49 | 69 | 1.44 |
| 485 | 4.64 | 34.12 | 0.72 | 2.69 | 90 | 7.50 | 2.35 | 27.04 | | | | | | | | |
| 582 | 4.36 | 34.20 | - | 3.02 | 94 | 7.50 | 2.39 | 27.13 | | | | | | | | |
| 678 | 4.06 | 34.27 | - | 3.29 | 104 | 7.43 | 2.39 | 27.22 | | | | | | | | |
| 776 | 3.86 | 34.32 | - | 3.29 | 129 | 7.47 | 2.42 | 27.28 | | | | | | | | |
| 970 | 3.47 | 34.41 | - | 3.36 | 132 | 7.40 | 2.42 | 27.39 | | | | | | | | |
| 1167 | 3.06 | 34.46 | - | 3.44 | 135 | 7.40 | 2.42 | 27.47 | | | | | | | | |
| 1462 | 2.50 | 34.53 | 0.77 | 3.15 | 159 | 7.47 | 2.44 | 27.58 | | | | | | | | |

a) Times reported are those of the messenger release to the nearest hour (when half way between, to the nearest even hour). When casts were not taken in order of increasing depth, footnotes are included.
b) Third cast; wire angle, 07°.
c) Second cast; wire angle, 14°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 3, 1958; 1000 GCT; 48°50'N, 130°19'W; sounding, 2670 m; wind, 320°, force 4; weather, cloudy; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 15.11 | 32.46 | 5.93 | 0.72 | | | | 24.01 | 0 | 15.11 | 32.46 | 5.93 | 0.72 | 24.01 | 391 | 0.00 |
| 10 | 15.10 | 32.49 | 6.00 | 0.65 | | | | 24.04 | 10 | 15.10 | 32.49 | 6.00 | 0.65 | 24.04 | 388 | 0.04 |
| 20 | 14.48 | 32.50 | 6.13 | 0.91 | | | | 24.18 | 20 | 14.48 | 32.50 | 6.13 | 0.91 | 24.18 | 375 | 0.08 |
| 30 | 13.73 | 32.48 | 5.39 | 0.75 | | | | 24.32 | 30 | 13.73 | 32.48 | 5.39 | 0.75 | 24.32 | 362 | 0.11 |
| 50 | 10.02 | 32.46 | 6.53 | 1.14 | | | | 24.99 | 50 | 10.02 | 32.46 | 6.53 | 1.14 | 24.99 | 299 | 0.18 |
| 75 | 8.77 | 32.48 | 6.29 | 1.23 | | | | 25.20 | 75 | 8.77 | 32.48 | 6.29 | 1.23 | 25.20 | 278 | 0.25 |
| 100 | 7.30 | 32.92 | 5.62 | 1.86 | | | | 25.76 | 100 | 7.30 | 32.92 | 5.62 | 1.86 | 25.76 | 226 | 0.32 |
| 125 | 6.90 | 33.32 | 5.06 | 2.08 | | | | 26.13 | 150 | 7.07 | 33.65 | 3.96 | 2.46 | 26.37 | 169 | 0.41 |
| 150 | 7.07 | 33.65 | 3.96 | 2.46 | | | | 26.37 | 200 | 6.81 | 33.91 | 2.87 | 2.47 | 26.61 | 147 | 0.49 |
| 175 | 7.02 | 33.84 | 3.32 | 2.46 | | | | 26.52 | 250 | 6.42 | 33.97 | 2.27 | 2.66 | 26.71 | 138 | 0.56 |
| 200 | 6.81 | 33.91 | 2.87 | 2.47 | | | | 26.61 | 300 | 6.03 | 34.00 | 2.20 | 2.55 | 26.78 | 131 | 0.63 |
| | | | | | | | | | 400 | 5.30 | 34.05 | 1.27 | 2.80 | 26.91 | 120 | 0.76 |
| 241b) | 6.54 | 33.98 | 2.28 | 2.53 | | | | 26.70 | 500 | 4.63 | 34.09 | 0.93 | 2.84 | 27.02 | 110 | 0.87 |
| | | | | | | | | | 600 | 4.35 | 34.17 | 0.54 | 3.00 | 27.11 | 102 | 0.98 |
| 250a) | 6.38 | 33.96 | 2.22 | 2.84 | | | | 26.70 | 700 | 4.06 | 34.25 | 0.38 | 3.03 | 27.21 | 93 | 1.08 |
| | | | | | | | | | 800 | 3.82 | 34.30 | 0.31 | 3.18 | 27.27 | 88 | 1.17 |
| 290b) | 6.09 | 33.99 | 2.35 | 2.50 | | | | 26.77 | 1000 | 3.40 | 34.38 | 0.30 | 3.10 | 27.38 | 79 | 1.33 |
| 386 | 5.44 | 34.05 | 1.30 | 2.83 | | | | 26.89 | 1200 | 3.02 | 34.46 | 0.38 | 2.99 | 27.47 | 70 | 1.48 |
| 482 | 4.67 | 34.08 | 1.03 | 2.76 | | | | 27.01 | | | | | | | | |
| 579 | 4.42 | 34.15 | 0.58 | 3.04 | | | | 27.09 | | | | | | | | |
| 675 | 4.12 | 34.23 | 0.41 | 2.96 | | | | 27.18 | | | | | | | | |
| 772 | 3.88 | 34.29 | 0.32 | 3.18 | | | | 27.26 | | | | | | | | |
| 965 | 3.47 | 34.36 | 0.29 | 3.14 | | | | 27.35 | | | | | | | | |
| 1157 | 3.10 | 34.45 | 0.36 | 3.00 | | | | 27.46 | | | | | | | | |
| 1446 | 2.58 | 34.51 | 0.58 | 3.09 | | | | 27.55 | | | | | | | | |

a) Second cast; wire angle, missing.
b) First cast; wire angle, 15°.

| OBSERVED | | | | | | | | | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 4, 1958; 1100 GCT; 48°59'N, 132°56'W; sounding, 3182 m; wind, 290°, force 2; weather, partly cloudy; sea, smooth. | | | | | | | | | | | | | | | | |
| 0a) | 15.10 | 32.48 | 6.16 | 1.22 | 0 | 8.05 | 2.20 | 24.03 | 0 | 15.10 | 32.48 | 6.16 | 1.22 | 24.03 | 389 | 0.00 |
| | | | | | | | | | 10 | 14.25 | 32.51 | 6.17 | 0.86 | 24.23 | 370 | 0.04 |
| 13b) | 13.87 | 32.51 | 6.27 | 0.80 | 0 | 8.10 | 2.24 | 24.31 | 20 | 12.68 | 32.48 | 6.71 | 0.75 | 24.53 | 342 | 0.07 |
| 23 | 12.21 | 32.48 | 6.89 | 0.78 | 0 | 8.11 | 2.23 | 24.62 | 30 | 11.20 | 32.49 | 7.33 | 1.04 | 24.81 | 316 | 0.11 |
| 33 | 10.78 | 32.50 | 7.44 | 1.12 | 0 | 8.09 | 2.24 | 24.89 | 50 | 8.52 | 32.53 | 6.96 | 1.27 | 25.28 | 271 | 0.17 |
| 53 | 8.24 | 32.54 | 6.89 | 1.29 | 10 | 8.02 | 2.24 | 25.33 | 75 | 7.44 | 32.57 | 6.59 | 1.31 | 25.47 | 253 | 0.23 |
| 78 | 7.34 | 32.59 | 6.55 | 1.33 | 15 | 7.98 | 2.25 | 25.50 | 100 | 6.63 | 32.81 | 6.21 | 1.65 | 25.77 | 225 | 0.29 |
| 103 | 6.54 | 32.86 | 6.13 | 1.68 | 18 | 7.92 | 2.26 | 25.82 | 150 | 5.56 | 33.52 | 4.98 | 1.98 | 26.46 | 160 | 0.39 |
| 128 | 5.84 | 33.38 | 5.21 | 1.89 | 30 | 7.82 | 2.26 | 26.32 | 200 | 5.23 | 33.84 | 4.07 | 2.08 | 26.75 | 132 | 0.46 |
| 152 | 5.54 | 33.53 | 4.95 | 1.99 | 40 | 7.75 | 2.25 | 26.47 | 250 | 4.92 | 33.89 | 3.06 | 2.65 | 26.83 | 126 | 0.52 |
| 177 | 5.39 | 33.70 | 4.48 | 2.13 | 44 | 7.72 | 2.28 | 26.62 | 300 | 4.56 | 33.93 | 2.33 | 2.75 | 26.90 | 119 | 0.59 |
| 202 | 5.22 | 33.85 | 4.03 | 2.08 | 49 | 7.68 | 2.31 | 26.76 | 400 | 4.22 | 34.01 | 1.42 | 2.95 | 27.00 | 110 | 0.70 |
| | | | | | | | | | 500 | 4.02 | 34.12 | 0.73 | 3.03 | 27.11 | 101 | 0.81 |
| 249c) | 5.00 | 33.88 | 3.18 | 2.63 | 58 | 7.67 | 2.30 | 26.81 | 600 | 3.72 | 34.18 | 0.53 | 3.29 | 27.18 | 94 | 0.90 |
| | | | | | | | | | 700 | 3.59 | 34.30 | 0.22 | 3.18 | 27.29 | 84 | 0.99 |
| 252b) | 4.84 | 33.90 | 2.93 | 2.67 | - | 7.58 | 2.31 | 26.84 | 800 | 3.33 | 34.33 | 0.37 | 3.14 | 27.34 | 80 | 1.08 |
| | | | | | | | | | 1000 | 2.98 | 34.40 | 0.69 | 3.75 | 27.43 | 72 | 1.23 |
| 299c) | 4.56 | 33.93 | 2.34 | 2.75 | 70 | 7.54 | 2.31 | 26.90 | 1200 | 2.69 | 34.47 | 0.52 | 3.34 | 27.51 | 65 | 1.37 |
| 399 | 4.22 | 34.01 | 1.43 | 2.95 | 86 | 7.45 | 2.34 | 27.00 | | | | | | | | |
| 498 | 4.03 | 34.12 | 0.73 | 3.02 | 98 | 7.42 | 2.37 | 27.11 | | | | | | | | |
| 598 | 3.72 | 34.18 | 0.54 | 3.29 | 112 | 7.37 | 2.45 | 27.18 | | | | | | | | |
| 698 | 3.60 | 34.30 | 0.22 | 3.18 | 120 | 7.45 | 2.39 | 27.29 | | | | | | | | |
| 797 | 3.34 | 34.33 | 0.36 | 3.12 | 126 | 7.33 | 2.39 | 27.34 | | | | | | | | |
| 997 | 2.98 | 34.40 | 0.69 | 3.76 | 142 | 7.42 | 2.40 | 27.43 | | | | | | | | |
| 1196 | 2.70 | 34.47 | 0.52 | 3.35 | 154 | 7.41 | 2.43 | 27.51 | | | | | | | | |
| 1496 | 2.34 | 34.52 | 0.74 | 3.14 | 159 | 7.40 | 2.42 | 27.58 | | | | | | | | |

a) Third cast; wire angle, missing.
b) Second cast; wire angle, 04°.
c) First cast; wire angle, 04°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 5, 1958; 1700 GCT; 49°11'N, 135°34'W; sounding, 3804 m; wind, 330°, force 2; weather, cloudy, precipitation within sight; sea, smooth. | | | | | | | | | | | | | | | | |
| 0a) | 15.68 | 32.51 | 6.13 | 0.71 | 6 | | | 23.93 | 0 | 15.68 | 32.51 | 6.13 | 0.71 | 23.93 | 399 | 0.00 |
| 10 | 15.42 | 32.51 | 6.29 | 0.78 | 0 | | | 23.98 | 10 | 15.42 | 32.51 | 6.29 | 0.78 | 23.98 | 394 | 0.04 |
| 20 | 14.16 | 32.51 | 6.46 | 0.73 | 0 | | | 24.25 | 20 | 14.16 | 32.51 | 6.46 | 0.73 | 24.25 | 368 | 0.08 |
| 30 | 12.48 | 32.52 | 6.98 | 0.78 | 0 | | | 24.60 | 30 | 12.48 | 32.52 | 6.98 | 0.78 | 24.60 | 336 | 0.11 |
| 50 | 9.85 | 32.56 | 7.43 | 1.00 | 0 | | | 25.10 | 50 | 9.85 | 32.56 | 7.43 | 1.00 | 25.10 | 288 | 0.18 |
| 75 | 7.92 | 32.58 | 7.03 | 1.14 | 5 | | | 25.41 | 75 | 7.92 | 32.58 | 7.03 | 1.14 | 25.41 | 259 | 0.24 |
| 100 | 7.26 | 32.66 | 6.68 | 1.32 | 9 | | | 25.56 | 100 | 7.26 | 32.66 | 6.68 | 1.32 | 25.56 | 244 | 0.31 |
| 125 | 6.30 | 33.03 | 5.97 | 1.32 | 23 | | | 25.98 | 150 | 5.68 | 33.42 | 5.45 | 2.01 | 26.37 | 168 | 0.41 |
| 150 | 5.68 | 33.42 | 5.45 | 2.01 | 36 | | | 26.37 | 200 | 5.39 | 33.82 | 3.95 | 2.24 | 26.72 | 136 | 0.48 |
| 175 | 5.46 | 33.72 | 4.56 | 2.10 | 40 | | | 26.63 | 250 | 5.02 | 33.92 | 2.64 | 2.66 | 26.84 | 125 | 0.55 |
| 200 | 5.39 | 33.82 | 3.95 | 2.24 | 46 | | | 26.72 | 300 | 4.60 | 33.93 | 1.47 | 2.83 | 26.89 | 120 | 0.61 |
| | | | | | | | | | 400 | 4.38 | 34.04 | 1.19 | 3.12 | 27.01 | 110 | 0.73 |
| 249b) | 5.00 | 33.92 | 2.58 | 2.59 | 59 | | | 26.84 | 500 | 4.11 | 34.12 | 0.77 | 3.31 | 27.10 | 102 | 0.83 |
| | | | | | | | | | 600 | 3.72 | 34.19 | 0.63 | 3.30 | 27.19 | 93 | 0.93 |
| 250a) | 5.03 | 33.91 | 2.71 | 2.74 | 61 | | | 26.83 | 700 | 3.49 | 34.25 | 0.55 | 3.26 | 27.26 | 87 | 1.02 |
| | | | | | | | | | 800 | 3.31 | 34.30 | 0.58 | 3.54 | 27.32 | 82 | 1.10 |
| 299b) | 4.60 | 33.93 | 1.47 | 2.83 | 73 | | | 26.89 | 1000 | 2.98 | 34.39 | 0.34 | 3.33 | 27.42 | 73 | 1.26 |
| 398 | 4.38 | 34.04 | 1.20 | 3.11 | 89 | | | 27.01 | 1200 | 2.69 | 34.45 | 0.69 | 3.33 | 27.50 | 67 | 1.40 |
| 495 | 4.14 | 34.12 | 0.78 | 3.30 | 98 | | | 27.09 | | | | | | | | |
| 591 | 3.74 | 34.18 | 0.65 | 3.33 | 112 | | | 27.18 | | | | | | | | |
| 688 | 3.51 | 34.24 | 0.53 | 3.20 | 124 | | | 27.25 | | | | | | | | |
| 786 | 3.34 | 34.29 | 0.63 | 3.56 | 128 | | | 27.31 | | | | | | | | |
| 984 | 3.00 | 34.38 | 0.30 | 3.33 | 139 | | | 27.41 | | | | | | | | |
| 1184 | 2.71 | 34.45 | 0.67 | 3.33 | 150 | | | 27.49 | | | | | | | | |
| 1484 | 2.33 | 34.51 | 0.71 | 3.33 | 145 | | | 27.57 | | | | | | | | |

a) Second cast; wire angle, 00°.
b) First cast; wire angle, 08°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 6, 1958; 1200 GCT; 49°16'N, 138°08'W; sounding, 3932 m; wind, 320°, force 4; weather, cloudy; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 14.80 | 32.70 | 6.15 | 0.87 | 6 | 8.01 | 2.18 | 24.26 | 0 | 14.80 | 32.70 | 6.15 | 0.87 | 24.26 | 367 | 0.00 |
| 10 | 14.76 | 32.71 | 6.19 | 1.66 | 0 | 8.00 | 2.18 | 24.28 | 10 | 14.76 | 32.71 | 6.19 | 1.66 | 24.28 | 365 | 0.04 |
| 20 | 12.23 | 32.73 | 6.81 | 0.94 | 0 | 7.95 | 2.18 | 24.81 | 20 | 12.23 | 32.73 | 6.81 | 0.94 | 24.81 | 316 | 0.07 |
| 30 | 9.72 | 32.75 | 7.53 | 1.13 | 0 | 7.98 | 2.16 | 25.26 | 30 | 9.72 | 32.75 | 7.53 | 1.13 | 25.26 | 272 | 0.10 |
| 49 | 8.08 | 32.74 | 7.15 | 1.32 | 0 | 7.96 | 2.17 | 25.51 | 50 | 8.03 | 32.74 | 7.13 | 1.34 | 25.52 | 248 | 0.15 |
| 74 | 7.10 | 32.76 | 6.74 | 1.66 | 5 | 7.90 | 2.17 | 25.66 | 75 | 7.08 | 32.76 | 6.74 | 1.65 | 25.67 | 234 | 0.21 |
| 99 | 6.68 | 32.89 | 6.51 | 1.71 | 9 | 7.82 | 2.17 | 25.82 | 100 | 6.66 | 32.91 | 6.47 | 1.75 | 25.84 | 218 | 0.27 |
| 124 | 6.19 | 33.35 | 5.72 | 2.30 | 23 | 7.78 | 2.23 | 26.25 | 150 | 5.70 | 33.57 | 5.58 | 2.10 | 26.48 | 158 | 0.36 |
| 149 | 5.73 | 33.56 | 5.60 | 2.09 | 36 | 7.75 | 2.20 | 26.47 | 200 | 5.09 | 33.74 | 4.73 | 2.41 | 26.69 | 138 | 0.44 |
| 173 | 5.20 | 33.68 | 5.20 | 2.34 | 40 | 7.71 | 2.25 | 26.63 | 250 | 4.75 | 33.84 | 3.72 | 2.55 | 26.81 | 128 | 0.50 |
| 198 | 5.10 | 33.74 | 4.77 | 2.41 | 46 | 7.70 | 2.26 | 26.69 | 300 | 4.43 | 33.91 | 2.66 | 2.78 | 26.90 | 119 | 0.56 |
| | | | | | | | | | 400 | 4.12 | 34.03 | 1.42 | 2.88 | 27.02 | 108 | 0.68 |
| 245b) | 4.80 | 33.84 | 3.77 | 2.72 | 59 | 7.60 | 2.28 | 26.80 | 500 | 3.86 | 34.11 | 0.91 | 3.22 | 27.12 | 100 | 0.78 |
| | | | | | | | | | 600 | 3.64 | 34.20 | 0.69 | 3.22 | 27.21 | 92 | 0.88 |
| 248a) | 4.77 | 33.83 | 3.86 | 2.21 | - | 7.58 | 2.29 | 26.80 | 700 | 3.44 | 34.25 | 0.62 | 3.23 | 27.27 | 86 | 0.97 |
| | | | | | | | | | 800 | 3.25 | 34.31 | 0.52 | 3.30 | 27.33 | 81 | 1.05 |
| 294b) | 4.45 | 33.90 | 2.76 | 2.79 | 73 | 7.43 | 2.28 | 26.89 | 1000 | 2.90 | 34.40 | 0.50 | 3.36 | 27.44 | 72 | 1.20 |
| 392 | 4.14 | 34.02 | 1.47 | 2.83 | 89 | 7.35 | 2.28 | 27.01 | 1200 | 2.61 | 34.44 | 0.54 | 3.34 | 27.49 | 67 | 1.34 |
| 490 | 3.88 | 34.10 | 0.95 | 3.22 | 98 | 7.28 | 2.33 | 27.11 | | | | | | | | |
| 588 | 3.67 | 34.19 | 0.69 | 3.22 | 112 | 7.34 | 2.35 | 27.20 | | | | | | | | |
| 684 | 3.47 | 34.24 | 0.64 | 3.22 | 124 | 7.30 | 2.37 | 27.26 | | | | | | | | |
| 782 | 3.28 | 34.30 | 0.53 | 3.29 | 128 | 7.25 | 2.38 | 27.32 | | | | | | | | |
| 972 | 2.96 | 34.39 | 0.50 | 3.36 | 139 | 7.32 | 2.39 | 27.42 | | | | | | | | |
| 1157 | 2.66 | 34.43 | 0.53 | 3.35 | 150 | 7.35 | 2.40 | 27.48 | | | | | | | | |
| 1436 | 2.49 | 34.47 | 0.62 | 3.21 | 145 | 7.38 | 2.41 | 27.53 | | | | | | | | |

a) Second cast; wire angle, 08°.
b) First cast; wire angle, 13°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 7, 1958; 1800 GCT; 49°25'N, 140°52'W; sounding, 3968 m; wind, 240°, force 4; weather, cloudy; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 14.60 | 32.68 | 6.16 | 0.92 | 9 | | | 24.29 | 0 | 14.60 | 32.68 | 6.16 | 0.92 | 24.29 | 364 | 0.00 |
| 10 | 13.74 | 32.68 | 6.10 | 0.82 | 0 | | | 24.47 | 10 | 13.74 | 32.68 | 6.10 | 0.82 | 24.47 | 347 | 0.04 |
| 20 | 12.92 | 32.69 | 6.23 | 1.03 | 0 | | | 24.64 | 20 | 12.92 | 32.69 | 6.23 | 1.03 | 24.64 | 331 | 0.07 |
| 30 | 8.94 | 32.71 | 7.63 | 1.22 | 0 | | | 25.36 | 30 | 8.94 | 32.71 | 7.63 | 1.22 | 25.36 | 263 | 0.10 |
| 50 | 7.68 | 32.76 | 6.96 | 1.28 | 9 | | | 25.58 | 50 | 7.68 | 32.76 | 6.96 | 1.28 | 25.58 | 242 | 0.15 |
| 75 | 7.01 | 32.77 | 6.73 | 1.75 | 9 | | | 25.68 | 75 | 7.01 | 32.77 | 6.73 | 1.75 | 25.68 | 233 | 0.21 |
| 100 | 6.32 | 32.94 | 6.38 | 1.84 | 19 | | | 25.91 | 100 | 6.32 | 32.94 | 6.38 | 1.84 | 25.91 | 212 | 0.26 |
| 125 | 5.54 | 33.45 | 5.67 | 2.11 | 34 | | | 26.41 | 150 | 5.12 | 33.62 | 5.10 | 2.23 | 26.59 | 147 | 0.36 |
| 150 | 5.12 | 33.62 | 5.10 | 2.23 | 42 | | | 26.59 | 200 | 4.76 | 33.78 | 4.19 | 2.19 | 26.76 | 132 | 0.42 |
| 174 | 4.96 | 33.74 | 4.58 | 2.17 | 54 | | | 26.70 | 250 | 4.59 | 33.85 | 3.46 | 2.37 | 26.83 | 125 | 0.49 |
| 199 | 4.76 | 33.78 | 4.21 | 2.19 | 60 | | | 26.76 | 300 | 4.38 | 33.92 | 2.85 | 2.52 | 26.91 | 118 | 0.55 |
| | | | | | | | | | 400 | 4.14 | 34.04 | 1.59 | 2.71 | 27.03 | 107 | 0.66 |
| 249b) | 4.64 | 33.85 | 3.58 | 2.29 | - | | | 26.83 | 500 | 3.88 | 34.13 | 0.99 | 2.86 | 27.13 | 99 | 0.77 |
| | | | | | | | | | 600 | 3.65 | 34.19 | 0.73 | 3.06 | 27.20 | 92 | 0.86 |
| 249a) | 4.55 | 33.85 | 3.36 | 2.45 | 70 | | | 26.84 | 700 | 3.44 | 34.25 | 0.54 | 3.02 | 27.27 | 86 | 0.95 |
| | | | | | | | | | 800 | 3.23 | 34.32 | 0.49 | 3.07 | 27.34 | 80 | 1.04 |
| 299b) | 4.38 | 33.92 | 2.87 | 2.52 | 70 | | | 26.91 | 1000 | 2.91 | 34.39 | 0.45 | 3.12 | 27.43 | 72 | 1.19 |
| 399 | 4.14 | 34.04 | 1.60 | 2.71 | 88 | | | 27.03 | 1200 | 2.63 | 34.45 | 0.46 | 2.98 | 27.50 | 66 | 1.33 |
| 498 | 3.88 | 34.13 | 1.00 | 2.85 | 106 | | | 27.13 | | | | | | | | |
| 598 | 3.65 | 34.19 | 0.74 | 3.06 | 117 | | | 27.20 | | | | | | | | |
| 698 | 3.44 | 34.25 | 0.54 | 3.02 | 119 | | | 27.27 | | | | | | | | |
| 797 | 3.24 | 34.32 | 0.49 | 3.07 | 133 | | | 27.34 | | | | | | | | |
| 996 | 2.92 | 34.39 | 0.45 | 3.13 | 150 | | | 27.43 | | | | | | | | |
| 1196 | 2.64 | 34.45 | 0.46 | 2.98 | 165 | | | 27.50 | | | | | | | | |
| 1488 | 2.31 | 34.52 | 0.81 | 3.15 | 161 | | | 27.58 | | | | | | | | |

a) Second cast; wire angle, 03°.
b) First cast; wire angle, 04°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 8, 1958; 1500 GCT; 49°41'N, 143°32'W; sounding, 4096 m; wind, 240°, force 4; weather, drizzle; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 13.35 | 32.76 | 6.03 | 1.27 | 27 | 7.97 | 2.16 | 24.61 | 0 | 13.35 | 32.76 | 6.03 | 1.27 | 24.61 | 334 | 0.00 |
| 10 | 13.36 | 32.76 | 6.19 | 1.41 | 17 | 7.98 | 2.18 | 24.61 | 10 | 13.36 | 32.76 | 6.19 | 1.41 | 24.61 | 334 | 0.03 |
| 20 | 12.40 | 32.78 | 6.34 | 0.94 | 19 | 8.00 | 2.18 | 24.81 | 20 | 12.40 | 32.78 | 6.34 | 0.94 | 24.81 | 315 | 0.06 |
| 30 | 10.06 | 32.82 | 6.70 | 1.34 | 19 | 7.99 | 2.18 | 25.26 | 30 | 10.06 | 32.82 | 6.70 | 1.34 | 25.26 | 272 | 0.09 |
| 50 | 7.06 | 32.84 | 7.06 | 1.44 | 17 | 7.97 | 2.19 | 25.73 | 50 | 7.06 | 32.84 | 7.06 | 1.44 | 25.73 | 228 | 0.14 |
| 75 | 6.49 | 32.85 | 6.71 | 1.62 | 21 | 7.95 | 2.20 | 25.82 | 75 | 6.49 | 32.85 | 6.71 | 1.62 | 25.82 | 220 | 0.20 |
| 100 | 6.06 | 32.91 | 6.41 | 1.64 | 21 | 7.91 | 2.20 | 25.92 | 100 | 6.06 | 32.91 | 6.41 | 1.64 | 25.92 | 211 | 0.25 |
| 125 | 5.64 | 33.48 | 5.41 | 1.94 | 33 | 7.81 | 2.25 | 26.42 | 150 | 4.94 | 33.64 | 4.88 | 2.24 | 26.63 | 144 | 0.34 |
| 150 | 4.94 | 33.64 | 4.88 | 2.24 | 49 | 7.73 | 2.26 | 26.63 | 200 | 4.17 | 33.75 | 4.08 | 2.67 | 26.80 | 128 | 0.41 |
| 175 | 4.48 | 33.72 | 4.47 | 2.36 | 48 | 7.69 | 2.28 | 26.74 | 250 | 3.74 | 33.82 | 2.72 | 2.82 | 26.90 | 118 | 0.47 |
| 200 | 4.17 | 33.75 | 4.08 | 2.67 | 55 | 7.63 | - | 26.80 | 300 | 3.69 | 33.90 | 1.94 | 3.07 | 26.97 | 112 | 0.53 |
| | | | | | | | | | 400 | 3.75 | 34.04 | 1.19 | 3.19 | 27.07 | 103 | 0.64 |
| 244b) | 3.75 | 33.82 | 2.82 | 2.78 | - | 7.50 | 2.30 | 26.90 | 500 | 3.69 | 34.15 | 0.94 | 3.28 | 27.16 | 95 | 0.74 |
| | | | | | | | | | 600 | 3.50 | 34.22 | 0.79 | 3.43 | 27.24 | 89 | 0.83 |
| 250a) | 3.75 | 33.82 | 2.75 | 2.81 | 75 | 7.47 | 2.30 | 26.90 | 700 | 3.33 | 34.28 | 0.68 | 3.30 | 27.30 | 83 | 0.92 |
| | | | | | | | | | 800 | 3.15 | 34.33 | 0.53 | 3.48 | 27.36 | 78 | 1.00 |
| 292b) | 3.68 | 33.89 | 2.03 | 3.05 | 88 | 7.47 | 2.33 | 26.96 | 1000 | 2.81 | 34.41 | 0.48 | 3.47 | 27.45 | 70 | 1.14 |
| 390 | 3.74 | 34.03 | 1.22 | 3.20 | 98 | 7.42 | 2.35 | 27.06 | 1200 | 2.56 | 34.47 | 0.53 | 3.39 | 27.52 | 64 | 1.28 |
| 488 | 3.72 | 34.14 | 0.97 | 3.22 | 115 | 7.38 | 2.37 | 27.15 | | | | | | | | |
| 586 | 3.52 | 34.21 | 0.80 | 3.49 | 126 | 7.37 | 2.37 | 27.23 | | | | | | | | |
| 684 | 3.36 | 34.27 | 0.72 | 3.25 | 123 | 7.39 | 2.40 | 27.29 | | | | | | | | |
| 782 | 3.19 | 34.32 | 0.54 | 3.48 | 123 | 7.39 | 2.40 | 27.35 | | | | | | | | |
| 978 | 2.84 | 34.40 | 0.47 | 3.48 | 129 | 7.41 | 2.41 | 27.44 | | | | | | | | |
| 1167 | 2.60 | 34.46 | 0.52 | 3.40 | 159 | 7.40 | 2.43 | 27.51 | | | | | | | | |
| 1475 | 2.32 | 34.51 | 0.60 | 3.40 | 174 | 7.46 | 2.44 | 27.58 | | | | | | | | |

a) Second cast; wire angle, 03°.
b) First cast; wire angle, 13°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 9, 1958; 2200 GCT; 49°48'N, 145°55'W; sounding, 4272 m; wind, 210°, force 5; weather, drizzle; sea, rough. | | | | | | | | | | | | | | | | |
| 0a) | 11.82 | 32.74 | 6.45 | 1.06 | - | 7.97 | - | 24.89 | 0 | 11.82 | 32.74 | 6.45 | 1.06 | 24.89 | 307 | 0.00 |
| 10 | 11.78 | 32.73 | 6.60 | 1.23 | 36 | 7.98 | 2.19 | 24.89 | 10 | 11.78 | 32.73 | 6.60 | 1.23 | 24.89 | 307 | 0.03 |
| 20 | 11.48 | 32.74 | 6.54 | 1.13 | 42 | 7.90 | 2.20 | 24.95 | 20 | 11.48 | 32.74 | 6.54 | 1.13 | 24.95 | 302 | 0.06 |
| 30 | 10.16 | 32.82 | 6.83 | 1.38 | 27 | 7.95 | 2.26 | 25.25 | 30 | 10.16 | 32.82 | 6.83 | 1.38 | 25.25 | 274 | 0.09 |
| 50 | 7.08 | 32.94 | 7.27 | 1.22 | - | - | - | 25.81 | 50 | 7.08 | 32.94 | 7.27 | 1.22 | 25.81 | 220 | 0.14 |
| 74 | 6.48 | 32.98 | 6.75 | 1.41 | 32 | 7.78 | 2.22 | 25.92 | 75 | 6.46 | 32.98 | 6.75 | 1.41 | 25.92 | 210 | 0.19 |
| 99 | 6.09 | 33.00 | 6.65 | 1.46 | 29 | 7.86 | 2.19 | 25.99 | 100 | 6.09 | 33.01 | 6.65 | 1.45 | 25.99 | 203 | 0.24 |
| 124 | 5.86 | 33.24 | 6.26 | 1.51 | 35 | 7.90 | 2.23 | 26.20 | 150 | 5.21 | 33.68 | 5.07 | 1.95 | 26.63 | 144 | 0.33 |
| 149 | 5.24 | 33.68 | 5.09 | 1.94 | 46 | 7.78 | 2.26 | 26.62 | 200 | 4.29 | 33.78 | 4.17 | 2.36 | 26.81 | 127 | 0.40 |
| 173 | 4.60 | 33.74 | 4.69 | 2.14 | 52 | 7.55 | 2.27 | 26.74 | 250 | 3.92 | 33.82 | 3.20 | 2.63 | 26.88 | 120 | 0.46 |
| 198 | 4.28 | 33.76 | 4.24 | 2.38 | 60 | 7.55 | 2.28 | 26.79 | 300 | 3.74 | 33.89 | 2.40 | 3.14 | 26.95 | 114 | 0.52 |
| | | | | | | | | | 400 | 3.71 | 34.03 | 1.45 | 3.07 | 27.07 | 104 | 0.63 |
| 208b) | 4.25 | 33.79 | 3.90 | 2.39 | - | 7.55 | 2.28 | 26.82 | 500 | 3.71 | 34.13 | 0.99 | 3.08 | 27.15 | 97 | 0.73 |
| | | | | | | | | | 600 | 3.54 | 34.21 | 0.80 | 3.01 | 27.23 | 90 | 0.82 |
| 248a) | 3.92 | 33.82 | 3.20 | 2.74 | 71 | 7.62 | 2.30 | 26.88 | 700 | 3.35 | 34.27 | 0.60 | 3.11 | 27.29 | 84 | 0.91 |
| | | | | | | | | | 800 | 3.17 | 34.32 | 0.36 | 3.12 | 27.35 | 79 | 0.99 |
| 250b) | 3.92 | 33.82 | 3.20 | 2.49 | - | - | - | 26.88 | 1000 | 2.91 | 34.38 | 0.48 | 3.09 | 27.42 | 73 | 1.14 |
| 331 | 3.68 | 33.93 | 2.01 | 3.29 | 70 | 7.52 | 2.30 | 26.99 | 1200 | 2.66 | 34.44 | 0.58 | 3.43 | 27.49 | 67 | 1.28 |
| 412 | 3.71 | 34.04 | 1.37 | 3.05 | 86 | 7.50 | 2.35 | 27.07 | 1500 | 2.28 | 34.51 | 0.60 | 2.77 | 27.58 | 59 | 1.47 |
| 495 | 3.72 | 34.13 | 1.01 | 3.10 | 105 | 7.34 | 2.37 | 27.14 | 2000 | 1.93 | 34.60 | 1.22 | 3.26 | 27.68 | 51 | 1.75 |
| 577 | 3.58 | 34.19 | 0.81 | 2.97 | 109 | 7.35 | 2.35 | 27.21 | 2500 | 1.73 | 34.64 | 1.92 | 2.88 | 27.73 | 47 | 1.99 |
| 663 | 3.43 | 34.25 | 0.73 | 3.10 | 112 | 7.35 | 2.38 | 27.27 | 3000 | 1.58 | 34.67 | 2.51 | 2.74 | 27.76 | 44 | 2.22 |
| 839 | 3.11 | 34.34 | 0.32 | 3.12 | 122 | 7.38 | 2.39 | 27.37 | 4000 | 1.52 | 34.70 | 3.13 | 2.77 | 27.79 | 44 | 2.67 |
| 1026 | 2.88 | 34.39 | 0.50 | 3.10 | 132 | 7.40 | 2.40 | 27.43 | | | | | | | | |
| 1319 | 2.51 | 34.47 | 0.60 | 3.33 | 146 | 7.33 | 2.41 | 27.53 | | | | | | | | |
| 1487c) | 2.29 | 34.51 | 0.59 | 2.74 | 150 | 7.34 | 2.42 | 27.58 | | | | | | | | |
| 1971 | 1.94 | 34.60 | 1.17 | 3.29 | 172 | 7.48 | 2.45 | 27.68 | | | | | | | | |
| 2465 | 1.74 | 34.64 | 1.88 | 2.89 | 186 | 7.48 | 2.46 | 27.73 | | | | | | | | |
| 2958 | 1.59 | 34.67 | 2.45 | 2.75 | 175 | 7.51 | 2.45 | 27.76 | | | | | | | | |
| 3454 | 1.53 | 34.68 | 3.00 | 2.71 | 162 | 7.60 | 2.45 | 27.77 | | | | | | | | |
| 3950 | 1.52 | 34.70 | 3.09 | 2.75 | 163 | 7.59 | 2.46 | 27.79 | | | | | | | | |
| 4119 | 1.53 | 34.70 | 3.24 | 2.82 | 166 | 7.57 | 2.45 | 27.79 | | | | | | | | |

a) Third cast; wire angle, 12°.
b) Second cast; wire angle, 25°.
c) First cast; wire angle, 28°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 11, 1958; 0100 GCT; 47°54'N, 146°22'W; sounding, 4480 m; wind, 290°, force 3; weather, overcast; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 13.08 | 32.84 | 6.12 | 0.69 | 29 | | | 24.73 | 0 | 13.08 | 32.84 | 6.12 | 0.69 | 24.73 | 323 | 0.00 |
| 10 | 12.94 | 32.84 | 6.24 | 0.89 | 19 | | | 24.75 | 10 | 12.94 | 32.84 | 6.24 | 0.89 | 24.75 | 320 | 0.03 |
| 20 | 12.02 | 32.84 | 6.33 | 0.86 | 12 | | | 24.93 | 20 | 12.02 | 32.84 | 6.33 | 0.86 | 24.93 | 304 | 0.06 |
| 30 | 9.49 | 32.85 | 6.83 | 0.99 | 10 | | | 25.38 | 30 | 9.49 | 32.85 | 6.83 | 0.99 | 25.38 | 361 | 0.09 |
| 50 | 7.44 | 32.90 | 6.74 | 1.07 | 12 | | | 25.73 | 50 | 7.44 | 32.90 | 6.74 | 1.07 | 25.73 | 228 | 0.14 |
| 75 | 6.72 | 32.94 | 6.50 | 1.19 | 17 | | | 25.86 | 75 | 6.72 | 32.94 | 6.50 | 1.19 | 25.86 | 216 | 0.20 |
| 100 | 6.40 | 32.99 | 6.60 | 1.39 | 27 | | | 25.94 | 100 | 6.40 | 32.99 | 6.60 | 1.39 | 25.94 | 209 | 0.25 |
| 125 | 6.05 | 33.07 | 6.50 | 1.32 | 22 | | | 26.05 | 150 | 5.88 | 33.63 | 5.24 | 1.69 | 26.51 | 155 | 0.34 |
| 150 | 5.88 | 33.63 | 5.24 | 1.69 | 34 | | | 26.51 | 200 | 4.98 | 33.79 | 4.41 | 1.96 | 26.74 | 133 | 0.41 |
| 175 | 5.41 | 33.74 | 4.96 | 1.86 | 37 | | | 26.65 | 250 | 4.52 | 33.84 | 3.54 | 2.36 | 26.83 | 125 | 0.48 |
| 200 | 4.98 | 33.79 | 4.41 | 1.96 | 46 | | | 26.74 | 300 | 4.26 | 33.89 | 2.64 | 2.67 | 26.90 | 119 | 0.54 |
| | | | | | | | | | 400 | 4.06 | 34.03 | 1.52 | 2.96 | 27.03 | 107 | 0.65 |
| 249b) | 4.53 | 33.84 | 3.58 | 2.36 | 53 | | | 26.83 | 500 | 3.88 | 34.13 | 0.98 | 3.02 | 27.13 | 99 | 0.75 |
| | | | | | | | | | 600 | 3.63 | 34.20 | 0.76 | 3.09 | 27.21 | 92 | 0.85 |
| 250a) | 4.52 | 33.84 | 3.51 | 2.36 | 60 | | | 26.83 | 700 | 3.39 | 34.27 | 0.65 | 3.12 | 27.29 | 84 | 0.94 |
| | | | | | | | | | 800 | 3.21 | 34.32 | 0.63 | 3.32 | 27.35 | 80 | 1.02 |
| 299b) | 4.26 | 33.89 | 2.65 | 2.67 | 73 | | | 26.90 | 1000 | 2.89 | 34.41 | 0.48 | 3.13 | 27.45 | 71 | 1.17 |
| 398 | 4.06 | 34.03 | 1.53 | 2.96 | 90 | | | 27.03 | 1200 | 2.60 | 34.46 | 0.47 | 2.56 | 27.51 | 65 | 1.30 |
| 498 | 3.88 | 34.13 | 0.99 | 3.02 | 110 | | | 27.13 | | | | | | | | |
| 597 | 3.64 | 34.20 | 0.77 | 3.09 | 115 | | | 27.21 | | | | | | | | |
| 697 | 3.40 | 34.27 | 0.65 | 3.11 | 121 | | | 27.29 | | | | | | | | |
| 796 | 3.22 | 34.32 | 0.63 | 3.32 | 115 | | | 27.34 | | | | | | | | |
| 996 | 2.90 | 34.41 | 0.48 | 3.15 | 163 | | | 27.45 | | | | | | | | |
| 1195 | 2.61 | 34.46 | 0.47 | 2.57 | 158 | | | 27.51 | | | | | | | | |
| 1494 | 2.31 | 34.52 | 0.59 | 3.06 | 170 | | | 27.58 | | | | | | | | |

a) Second cast; wire angle, 06°.
b) First cast; wire angle, 04°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 12, 1958; 0400 GCT; 46°04'N, 146°26'W; sounding, 4526 m; wind, calm; weather, overcast; sea, calm. | | | | | | | | | | | | | | | | |
| 0a) | 14.57 | 32.95 | 5.94 | 0.96 | 48 | 7.96 | 2.21 | 24.51 | 0 | 14.57 | 32.95 | 5.94 | 0.96 | 24.51 | 344 | 0.00 |
| 10 | 13.60 | 32.94 | 6.23 | 0.67 | 32 | 7.97 | 2.21 | 24.70 | 10 | 13.60 | 32.94 | 6.23 | 0.67 | 24.70 | 326 | 0.03 |
| 20 | 11.80 | 32.91 | 6.72 | 0.82 | 16 | 7.98 | 2.18 | 25.03 | 20 | 11.80 | 32.91 | 6.72 | 0.82 | 25.03 | 295 | 0.06 |
| 30 | 10.99 | 32.92 | 6.72 | 0.77 | 30 | 7.97 | 2.20 | 25.18 | 30 | 10.99 | 32.92 | 6.72 | 0.77 | 25.18 | 280 | 0.09 |
| 50 | 7.66 | 32.94 | 6.91 | 0.94 | 39 | 7.90 | 2.20 | 25.73 | 50 | 7.66 | 32.94 | 6.91 | 0.94 | 25.73 | 228 | 0.14 |
| 75 | 7.00 | 32.96 | 6.63 | 1.16 | 17 | 7.87 | 2.20 | 25.84 | 75 | 7.00 | 32.96 | 6.63 | 1.16 | 25.84 | 218 | 0.20 |
| 100 | 6.51 | 32.96 | 6.55 | 1.26 | 25 | 7.86 | 2.20 | 25.90 | 100 | 6.51 | 32.96 | 6.55 | 1.26 | 25.90 | 212 | 0.25 |
| 125 | 7.02 | 33.49 | 5.68 | 1.63 | 26 | 7.81 | 2.24 | 26.25 | 150 | 6.82 | 33.80 | 5.12 | 1.55 | 26.52 | 154 | 0.35 |
| 150 | 6.82 | 33.80 | 5.12 | 1.55 | 32 | 7.76 | 2.24 | 26.52 | 200 | 5.74 | 33.85 | 4.77 | 1.76 | 26.70 | 138 | 0.42 |
| 175 | 6.28 | 33.87 | 4.92 | 1.74 | 55 | 7.73 | 2.29 | 26.65 | 250 | 4.99 | 33.84 | 4.14 | 2.04 | 26.78 | 130 | 0.49 |
| 200 | 5.74 | 33.85 | 4.77 | 1.76 | 44 | 7.70 | 2.29 | 26.70 | 300 | 4.68 | 33.89 | 3.32 | 2.36 | 26.85 | 124 | 0.55 |
| | | | | | | | | | 400 | 4.30 | 34.00 | 1.95 | 2.75 | 26.98 | 112 | 0.67 |
| 250b) | 5.06 | 33.84 | 4.21 | 1.89 | 69 | 7.63 | 2.31 | 26.77 | 500 | 4.02 | 34.10 | 1.33 | 2.95 | 27.09 | 102 | 0.77 |
| | | | | | | | | | 600 | 3.79 | 34.18 | 0.95 | 2.95 | 27.18 | 95 | 0.87 |
| 250a) | 4.92 | 33.83 | 4.08 | 2.18 | - | 7.60 | 2.30 | 26.78 | 700 | 3.52 | 34.24 | 0.78 | 3.13 | 27.25 | 88 | 0.96 |
| | | | | | | | | | 800 | 3.32 | 34.31 | 0.63 | 3.25 | 27.33 | 82 | 1.05 |
| 300b) | 4.68 | 33.89 | 3.32 | 2.36 | 95 | 7.52 | 2.30 | 26.85 | 1000 | 2.97 | 34.38 | 0.49 | 3.32 | 27.42 | 74 | 1.20 |
| 399 | 4.30 | 34.00 | 1.96 | 2.75 | 105 | 7.43 | 2.32 | 26.98 | 1200 | 2.66 | 34.45 | 0.48 | 3.18 | 27.50 | 66 | 1.34 |
| 499 | 4.02 | 34.10 | 1.34 | 2.95 | 139 | 7.40 | 2.35 | 27.09 | | | | | | | | |
| 598 | 3.80 | 34.18 | 0.95 | 2.95 | 140 | 7.40 | - | 27.18 | | | | | | | | |
| 698 | 3.52 | 34.24 | 0.78 | 3.13 | 150 | 7.40 | 2.39 | 27.25 | | | | | | | | |
| 798 | 3.32 | 34.31 | 0.63 | 3.25 | 135 | 7.36 | 2.38 | 27.33 | | | | | | | | |
| 997 | 2.98 | 34.38 | 0.49 | 3.32 | 166 | 7.38 | 2.41 | 27.41 | | | | | | | | |
| 1196 | 2.67 | 34.45 | 0.48 | 3.18 | 162 | 7.40 | 2.41 | 27.50 | | | | | | | | |
| 1496 | 2.32 | 34.52 | 0.64 | 3.32 | 204 | 7.41 | 2.42 | 27.58 | | | | | | | | |

a) Second cast; wire angle, 00°.
b) First cast; wire angle, 05°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 12, 1958; 2000 GCT; 45°11'N, 146°26'W; sounding, 4810 m; wind, 090°, force 2; weather, cloudy; sea, smooth. | | | | | | | | | | | | | | | | |
| 0a) | 15.52 | 33.03 | 5.36 | 0.55 | | | | 24.36 | 0 | 15.52 | 33.03 | 5.36 | 0.55 | 24.36 | 358 | 0.00 |
| 10 | 14.48 | 33.03 | 5.96 | 0.60 | | | | 24.59 | 10 | 14.48 | 33.03 | 5.96 | 0.60 | 24.59 | 336 | 0.04 |
| 20 | 13.08 | 33.01 | 6.24 | 0.58 | | | | 24.86 | 20 | 13.08 | 33.01 | 6.24 | 0.58 | 24.86 | 311 | 0.07 |
| 30 | 11.87 | 33.04 | 6.53 | 0.61 | | | | 25.11 | 30 | 11.87 | 33.04 | 6.53 | 0.61 | 25.11 | 287 | 0.10 |
| 50 | 8.60 | 33.11 | 6.57 | 0.96 | | | | 25.72 | 50 | 8.60 | 33.11 | 6.57 | 0.96 | 25.72 | 229 | 0.15 |
| 75 | 7.81 | 33.15 | 6.31 | 1.15 | | | | 25.87 | 75 | 7.81 | 33.15 | 6.31 | 1.15 | 25.87 | 215 | 0.20 |
| 100 | 7.34 | 33.15 | 6.27 | 1.21 | | | | 25.94 | 100 | 7.34 | 33.15 | 6.27 | 1.21 | 25.94 | 209 | 0.26 |
| 125 | 7.37 | 33.21 | 6.19 | 1.15 | | | | 25.98 | 150 | 7.84 | 33.85 | 5.02 | 1.52 | 26.42 | 165 | 0.35 |
| 150 | 7.84 | 33.85 | 5.02 | 1.52 | | | | 26.42 | 200 | 6.96 | 33.90 | 4.77 | 1.64 | 26.58 | 150 | 0.43 |
| 175 | 7.39 | 33.89 | 4.89 | 1.67 | | | | 26.51 | 250 | 6.16 | 33.90 | 4.37 | 2.10 | 26.69 | 140 | 0.50 |
| 200 | 6.96 | 33.90 | 4.77 | 1.64 | | | | 26.58 | 300 | 5.70 | 33.92 | 3.86 | 2.09 | 26.76 | 133 | 0.57 |
| | | | | | | | | | 400 | 4.70 | 33.96 | 2.49 | 2.73 | 26.91 | 120 | 0.70 |
| 250b) | 6.22 | 33.90 | 4.47 | 2.06 | | | | 26.68 | 500 | 4.17 | 34.05 | 1.64 | 2.79 | 27.04 | 108 | 0.81 |
| | | | | | | | | | 600 | 3.94 | 34.15 | 1.02 | 3.18 | 27.14 | 99 | 0.91 |
| 250a) | 6.10 | 33.91 | 4.27 | 2.13 | | | | 26.70 | 700 | 3.64 | 34.22 | 0.71 | 3.17 | 27.22 | 91 | 1.01 |
| | | | | | | | | | 800 | 3.42 | 34.28 | 0.60 | 3.12 | 27.29 | 85 | 1.10 |
| 300b) | 5.70 | 33.92 | 3.86 | 2.09 | | | | 26.76 | 1000 | 3.02 | 34.37 | 0.54 | 3.12 | 27.40 | 75 | 1.26 |
| 400 | 4.70 | 33.96 | 2.49 | 2.73 | | | | 26.91 | 1200 | 2.70 | 34.43 | 0.49 | 3.16 | 27.48 | 68 | 1.40 |
| 500 | 4.17 | 34.05 | 1.64 | 2.79 | | | | 27.04 | 1500 | 2.34 | 34.51 | 0.57 | 3.16 | 27.57 | 60 | 1.59 |
| 600 | 3.94 | 34.15 | 1.02 | 3.18 | | | | 27.14 | | | | | | | | |
| 700 | 3.64 | 34.22 | 0.71 | 3.17 | | | | 27.22 | | | | | | | | |
| 800 | 3.42 | 34.28 | 0.60 | 3.12 | | | | 27.29 | | | | | | | | |
| 1000 | 3.02 | 34.37 | 0.54 | 3.12 | | | | 27.40 | | | | | | | | |
| 1200 | 2.70 | 34.43 | 0.49 | 3.16 | | | | 27.48 | | | | | | | | |
| 1500 | 2.34 | 34.51 | 0.57 | 3.16 | | | | 27.57 | | | | | | | | |

a) Second cast; wire angle, missing.
b) First cast; wire angle, 02°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 13, 1958; 1000 GCT; 44°00'N, 146°40'W; sounding, 4919 m; wind, 050°, force 4; weather, overcast; sea, smooth. | | | | | | | | | | | | | | | | |
| 0a) | 16.73 | 33.14 | 5.68 | 0.36 | 0 | 7.93 | 2.20 | 24.17 | 0 | 16.73 | 33.14 | 5.68 | 0.36 | 24.17 | 376 | 0.00 |
| 10 | 16.10 | 33.11 | 5.86 | 0.37 | 0 | 7.98 | 2.22 | 24.29 | 10 | 16.10 | 33.11 | 5.86 | 0.37 | 24.29 | 364 | 0.04 |
| 20 | 14.35 | 33.12 | 5.89 | 0.39 | 0 | 7.95 | 2.20 | 24.68 | 20 | 14.35 | 33.12 | 5.89 | 0.39 | 24.68 | 327 | 0.07 |
| 30 | 12.01 | 33.09 | 7.01 | 0.59 | 0 | 8.10 | 2.20 | 25.13 | 30 | 12.01 | 33.09 | 7.01 | 0.59 | 25.13 | 285 | 0.10 |
| 50 | 8.86 | 33.13 | 6.70 | 0.90 | 0 | 7.88 | 2.22 | 25.70 | 50 | 8.86 | 33.13 | 6.70 | 0.90 | 25.70 | 231 | 0.16 |
| 75 | 8.11 | 33.16 | 6.32 | 1.03 | 0 | 7.85 | 2.22 | 25.84 | 75 | 8.11 | 33.16 | 6.32 | 1.03 | 25.84 | 218 | 0.21 |
| 100 | 7.87 | 33.17 | 6.18 | 1.14 | 0 | 7.84 | 2.20 | 25.88 | 100 | 7.87 | 33.17 | 6.18 | 1.14 | 25.88 | 215 | 0.26 |
| 125 | 7.50 | 33.18 | 6.14 | 1.12 | 2 | 7.82 | 2.23 | 25.94 | 150 | 8.22 | 33.86 | 5.05 | 1.48 | 26.37 | 169 | 0.36 |
| 149 | 8.24 | 33.86 | 5.06 | 1.48 | 17 | 7.80 | 2.25 | 26.36 | 200 | 7.41 | 33.93 | 4.79 | 1.64 | 26.54 | 153 | 0.44 |
| 173 | 7.78 | 33.93 | 4.86 | 1.55 | 20 | 7.76 | 2.26 | 26.49 | 250 | 6.41 | 33.91 | 4.72 | 1.37 | 26.66 | 142 | 0.52 |
| 198 | 7.40 | 33.93 | 4.83 | 1.57 | 23 | 7.75 | 2.27 | 26.54 | 300 | 5.83 | 33.89 | 4.11 | 1.74 | 26.72 | 137 | 0.59 |
| | | | | | | | | | 400 | 4.81 | 33.95 | 2.72 | 2.23 | 26.89 | 122 | 0.72 |
| 230b) | 7.05 | 33.93 | 4.56 | 1.88 | - | - | - | 26.59 | 500 | 4.37 | 34.04 | 1.75 | 2.50 | 27.01 | 111 | 0.83 |
| | | | | | | | | | 600 | 4.00 | 34.14 | 1.11 | 2.64 | 27.12 | 100 | 0.94 |
| 247a) | 6.43 | 33.91 | 4.75 | 1.33 | 30 | 7.75 | 2.28 | 26.66 | 700 | 3.70 | 34.22 | 0.78 | 2.91 | 27.22 | 92 | 1.03 |
| | | | | | | | | | 800 | 3.46 | 34.27 | 0.67 | 3.04 | 27.28 | 86 | 1.12 |
| 276b) | 6.18 | 33.89 | 4.47 | 1.65 | 35 | 7.74 | 2.33 | 26.68 | 1000 | 3.04 | 34.36 | 0.46 | 2.90 | 27.39 | 76 | 1.28 |
| 368 | 5.04 | 33.92 | 3.16 | 2.03 | 55 | 7.58 | 2.35 | 26.84 | 1200 | 2.72 | 34.43 | 0.43 | 2.89 | 27.48 | 69 | 1.43 |
| 460 | 4.48 | 34.00 | 2.05 | 2.48 | 73 | 7.50 | 2.35 | 26.96 | 1500 | 2.34 | 34.52 | 0.53 | 3.07 | 27.58 | 59 | 1.62 |
| 552 | 4.20 | 34.09 | 1.40 | 2.56 | 88 | 7.38 | 2.41 | 27.06 | 2000 | 1.92 | 34.60 | 1.34 | 3.13 | 27.68 | 51 | 1.90 |
| 646 | 3.84 | 34.18 | 0.90 | 2.74 | 102 | 7.45 | 2.39 | 27.17 | 2500 | 1.71 | 34.67 | 2.02 | 2.68 | 27.75 | 45 | 2.13 |
| 738 | 3.61 | 34.24 | 0.71 | 3.00 | 110 | 7.33 | 2.41 | 27.24 | 3000 | 1.56 | 34.67 | 2.60 | 2.80 | 27.76 | 44 | 2.36 |
| 921 | 3.20 | 34.33 | 0.57 | 3.03 | 126 | 7.31 | 2.44 | 27.35 | 4000 | 1.48 | 34.69 | 3.11 | 2.73 | 27.78 | 44 | 2.80 |
| 1103 | 2.86 | 34.40 | 0.38 | 2.81 | 140 | 7.40 | 2.44 | 27.44 | | | | | | | | |
| 1378 | 2.48 | 34.48 | 0.50 | 3.01 | 148 | 7.35 | 2.46 | 27.54 | | | | | | | | |
| 1498c) | 2.34 | 34.52 | 0.53 | 3.07 | 154 | 7.42 | 2.47 | 27.58 | | | | | | | | |
| 1998 | 1.92 | 34.60 | 1.34 | 3.13 | 164 | 7.47 | 2.45 | 27.68 | | | | | | | | |
| 2497 | 1.71 | 34.67 | 2.02 | 2.68 | 162 | 7.55 | 2.47 | 27.75 | | | | | | | | |
| 2996 | 1.56 | 34.67 | 2.60 | 2.80 | 159 | 7.62 | 2.47 | 27.76 | | | | | | | | |
| 3494 | 1.50 | 34.69 | 2.96 | 2.77 | 160 | 7.63 | 2.45 | 27.78 | | | | | | | | |
| 3996 | 1.48 | - | - | - | - | - | - | | | | | | | | | |
| 4496 | 1.52 | 34.69 | 3.18 | 2.74 | 152 | 7.68 | 2.46 | 27.78 | | | | | | | | |
| 4796 | 1.56 | 34.69 | 3.19 | 2.77 | 158 | 7.67 | 2.46 | 27.78 | | | | | | | | |
| 4896 | 1.58 | 34.70 | 3.17 | 2.52 | 155 | 7.68 | 2.47 | 27.79 | | | | | | | | |

a) First cast; wire angle, 05°.
b) Second cast; wire angle, 15°.
c) Third cast; wire angle, 04°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 14, 1958; 2100 GCT; 42°05'N, 144°18'W; sounding, 4709 m; wind, 090°, force 4; weather, cloudy; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 18.32 | 33.18 | 5.49 | 0.47 | 0 | | | 23.82 | 0 | 18.32 | 33.18 | 5.49 | 0.47 | 23.82 | 409 | 0.00 |
| 10 | 17.93 | 33.19 | 5.54 | 0.40 | 0 | | | 23.93 | 10 | 17.93 | 33.19 | 5.54 | 0.40 | 23.93 | 399 | 0.04 |
| 20 | 14.94 | 33.26 | 6.08 | 0.45 | 5 | | | 24.67 | 20 | 14.94 | 33.26 | 6.08 | 0.45 | 24.67 | 329 | 0.08 |
| 30 | 12.21 | 33.24 | 6.81 | 0.62 | 6 | | | 25.20 | 30 | 12.21 | 33.24 | 6.81 | 0.62 | 25.20 | 278 | 0.11 |
| 49 | 9.96 | 33.27 | 6.57 | 0.67 | 6 | | | 25.63 | 50 | 9.91 | 33.27 | 6.54 | 0.69 | 25.64 | 237 | 0.16 |
| 74 | 9.04 | 33.29 | 6.12 | 0.94 | 5 | | | 25.80 | 75 | 9.03 | 33.30 | 6.12 | 0.92 | 25.80 | 222 | 0.21 |
| | | | | | | | | | 100 | 8.94 | 33.28 | 6.25 | 1.08 | 25.80 | 222 | 0.27 |
| 94b) | 9.00 | 33.31 | 6.12 | 0.86 | 7 | | | 25.82 | 150 | 8.91 | 33.96 | 4.99 | 1.32 | 26.34 | 172 | 0.37 |
| | | | | | | | | | 200 | 8.11 | 33.98 | 4.89 | 1.34 | 26.48 | 160 | 0.45 |
| 99a) | 8.87 | 33.36 | 5.99 | 0.84 | - | | | 25.88 | 250 | 7.57 | | | 1.55 | | | |
| | | | | | | | | | 300 | 6.79 | | | 1.79 | | | |
| 117b) | 8.94 | 33.42 | 5.86 | 1.33 | 14 | | | 25.91 | 400 | 5.38 | | | 2.27 | | | |
| | | | | | | | | | 500 | 4.58 | | 1.85 | 2.73 | | | |
| 123a) | - | 33.71 | 5.26 | 1.13 | - | | | | 600 | 4.11 | | 1.11 | 2.45 | | | |
| 148 | 8.95 | 33.96 | 5.00 | 1.30 | 36 | | | 26.33 | 700 | 3.83 | | 0.61 | 3.19 | | | |
| 172 | 8.47 | 33.98 | 4.94 | 1.42 | 37 | | | 26.42 | 800 | 3.53 | | 0.49 | 3.04 | | | |
| 197 | 8.09 | 33.98 | 4.92 | 1.39 | 58 | | | 26.48 | 1000 | 3.06 | 34.36 | 0.38 | 2.60 | 27.39 | 76 | |
| | | | | | | | | | 1200 | 2.71 | 34.44 | 0.40 | 2.53 | 27.49 | 68 | |
| 222c) | 8.08 | 33.97 | 4.77 | 1.21 | - | | | 26.47 | | | | | | | | |
| 246a) | 7.62 | 33.97 | 4.80 | 1.54 | 52 | | | 26.54 | | | | | | | | |
| 266c) | 7.36 | - | - | 1.59 | - | | | | | | | | | | | |
| 355 | 5.98 | - | - | 2.07 | 69 | | | | | | | | | | | |
| 444 | 4.92 | - | 2.46 | 2.45 | 78 | | | | | | | | | | | |
| 532 | 4.41 | - | 1.56 | 2.77 | 92 | | | | | | | | | | | |
| 620 | 4.04 | - | 0.99 | 2.47 | 114 | | | | | | | | | | | |
| 710 | 3.80 | - | 0.57 | 3.24 | 120 | | | | | | | | | | | |
| 886 | 3.31 | 34.30 | 0.43 | 2.86 | 134 | | | 27.32 | | | | | | | | |
| 1064 | 2.94 | 34.39 | 0.37 | 2.52 | 158 | | | 27.43 | | | | | | | | |
| 1330 | 2.54 | 34.47 | 0.49 | 2.77 | 174 | | | 27.52 | | | | | | | | |

a) First cast; wire angle, 09°.
b) Third cast; wire angle, 20°.
c) Second cast; wire angle, 25°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 15, 1958; 2200 GCT; 40°38'N, 142°56'W; sounding, 4663 m; wind, 110°, force 3; weather, overcast; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 19.47 | 33.38 | 5.43 | 0.35 | 0 | 8.05 | 2.23 | 23.69 | 0 | 19.47 | 33.38 | 5.43 | 0.35 | 23.69 | 422 | 0.00 |
| 10 | 18.82 | 33.39 | 5.61 | 0.37 | 0 | 8.04 | 2.20 | 23.86 | 10 | 18.82 | 33.39 | 5.61 | 0.37 | 23.86 | 406 | 0.04 |
| 20 | 15.36 | 33.35 | 6.38 | 0.33 | 0 | 8.04 | 2.20 | 24.64 | 20 | 15.36 | 33.35 | 6.38 | 0.33 | 24.64 | 331 | 0.08 |
| 30 | 12.85 | 33.40 | 6.72 | 0.44 | 0 | 8.04 | 2.22 | 25.20 | 30 | 12.85 | 33.40 | 6.72 | 0.44 | 25.20 | 278 | 0.11 |
| 49 | 10.93 | 33.38 | 6.69 | 0.44 | 0 | 8.00 | 2.23 | 25.55 | 50 | 10.86 | 33.38 | 6.65 | 0.46 | 25.56 | 244 | 0.16 |
| 74 | 9.83 | 33.37 | 5.98 | 0.84 | 0 | 7.96 | 2.19 | 25.73 | 75 | 9.83 | 33.38 | 5.98 | 0.84 | 25.74 | 228 | 0.22 |
| 98 | 9.81 | 33.48 | 5.95 | 0.79 | 0 | 7.96 | 2.20 | 25.82 | 100 | 9.80 | 33.48 | 5.97 | 0.79 | 25.82 | 221 | 0.28 |
| 123 | 9.76 | 33.56 | 5.91 | 0.82 | 0 | 7.96 | 2.23 | 25.89 | 150 | 9.90 | 33.86 | 5.18 | 1.02 | 26.10 | 195 | 0.38 |
| 147 | 9.90 | 33.83 | 5.22 | 1.01 | 0 | 7.89 | 2.25 | 26.08 | 200 | 9.06 | 34.05 | 4.93 | 1.36 | 26.39 | 169 | 0.47 |
| 172 | 9.73 | 34.03 | 4.96 | 1.16 | 10 | 7.88 | 2.26 | 26.26 | 250 | 8.09 | 34.04 | 5.01 | 1.49 | 26.53 | 156 | 0.55 |
| 196 | 9.17 | 34.05 | 4.90 | 1.38 | 14 | 7.83 | 2.26 | 26.37 | 300 | 7.39 | 34.00 | 4.69 | 1.88 | 26.60 | 150 | 0.63 |
| | | | | | | | | | 400 | 5.90 | 33.96 | 3.54 | 2.25 | 26.77 | 134 | 0.77 |
| 237b) | 8.23 | 34.01 | 5.05 | 1.33 | - | 7.76 | 2.28 | 26.48 | 500 | 4.92 | 34.00 | 2.30 | 2.73 | 26.91 | 120 | 0.90 |
| 284 | 7.68 | 34.02 | 4.84 | 1.82 | 50 | 7.75 | 2.28 | 26.57 | 600 | 4.29 | 34.08 | 1.38 | 3.12 | 27.05 | 108 | 1.01 |
| 380 | 6.14 | 33.95 | 3.83 | 2.19 | 53 | 7.62 | 2.24 | 26.73 | 700 | 3.90 | 34.17 | 0.50 | 3.29 | 27.16 | 98 | 1.11 |
| 475 | 5.12 | 33.99 | 2.58 | 2.55 | 72 | 7.53 | 2.34 | 26.88 | 800 | 3.58 | 34.24 | 0.62 | 3.42 | 27.25 | 90 | 1.21 |
| 571 | 4.44 | 34.05 | 1.62 | 3.09 | 82 | 7.40 | 2.33 | 27.01 | 1000 | 3.11 | 34.35 | 0.38 | 3.41 | 27.38 | 78 | 1.37 |
| 666 | 4.00 | 34.14 | 0.97 | 3.21 | 100 | 7.38 | 2.37 | 27.12 | 1200 | 2.80 | 34.43 | 0.33 | 3.31 | 27.47 | 69 | 1.52 |
| 761 | 3.72 | 34.21 | 0.68 | 3.40 | 113 | 7.33 | 2.37 | 27.21 | | | | | | | | |
| 956 | 3.18 | - | - | - | - | - | - | | | | | | | | | |
| 980a) | 3.14 | 34.34 | 0.40 | 3.43 | - | 7.33 | 2.39 | 27.37 | | | | | | | | |
| 1151b) | 2.87 | 34.41 | 0.32 | 3.32 | 137 | 7.35 | 2.42 | 27.45 | | | | | | | | |
| 1444 | 2.46 | 34.50 | 0.57 | 3.36 | 150 | 7.32 | 2.43 | 27.56 | | | | | | | | |

a) Second cast; wire angle, 15°.
b) First cast; wire angle, 14°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 17, 1958; 0500 GCT; 38°14'N, 140°28'W; sounding, 5212 m; wind, 050°, force 1; weather, cloudy; sea, smooth. | | | | | | | | | | | | | | | | |
| 0a) | 20.06 | 33.26 | 5.30 | 0.67 | 0 | 7.95 | 2.18 | 23.44 | 0 | 20.06 | 33.26 | 5.30 | 0.67 | 23.44 | 445 | 0.00 |
| 10 | 18.96 | 33.26 | 5.38 | 0.41 | 0 | 7.97 | 2.18 | 23.72 | 10 | 18.96 | 33.26 | 5.38 | 0.41 | 23.72 | 419 | 0.04 |
| 20 | 15.02 | 33.07 | 6.00 | 0.69 | 0 | 7.96 | 2.17 | 24.50 | 20 | 15.02 | 33.07 | 6.00 | 0.69 | 24.50 | 345 | 0.08 |
| 30 | 13.86 | 33.09 | 6.03 | 0.36 | 0 | 7.96 | 2.17 | 24.76 | 30 | 13.86 | 33.09 | 6.03 | 0.36 | 24.76 | 320 | 0.11 |
| 50 | 11.86 | 33.10 | 6.17 | 0.48 | 0 | 7.94 | 2.17 | 25.16 | 50 | 11.86 | 33.10 | 6.17 | 0.48 | 25.16 | 282 | 0.17 |
| 75 | 10.94 | 33.18 | 5.86 | 0.54 | 0 | 7.92 | 2.17 | 25.39 | 75 | 10.94 | 33.18 | 5.86 | 0.54 | 25.39 | 261 | 0.24 |
| 100 | 10.73 | 33.20 | 5.82 | 0.66 | 0 | 7.91 | 2.18 | 25.44 | 100 | 10.73 | 33.20 | 5.82 | 0.66 | 25.44 | 257 | 0.31 |
| 124 | 10.20 | 33.49 | 5.58 | 0.98 | 0 | 7.90 | 2.21 | 25.76 | 150 | 9.81 | 33.87 | 5.02 | 1.15 | 26.12 | 193 | 0.42 |
| 149 | 9.82 | 33.87 | 5.03 | 1.15 | 0 | 7.82 | 2.22 | 26.12 | 200 | 9.13 | 34.01 | 4.97 | 1.36 | 26.34 | 173 | 0.51 |
| 174 | 9.53 | 33.96 | 4.91 | 1.26 | 5 | 7.80 | 2.23 | 26.24 | 250 | 8.52 | 34.04 | 4.83 | 1.62 | 26.46 | 162 | 0.59 |
| | | | | | | | | | 300 | 7.72 | 34.01 | 4.48 | 1.69 | 26.56 | 153 | 0.67 |
| 199b) | 9.14 | 34.01 | 4.97 | 1.35 | 10 | 7.80 | 2.23 | 26.34 | 400 | 6.20 | 33.96 | 3.39 | 2.21 | 26.73 | 138 | 0.82 |
| 249 | 8.54 | 34.04 | 4.84 | 1.62 | 13 | 7.70 | 2.25 | 26.46 | 500 | 5.10 | 34.00 | 2.24 | 2.66 | 26.89 | 122 | 0.95 |
| 299 | 7.74 | 34.01 | 4.49 | 1.68 | 20 | 7.72 | 2.25 | 26.56 | 600 | 4.37 | 34.09 | 1.13 | 3.04 | 27.05 | 108 | 1.06 |
| | | | | | | | | | 700 | 3.95 | 34.18 | 0.64 | 2.71 | 27.16 | 97 | 1.17 |
| 398a) | 6.34 | 33.97 | 3.52 | 2.22 | 38 | 7.58 | 2.28 | 26.72 | 800 | 3.72 | 34.27 | 0.46 | 2.92 | 27.26 | 89 | 1.26 |
| | | | | | | | | | 1000 | 3.31 | 34.40 | 0.43 | 2.75 | 27.40 | 76 | 1.42 |
| 399b) | 6.12 | 33.96 | 3.30 | 2.18 | 39 | 7.60 | 2.27 | 26.74 | 1200 | 2.91 | 34.48 | 0.49 | 3.28 | 27.50 | 67 | 1.57 |
| | | | | | | | | | 1500 | 2.41 | 34.55 | 0.77 | 3.09 | 27.60 | 58 | 1.76 |
| 498a) | 5.12 | 34.00 | 2.27 | 2.64 | 46 | 7.47 | 2.30 | 26.89 | 2000 | 1.94 | 34.62 | 1.59 | 2.32 | 27.69 | 49 | 2.02 |
| | | | | | | | | | 2500 | 1.73 | 34.65 | 2.13 | 2.45 | 27.73 | 46 | 2.26 |
| 598b) | 4.38 | 34.09 | 1.14 | 3.05 | 78 | 7.36 | 2.31 | 27.05 | 3000 | 1.56 | 34.67 | 2.61 | 2.77 | 27.76 | 44 | 2.49 |
| 698 | 3.96 | 34.18 | 0.65 | 2.70 | 92 | 7.37 | 2.36 | 27.16 | 4000 | 1.49 | 34.69 | 3.13 | 2.24 | 27.78 | 44 | 2.93 |
| 798 | 3.72 | 34.27 | 0.46 | 2.93 | 108 | 7.33 | 2.37 | 27.26 | | | | | | | | |
| 997 | 3.32 | 34.40 | 0.43 | 2.74 | 120 | 7.36 | 2.40 | 27.40 | | | | | | | | |
| 1197 | 2.92 | 34.48 | 0.49 | 3.28 | 132 | 7.37 | 2.43 | 27.50 | | | | | | | | |
| 1496 | 2.41 | 34.55 | 0.76 | 3.10 | 142 | - | - | 27.60 | | | | | | | | |
| 1729c) | 2.15 | 34.59 | 1.27 | 2.63 | 149 | 7.44 | 2.45 | 27.65 | | | | | | | | |
| 2229 | 1.80 | 34.64 | 1.84 | 2.22 | 153 | 7.50 | 2.43 | 27.72 | | | | | | | | |
| 2728 | 1.63 | - | - | - | - | - | - | | | | | | | | | |
| 2781d) | 1.60 | 34.66 | 2.41 | 2.63 | - | 7.60 | 2.46 | 27.75 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

(continued from preceding page)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 3227c) | 1.53 | 34.68 | 2.79 | 2.80 | 146 | 7.58 | 2.45 | 27.77 |
| 3726 | 1.49 | 34.69 | 3.07 | 2.42 | 142 | 7.60 | 2.45 | 27.78 |
| 4228 | 1.50 | 34.69 | 3.20 | 2.21 | 144 | 7.63 | 2.46 | 27.78 |
| 4724 | 1.54 | 34.71 | 3.40 | 2.54 | 135 | - | - | 27.80 |
| 4885d) | 1.56 | 34.70 | 3.43 | 2.60 | 137 | 7.60 | 2.43 | 27.79 |

a) First cast; wire angle, 02°.
b) Second cast; wire angle, 02°.
c) Third cast; wire angle, 08°.
d) Fourth cast; wire angle, 08°.

BROWN BEAR; July 18, 1958; 2300 GCT; 39°22'N, 136°27'W; sounding, 4938 m; wind, 080°, force 1; weather, cloudy; sea, smooth.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 19.12 | 33.44 | 5.30 | 0.60 | 0 | 8.00 | 2.24 | 23.82 | 0 | 19.12 | 33.44 | 5.30 | 0.60 | 23.82 | 409 | 0.00 |
| 10 | 18.20 | 33.45 | 5.47 | 0.36 | 0 | 8.01 | 2.23 | 24.06 | 10 | 18.20 | 33.45 | 5.47 | 0.36 | 24.06 | 387 | 0.04 |
| 20 | - | 33.22 | 5.39 | 0.36 | 0 | 8.03 | 2.23 | | 20 | 17.35 | 33.22 | 5.39 | 0.36 | 24.09 | 384 | 0.08 |
| 30 | 16.38 | 33.17 | 5.82 | 0.57 | 0 | 8.02 | 2.21 | 24.28 | 30 | 16.38 | 33.17 | 5.82 | 0.57 | 24.28 | 366 | 0.12 |
| 50 | 13.68 | 33.19 | 6.00 | 0.42 | 0 | 8.00 | 2.23 | 24.88 | 50 | 13.68 | 33.19 | 6.00 | 0.42 | 24.88 | 310 | 0.18 |
| 75 | 11.88 | 33.18 | 5.97 | 0.85 | 0 | 8.02 | 2.23 | 25.22 | 75 | 11.88 | 33.18 | 5.97 | 0.85 | 25.22 | 278 | 0.26 |
| 100 | 11.70 | 33.32 | 5.75 | 0.61 | 0 | 8.00 | 2.24 | 25.36 | 100 | 11.70 | 33.32 | 5.75 | 0.61 | 25.36 | 264 | 0.33 |
| 124 | 9.88 | 33.56 | 5.05 | 1.21 | 7 | 8.00 | 2.24 | 25.87 | 150 | 9.36 | 33.71 | 5.15 | 1.63 | 26.07 | 198 | 0.44 |
| 149 | 9.38 | 33.70 | 5.16 | 1.63 | 5 | 7.89 | 2.24 | 26.06 | 200 | 8.94 | 33.87 | 5.11 | 1.45 | 26.26 | 180 | 0.54 |
| 173 | 9.06 | 33.82 | 5.05 | 1.58 | 6 | 7.87 | 2.26 | 26.21 | 250 | 8.61 | 34.00 | 4.88 | 1.58 | 26.42 | 166 | 0.62 |
| | | | | | | | | | 300 | 7.74 | 34.00 | 4.79 | 3.35 | 26.55 | 154 | 0.70 |
| 200b) | 8.94 | 33.87 | 5.11 | 1.45 | 13 | 7.77 | 2.26 | 26.26 | 400 | 6.06 | 33.95 | 3.12 | 2.63 | 26.74 | 137 | 0.85 |
| 250 | 8.61 | 34.00 | 4.88 | 1.58 | 17 | 7.80 | 2.29 | 26.42 | 500 | 4.84 | 34.00 | 1.95 | 2.97 | 26.92 | 119 | 0.98 |
| 300 | 7.74 | 34.00 | 4.79 | 3.35 | 17 | 7.77 | 2.28 | 26.55 | 600 | 4.26 | 34.11 | 0.96 | 3.52 | 27.07 | 105 | 1.09 |
| | | | | | | | | | 700 | 3.93 | 34.18 | 0.62 | 3.43 | 27.16 | 97 | 1.19 |
| 397a) | 6.11 | 33.95 | 3.16 | 2.62 | 42 | 7.60 | 2.30 | 26.73 | 800 | 3.72 | 34.26 | 0.40 | 3.61 | 27.25 | 90 | 1.28 |
| 496 | 4.86 | 33.99 | 2.00 | 3.10 | 62 | 7.48 | 2.35 | 26.91 | 1000 | 3.29 | 34.39 | 0.21 | 4.04 | 27.39 | 77 | 1.45 |
| | | | | | | | | | 1200 | 2.91 | 34.47 | 0.43 | 3.76 | 27.49 | 68 | 1.59 |
| 499b) | 4.84 | 34.00 | 1.96 | 2.80 | - | 7.47 | 2.36 | 26.92 | | | | | | | | |
| 598 | 4.27 | 34.11 | 0.97 | 3.52 | 81 | 7.38 | 2.35 | 27.07 | | | | | | | | |
| 698 | 3.93 | 34.18 | 0.62 | 3.43 | 107 | 7.36 | 2.39 | 27.16 | | | | | | | | |
| 797 | 3.73 | 34.26 | 0.41 | 3.60 | 114 | 7.33 | 2.40 | 27.25 | | | | | | | | |
| 996 | 3.30 | 34.39 | 0.21 | 4.05 | 127 | 7.30 | 2.41 | 27.39 | | | | | | | | |
| 1196 | 2.92 | 34.47 | 0.43 | 3.76 | 135 | 7.36 | 2.43 | 27.49 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 1496c) | 2.36 | 34.55 | 0.80 | 3.64 | 146 | 7.39 | 2.44 | 27.60 | | | | | | | | |

a) Fourth cast; wire angle, 04°.
b) First cast; wire angle, 03°.
c) Third cast; wire angle, 04°.

BROWN BEAR; July 20, 1958; 0600 GCT; 40°35'N, 132°23'W; sounding, 3859 m; wind, 020°, force 4; weather, overcast; sea, slight.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 16.94 | 32.68 | 5.54 | 0.64 | 0 | 8.01 | 2.26 | 23.77 | 0 | 16.94 | 32.68 | 5.54 | 0.64 | 23.77 | 414 | 0.00 |
| 10 | 16.92 | 32.68 | 5.58 | 0.64 | 0 | 8.03 | 2.17 | 23.78 | 10 | 16.92 | 32.68 | 5.58 | 0.64 | 23.78 | 414 | 0.04 |
| 20 | 16.82 | 32.68 | 5.49 | 0.84 | 0 | 8.05 | 2.17 | 23.80 | 20 | 16.82 | 32.68 | 5.49 | 0.84 | 23.80 | 412 | 0.08 |
| 30 | 14.50 | 32.82 | 6.04 | 0.67 | 0 | 8.04 | 2.17 | 24.42 | 30 | 14.50 | 32.82 | 6.04 | 0.67 | 24.42 | 353 | 0.12 |
| 50 | 11.08 | 32.72 | 6.66 | 0.82 | 0 | 8.04 | 2.16 | 25.01 | 50 | 11.08 | 32.72 | 6.66 | 0.82 | 25.01 | 297 | 0.18 |
| 74 | 10.12 | 32.82 | 5.54 | 1.08 | 0 | 7.99 | 2.17 | 25.25 | 75 | 10.08 | 32.85 | 5.52 | 1.09 | 25.28 | 271 | 0.26 |
| 99 | 9.22 | 33.35 | 5.12 | 1.39 | 13 | 7.93 | 2.20 | 25.81 | 100 | 9.19 | 33.36 | 5.11 | 1.41 | 25.83 | 220 | 0.32 |
| 124 | 8.72 | 33.53 | 4.91 | 1.75 | - | 7.82 | 2.23 | 26.03 | 150 | 8.49 | 33.73 | 4.53 | 1.93 | 26.22 | 183 | 0.42 |
| 148 | 8.51 | 33.71 | 4.56 | 1.92 | 13 | 7.73 | 2.24 | 26.21 | 200 | 8.10 | 33.92 | 4.46 | 1.99 | 26.43 | 164 | 0.50 |
| 172 | 8.29 | 33.88 | 4.38 | 1.96 | 23 | 7.71 | 2.25 | 26.37 | 250 | 7.31 | 33.96 | 4.13 | 2.31 | 26.58 | 151 | 0.58 |
| | | | | | | | | | 300 | 6.46 | 33.95 | 3.35 | 2.51 | 26.69 | 141 | 0.66 |
| 194b) | 8.18 | 33.91 | 4.46 | 1.93 | 31 | 7.71 | 2.26 | 26.41 | 400 | 5.45 | 33.99 | 1.94 | 3.17 | 26.84 | 126 | 0.79 |
| 243 | 7.45 | 33.96 | 4.24 | 2.30 | 51 | 7.69 | 2.26 | 26.56 | 500 | 4.87 | 34.07 | 1.18 | 3.43 | 26.98 | 114 | 0.91 |
| 292 | 6.56 | 33.95 | 3.49 | 2.43 | 50 | 7.61 | 2.29 | 26.67 | 600 | 4.50 | 34.15 | 0.69 | 3.81 | 27.08 | 105 | 1.02 |
| | | | | | | | | | 700 | 4.13 | 34.23 | 0.44 | 3.77 | 27.18 | 96 | 1.12 |
| 396a) | 5.48 | 33.99 | 1.98 | 3.17 | 59 | 7.43 | 2.29 | 26.84 | 800 | 3.81 | 34.30 | 0.35 | 3.69 | 27.27 | 88 | 1.21 |
| | | | | | | | | | 1000 | 3.32 | 34.41 | 0.35 | 3.79 | 27.41 | 76 | 1.38 |
| 488b) | 4.96 | 34.05 | 1.27 | 3.49 | 81 | 7.39 | 2.33 | 26.95 | 1200 | 2.99 | 34.49 | 0.48 | 3.46 | 27.50 | 67 | 1.52 |
| | | | | | | | | | 1500 | 2.52 | 34.55 | 0.91 | 3.55 | 27.59 | 59 | 1.71 |
| 496a) | 4.84 | 34.06 | 1.19 | 3.27 | 87 | 7.32 | 2.33 | 26.97 | 2000 | 1.94 | 34.61 | 1.62 | 3.39 | 27.69 | 50 | 1.98 |
| | | | | | | | | | 2500 | 1.73 | 34.65 | 2.02 | 3.22 | 27.73 | 46 | 2.22 |
| 585b) | 4.56 | 34.14 | 0.74 | 3.79 | 114 | 7.33 | 2.31 | 27.07 | 3000 | 1.59 | 34.67 | 2.46 | 3.14 | 27.76 | 45 | 2.45 |
| 683 | 4.19 | 34.22 | 0.46 | 3.82 | 123 | 7.31 | 2.38 | 27.17 | | | | | | | | |
| 781 | 3.87 | 34.29 | 0.35 | 3.64 | 129 | 7.30 | 2.39 | 27.26 | | | | | | | | |
| 975 | 3.36 | 34.40 | 0.35 | 3.87 | 150 | 7.31 | 2.41 | 27.39 | | | | | | | | |
| 1168 | 3.04 | 34.48 | 0.44 | 3.44 | 169 | 7.40 | 2.43 | 27.49 | | | | | | | | |
| 1455 | 2.58 | 34.54 | 0.85 | 3.82 | 145 | 7.30 | 2.44 | 27.58 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| (continued from preceding page) | | | | | | | | | | | | | | | | |
| 1477c) | 2.56 | 34.54 | 0.85 | 3.31 | 182 | 7.40 | 2.44 | 27.58 | | | | | | | | |
| 1974 | 1.95 | 34.61 | 1.60 | 3.40 | 188 | 7.43 | 2.44 | 27.69 | | | | | | | | |
| 2475 | 1.74 | 34.65 | 1.99 | 3.24 | 164 | 7.52 | 2.44 | 27.73 | | | | | | | | |
| 2976 | 1.59 | 34.67 | 2.46 | 3.10 | 177 | 7.53 | 2.45 | 27.76 | | | | | | | | |
| 3476 | 1.56 | 34.68 | 2.68 | 3.30 | 185 | 7.57 | 2.45 | 27.77 | | | | | | | | |
| 3675 | 1.55 | 34.68 | 2.84 | 3.01 | 185 | 7.61 | - | 27.77 | | | | | | | | |
| 3704 | 1.56 | - | - | - | - | - | - | | | | | | | | | |
| a) First cast; wire angle, 08°. | | | | | | | | | | | | | | | | |
| b) Second cast; wire angle, 13°. | | | | | | | | | | | | | | | | |
| c) Third cast; wire angle, 11°. | | | | | | | | | | | | | | | | |
| BROWN BEAR; July 21, 1958; 0700 GCT; 40°07'N, 130°46'W; sounding, 4389 m; wind, 030°, force 5; weather, cloudy; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 17.04 | 32.83 | 5.54 | 0.41 | 25 | | | 23.86 | 0 | 17.04 | 32.83 | 5.54 | 0.41 | 23.86 | 405 | 0.00 |
| 10 | 17.04 | 32.83 | 5.49 | 0.42 | 26 | | | 23.86 | 10 | 17.04 | 32.83 | 5.49 | 0.42 | 23.86 | 405 | 0.04 |
| 20 | 17.03 | 32.83 | 5.47 | 0.48 | 21 | | | 23.87 | 20 | 17.03 | 32.83 | 5.47 | 0.48 | 23.87 | 405 | 0.08 |
| 30 | 16.92 | 32.83 | 5.43 | 0.95 | 16 | | | 23.89 | 30 | 16.92 | 32.83 | 5.43 | 0.95 | 23.89 | 403 | 0.12 |
| 49 | 11.81 | 32.82 | 6.44 | 0.65 | 44 | | | 24.95 | 50 | 11.77 | 32.82 | 6.41 | 0.68 | 24.96 | 302 | 0.19 |
| 73 | 10.70 | 32.87 | 5.82 | 1.21 | 28 | | | 25.19 | 75 | 10.55 | 32.91 | 5.77 | 1.24 | 25.25 | 274 | 0.26 |
| 98 | 9.17 | 33.24 | 5.32 | 1.48 | 30 | | | 25.74 | 100 | 9.08 | 33.25 | 5.31 | 1.50 | 25.76 | 226 | 0.33 |
| 122 | 8.38 | 33.39 | 5.19 | 1.64 | 22 | | | 25.98 | 150 | 8.12 | 33.56 | 5.00 | 1.80 | 26.15 | 190 | 0.43 |
| 146 | 8.12 | 33.55 | 5.03 | 1.71 | 32 | | | 26.14 | 200 | 7.58 | 33.90 | 4.42 | 1.98 | 26.49 | 158 | 0.52 |
| 170 | 8.02 | 33.70 | 4.77 | 1.93 | 56 | | | 26.27 | 250 | 6.86 | 33.94 | 3.85 | 2.79 | 26.62 | 146 | 0.59 |
| | | | | | | | | | 300 | 6.19 | 33.94 | 3.08 | 3.06 | 26.71 | 138 | 0.66 |
| 184b) | 7.82 | 33.86 | 4.51 | 1.69 | - | | | 26.43 | 400 | 5.26 | 33.99 | 1.78 | 3.06 | 26.87 | 124 | 0.80 |
| 231 | 7.13 | 33.94 | 4.14 | 2.49 | 83 | | | 26.59 | 500 | 4.79 | 34.09 | 1.04 | 3.47 | 27.00 | 112 | 0.91 |
| 278 | 6.49 | 33.94 | 3.44 | 3.12 | 94 | | | 26.67 | 600 | 4.43 | 34.17 | 0.67 | 3.56 | 27.10 | 103 | 1.02 |
| | | | | | | | | | 700 | 4.26 | 34.27 | 0.40 | 3.53 | 27.20 | 94 | 1.12 |
| 389a) | 5.31 | 33.98 | 1.89 | 3.02 | 100 | | | 26.85 | 800 | 3.99 | 34.34 | 0.30 | 3.86 | 27.28 | 87 | 1.21 |
| | | | | | | | | | 1000 | 3.42 | 34.42 | 0.36 | 3.86 | 27.40 | 76 | 1.37 |
| 464b) | 5.00 | 34.04 | 1.42 | 3.42 | - | | | 26.94 | 1200 | 2.99 | 34.48 | 0.54 | 3.58 | 27.49 | 68 | 1.52 |
| 486a) | 4.86 | 34.10 | 0.88 | 3.24 | 112 | | | 27.00 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 556b) | 4.54 | 34.14 | 0.80 | 3.64 | 131 | | | 27.07 | | | | | | | | |
| 649 | 4.32 | 34.21 | 0.54 | 3.52 | 130 | | | 27.15 | | | | | | | | |
| 743 | 4.18 | 34.31 | 0.32 | 3.57 | 139 | | | 27.24 | | | | | | | | |
| 929 | 3.60 | 34.40 | 0.31 | 4.14 | 155 | | | 27.37 | | | | | | | | |
| 1114 | 3.16 | 34.46 | 0.46 | 3.61 | - | | | 27.46 | | | | | | | | |
| 1395 | 2.68 | 34.53 | 0.77 | 4.00 | 180 | | | 27.56 | | | | | | | | |

a) Second cast; wire angle, 15°.
b) First cast; wire angle, 20°.

BROWN BEAR; July 22, 1958; 0700 GCT; 39°23'N, 128°25'W; sounding, 4115 m; wind, 350°, force 5; weather, rain; sea, rough.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 16.91 | 32.89 | 5.58 | 0.74 | 0 | 7.97 | 2.13 | 23.94 | 0 | 16.91 | 32.89 | 5.58 | 0.74 | 23.94 | 398 | 0.00 |
| 10 | 16.90 | 32.89 | 5.52 | 0.63 | 0 | 7.97 | 2.17 | 23.94 | 10 | 16.90 | 32.89 | 5.52 | 0.63 | 23.94 | 398 | 0.04 |
| 20 | 16.90 | 32.89 | 5.50 | 0.73 | 0 | 7.97 | 2.17 | 23.94 | 20 | 16.90 | 32.89 | 5.50 | 0.73 | 23.94 | 398 | 0.08 |
| 30 | 16.84 | 32.89 | 5.53 | 0.66 | 0 | 7.99 | 2.18 | 23.96 | 30 | 16.84 | 32.89 | 5.53 | 0.66 | 23.96 | 397 | 0.12 |
| 50 | 12.12 | 32.81 | 6.38 | 0.75 | 0 | 7.96 | 2.16 | 24.89 | 50 | 12.12 | 32.81 | 6.38 | 0.75 | 24.89 | 308 | 0.19 |
| 74 | 11.18 | 32.96 | 5.88 | 0.85 | 0 | 7.92 | 2.17 | 25.18 | 75 | 11.13 | 32.97 | 5.85 | 0.87 | 25.19 | 280 | 0.26 |
| 99 | 9.99 | 33.24 | 5.33 | 1.33 | 0 | 7.86 | 2.19 | 25.60 | 100 | 9.94 | 33.25 | 5.32 | 1.34 | 25.62 | 240 | 0.33 |
| 148 | 8.26 | 33.65 | 4.80 | 1.65 | 14 | 7.77 | 2.23 | 26.20 | 150 | 8.25 | 33.66 | 4.79 | 1.66 | 26.21 | 185 | 0.44 |
| 198 | 7.80 | 33.91 | 4.36 | 1.98 | 30 | 7.72 | 2.25 | 26.47 | 200 | 7.84 | 33.88 | 4.44 | 1.86 | 26.44 | 163 | 0.52 |
| | | | | | | | | | 250 | 7.18 | 33.94 | 3.97 | 2.10 | 26.58 | 150 | 0.60 |
| 207b) | 7.84 | 33.87 | 4.47 | 1.76 | 31 | 7.61 | 2.24 | 26.43 | 300 | 6.48 | 33.94 | 3.18 | 2.33 | 26.68 | 142 | 0.67 |
| 238 | 7.48 | 33.94 | 4.26 | 1.95 | 46 | 7.64 | 2.26 | 26.54 | 400 | 5.42 | 33.98 | 1.87 | 2.37 | 26.84 | 126 | 0.81 |
| | | | | | | | | | 500 | 4.78 | 34.07 | 1.02 | 2.73 | 26.99 | 113 | 0.93 |
| 247a) | 7.14 | 33.94 | 3.92 | 2.01 | - | 7.63 | 2.25 | 26.59 | 600 | 4.51 | 34.19 | 0.62 | 3.36 | 27.11 | 102 | 1.04 |
| | | | | | | | | | 700 | 4.19 | 34.27 | 0.36 | 3.57 | 27.21 | 93 | 1.13 |
| 271b) | 6.86 | 33.94 | 3.65 | 2.38 | 42 | 7.57 | 2.26 | 26.62 | 800 | 3.89 | 34.34 | 0.37 | 3.54 | 27.29 | 86 | 1.22 |
| | | | | | | | | | 1000 | 3.43 | 34.45 | 0.43 | 3.71 | 27.43 | 74 | 1.38 |
| 494a) | 4.79 | 34.06 | 1.05 | 2.68 | 70 | 7.42 | 2.36 | 26.98 | 1200 | 2.99 | 34.51 | 0.57 | 3.70 | 27.52 | 66 | 1.52 |
| 601c) | 4.51 | 34.19 | 0.62 | 3.36 | 81 | 7.30 | 2.36 | 27.11 | | | | | | | | |
| 706d) | 4.17 | 34.27 | 0.35 | 3.58 | 100 | 7.24 | 2.36 | 27.21 | | | | | | | | |
| 805 | 3.88 | 34.34 | 0.37 | 3.55 | 114 | 7.30 | 2.37 | 27.30 | | | | | | | | |
| 891e) | 3.72 | 34.39 | 0.39 | 3.80 | 123 | 7.25 | 2.37 | 27.35 | | | | | | | | |
| 1089 | 3.22 | 34.48 | 0.48 | 3.68 | 142 | 7.27 | 2.41 | 27.47 | | | | | | | | |
| 1286 | 2.84 | 34.52 | 0.66 | 3.75 | 159 | 7.34 | 2.43 | 27.54 | | | | | | | | |

a) Seventh cast; wire angle, 05°.
b) First cast; wire angle, 34°.
c) Fourth cast; wire angle, 03°.
d) Fifth cast; wire angle, 05°.
e) Sixth cast; wire angle, 06°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 23, 1958; 0800 GCT; 38°49'N, 126°03'W; sounding, 4096 m; wind, 340°, force 5; weather, overcast; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 14.89 | 32.97 | 5.86 | 0.61 | 42 | 7.99 | 2.19 | 24.45 | 0 | 14.89 | 32.97 | 5.86 | 0.61 | 24.45 | 349 | 0.00 |
| 10 | 14.88 | 32.96 | 5.84 | 0.83 | 34 | 7.97 | 2.17 | 24.45 | 10 | 14.88 | 32.96 | 5.84 | 0.83 | 24.45 | 350 | 0.04 |
| 20 | 14.86 | 32.96 | 5.82 | 0.59 | 57 | 7.98 | 2.17 | 24.45 | 20 | 14.86 | 32.96 | 5.82 | 0.59 | 24.45 | 349 | 0.07 |
| 30 | 14.50 | 32.98 | 5.77 | 0.70 | 53 | 7.99 | 2.20 | 24.54 | 30 | 14.50 | 32.98 | 5.77 | 0.70 | 24.54 | 341 | 0.10 |
| 50 | 11.92 | 33.15 | 6.05 | 0.92 | 34 | 7.90 | 2.20 | 25.19 | 50 | 11.92 | 33.15 | 6.05 | 0.92 | 25.19 | 280 | 0.17 |
| 74 | 10.91 | 33.29 | 6.20 | 1.36 | 37 | 7.86 | 2.22 | 25.48 | 75 | 10.86 | 33.30 | 6.11 | 1.37 | 25.50 | 251 | 0.23 |
| 99 | 9.67 | 33.53 | 4.36 | 1.71 | 56 | 7.80 | 2.24 | 25.88 | 100 | 9.62 | 33.54 | 4.32 | 1.74 | 25.90 | 213 | 0.29 |
| 124 | 8.69 | 33.66 | 3.60 | 2.05 | 66 | 7.76 | 2.26 | 26.14 | 150 | 8.22 | 33.77 | 3.40 | 1.81 | 26.30 | 176 | 0.39 |
| 149 | 8.22 | 33.76 | 3.44 | 1.79 | 72 | 7.64 | 2.27 | 26.29 | 200 | 7.76 | 33.98 | 2.33 | 2.52 | 26.53 | 155 | 0.47 |
| 174 | 8.06 | 33.95 | 2.41 | 2.19 | 85 | 7.52 | 2.26 | 26.46 | 250 | 7.13 | 34.04 | 1.90 | 2.83 | 26.67 | 142 | 0.54 |
| | | | | | | | | | 300 | 6.63 | 34.07 | 1.55 | 2.82 | 26.76 | 134 | 0.61 |
| 192b) | 7.96 | 33.98 | 2.48 | 2.42 | 112 | 7.52 | 2.26 | 26.50 | 400 | 5.89 | 34.11 | 1.15 | 2.88 | 26.89 | 123 | 0.74 |
| 238 | 7.26 | 34.03 | 2.03 | 2.82 | 123 | 7.43 | 2.26 | 26.64 | 500 | 5.45 | 34.22 | 0.66 | 3.30 | 27.03 | 110 | 0.86 |
| 284 | 6.78 | 34.07 | 1.58 | 2.84 | 142 | 7.41 | 2.32 | 26.74 | 600 | 4.75 | 34.25 | 0.54 | 3.59 | 27.13 | 100 | 0.96 |
| | | | | | | | | | 700 | 4.28 | 34.28 | 0.36 | 3.60 | 27.21 | 94 | 1.06 |
| 396a) | 5.90 | 34.10 | 1.19 | 2.87 | - | 7.40 | 2.33 | 26.88 | 800 | 4.06 | 34.34 | 0.33 | 3.48 | 27.28 | 88 | 1.15 |
| | | | | | | | | | 1000 | 3.61 | 34.44 | 0.41 | 3.29 | 27.40 | 77 | 1.32 |
| 471b) | 5.54 | 34.19 | 0.65 | 3.48 | 146 | 7.34 | 2.35 | 26.99 | 1200 | 3.15 | 34.50 | 0.70 | 3.89 | 27.49 | 68 | 1.46 |
| | | | | | | | | | 1500 | 2.66 | 34.55 | 0.98 | 2.94 | 27.58 | 61 | 1.65 |
| 495a) | 5.53 | 34.21 | 0.59 | 2.92 | - | 7.37 | 2.35 | 27.01 | 2000 | 2.02 | 34.62 | 1.47 | 3.61 | 27.69 | 50 | 1.93 |
| | | | | | | | | | 2500 | 1.75 | 34.65 | 1.62 | 3.18 | 27.73 | 47 | 2.17 |
| 564b) | 5.06 | 34.26 | 0.69 | 3.57 | 144 | 7.30 | 2.35 | 27.10 | 3000 | 1.61 | 34.67 | 2.58 | 3.07 | 27.76 | 45 | 2.40 |
| 658 | 4.39 | 34.25 | 0.38 | 3.60 | 146 | 7.33 | 2.38 | 27.17 | | | | | | | | |
| 753 | 4.15 | 34.31 | 0.35 | 3.57 | 139 | 7.27 | 2.37 | 27.24 | | | | | | | | |
| 944 | 3.76 | 34.42 | 0.34 | 3.30 | 156 | 7.29 | 2.41 | 27.37 | | | | | | | | |
| 1135 | 3.28 | 34.49 | 0.57 | 3.30 | 187 | 7.36 | 2.42 | 27.47 | | | | | | | | |
| 1423 | 2.78 | 34.53 | 0.91 | 3.40 | 204 | 7.33 | 2.43 | 27.55 | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 1467c) | 2.72 | 34.54 | 0.91 | 2.84 | 189 | 7.33 | 2.44 | 27.57 | | | | | | | | |
| 1948 | 2.06 | 34.61 | 1.55 | 3.69 | 213 | 7.41 | 2.45 | 27.68 | | | | | | | | |
| 2431 | 1.78 | 34.65 | 1.40 | 3.17 | 207 | 7.47 | 2.46 | 27.73 | | | | | | | | |
| 2917 | 1.62 | 34.67 | 2.54 | 3.14 | 212 | 7.49 | 2.46 | 27.76 | | | | | | | | |
| 3412 | 1.54 | 34.68 | 2.80 | 2.86 | 204 | 7.50 | 2.46 | 27.77 | | | | | | | | |
| 3709 | 1.50 | 34.69 | 2.99 | 2.82 | 205 | 7.57 | 2.46 | 27.78 | | | | | | | | |
| 3809 | 1.49 | 34.69 | 3.05 | 2.92 | 218 | 7.57 | 2.46 | 27.78 | | | | | | | | |

a) Fourth cast; wire angle, 03°.
b) Second cast; wire angle, 10°.
c) Third cast; wire angle, 15°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; July 26, 1958; 2300 GCT; 37°04'N, 123°44'W; sounding, 3493 m; wind, 290°, force 3; weather, overcast; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 16.45 | 33.06 | 5.36 | 1.30 | 0 | 8.03 | 2.33 | 24.18 | 0 | 16.45 | 33.06 | 5.36 | 1.30 | 24.18 | 375 | 0.00 |
| 10 | 16.36 | 33.06 | 4.97 | 1.20 | 0 | 8.08 | 2.30 | 24.20 | 10 | 16.36 | 33.06 | 4.97 | 1.20 | 24.20 | 374 | 0.04 |
| 20 | 15.56 | 33.03 | 5.64 | 0.86 | 0 | 8.04 | 2.20 | 24.35 | 20 | 15.56 | 33.03 | 5.64 | 0.86 | 24.35 | 359 | 0.07 |
| 29 | 13.68 | 33.03 | 6.02 | 0.84 | 0 | 8.03 | 2.22 | 24.75 | 30 | 13.52 | 33.04 | 5.98 | 0.86 | 24.79 | 317 | 0.11 |
| 49 | 11.00 | 33.23 | 5.20 | 1.17 | 14 | 7.88 | 2.21 | 25.42 | 50 | 10.91 | 33.24 | 5.15 | 1.19 | 25.44 | 256 | 0.16 |
| 73 | 9.39 | 33.47 | 4.21 | 1.64 | 11 | 7.74 | 2.25 | 25.88 | 75 | 9.34 | 33.48 | 4.18 | 1.66 | 25.90 | 213 | 0.22 |
| 98 | 8.82 | 33.62 | 3.79 | 1.88 | 18 | 7.72 | 2.26 | 26.09 | 100 | 8.79 | 33.63 | 3.74 | 1.91 | 26.10 | 194 | 0.28 |
| 123 | 8.48 | 33.77 | 3.19 | 2.18 | 27 | 7.66 | 2.26 | 26.26 | 150 | 8.15 | 33.91 | 2.73 | 2.23 | 26.42 | 165 | 0.36 |
| 147 | 8.19 | 33.90 | 2.74 | 2.19 | 29 | 7.62 | 2.26 | 26.40 | 200 | 7.75 | 34.04 | 1.83 | 2.33 | 26.58 | 150 | 0.44 |
| 171 | 7.94 | 33.96 | 2.52 | 2.38 | 32 | 7.55 | 2.26 | 26.49 | 250 | 7.38 | 34.08 | 1.52 | 2.78 | 26.66 | 143 | 0.52 |
| | | | | | | | | | 300 | 6.98 | 34.11 | 1.23 | 2.75 | 26.74 | 136 | 0.59 |
| 196b) | 7.78 | 34.04 | 1.86 | 2.26 | 33 | 7.53 | 2.35 | 26.57 | 400 | 6.08 | 34.18 | 0.75 | 3.22 | 26.92 | 120 | 0.72 |
| 244 | 7.42 | 34.08 | 1.55 | 2.81 | 30 | 7.49 | 2.29 | 26.66 | 500 | 5.45 | 34.25 | 0.54 | 3.40 | 27.05 | 108 | 0.83 |
| 292 | 7.06 | 34.11 | 1.29 | 2.70 | 47 | 7.50 | 2.34 | 26.73 | 600 | 4.94 | 34.31 | 0.33 | 3.44 | 27.16 | 98 | 0.93 |
| | | | | | | | | | 700 | 4.53 | 34.37 | 0.27 | 3.22 | 27.25 | 90 | 1.03 |
| 392a) | 6.14 | 34.17 | 0.76 | 3.21 | 65 | 7.41 | 2.33 | 26.90 | 800 | 4.21 | 34.40 | 0.29 | 3.24 | 27.31 | 85 | 1.11 |
| | | | | | | | | | 1000 | 3.63 | 34.46 | 0.43 | 3.23 | 27.42 | 75 | 1.27 |
| 482b) | 5.58 | 34.24 | 0.58 | 3.19 | 76 | 7.40 | 2.39 | 27.03 | 1200 | 3.14 | 34.52 | 0.64 | 2.91 | 27.51 | 67 | 1.42 |
| | | | | | | | | | 1500 | 2.65 | 34.57 | 1.04 | 3.50 | 27.60 | 59 | 1.60 |
| 490a) | 5.48 | 34.24 | 0.57 | 3.54 | 75 | 7.37 | 2.37 | 27.04 | 2000 | 2.04 | 34.63 | 1.66 | 3.40 | 27.69 | 50 | 1.88 |
| | | | | | | | | | 2500 | 1.75 | 34.67 | 2.24 | 3.15 | 27.75 | 45 | 2.12 |
| 576b) | 5.06 | 34.29 | 0.36 | 3.49 | 84 | 7.33 | 2.37 | 27.13 | 3000 | 1.62 | 34.68 | 2.66 | 2.93 | 27.77 | 44 | 2.34 |
| 668 | 4.64 | 34.36 | 0.27 | 3.30 | 90 | 7.43 | 2.42 | 27.23 | | | | | | | | |
| 762 | 4.33 | 34.39 | 0.28 | 3.14 | 97 | 7.36 | 2.41 | 27.29 | | | | | | | | |
| 950 | 3.76 | 34.45 | 0.37 | 3.37 | 111 | 7.38 | 2.43 | 27.40 | | | | | | | | |
| 1140 | 3.30 | 34.50 | 0.59 | 2.99 | 126 | 7.43 | 2.45 | 27.48 | | | | | | | | |
| 1430 | 2.71 | 34.56 | 0.93 | 3.19 | 140 | 7.38 | 2.44 | 27.58 | | | | | | | | |
| 1529c) | 2.62 | 34.57 | 1.09 | 3.60 | 142 | 7.37 | 2.44 | 27.60 | | | | | | | | |
| 2028 | 2.01 | 34.63 | 1.69 | 3.39 | 158 | 7.43 | 2.44 | 27.70 | | | | | | | | |
| 2527 | 1.74 | 34.67 | 2.27 | 3.14 | 162 | 7.48 | 2.44 | 27.75 | | | | | | | | |
| 3026 | 1.62 | 34.68 | 2.67 | 2.91 | 160 | 7.53 | 2.45 | 27.77 | | | | | | | | |
| 3275 | 1.58 | 34.68 | 2.73 | 2.64 | 165 | 7.55 | 2.45 | 27.77 | | | | | | | | |
| 3375 | 1.58 | 34.69 | 2.74 | 2.64 | - | 7.53 | 2.45 | 27.78 | | | | | | | | |

a) First cast; wire angle, 11°.
b) Second cast; wire angle, 11°.
c) Third cast; wire angle, 19°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 4, 1958; 0200 GCT; 33°55'N, 126°10'W; sounding, 4572 m; wind, 360°, force 7; weather, partly cloudy; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 18.60 | 33.14 | 5.19 | 0.86 | 0 | 8.13 | 2.30 | 23.72 | 0 | 18.60 | 33.14 | 5.19 | 0.86 | 23.72 | 418 | 0.00 |
| 10 | 18.62 | 33.13 | 4.52 | 0.56 | 0 | 8.13 | 2.31 | 23.71 | 10 | 18.62 | 33.13 | 4.52 | 0.56 | 23.71 | 420 | 0.04 |
| 20 | 18.58 | 33.14 | 5.31 | 0.39 | 0 | 8.12 | 2.23 | 23.73 | 20 | 18.58 | 33.14 | 5.31 | 0.39 | 23.73 | 419 | 0.08 |
| 30 | 18.14 | 33.12 | 5.38 | 0.87 | 0 | 8.10 | 2.25 | 23.82 | 30 | 18.14 | 33.12 | 5.38 | 0.87 | 23.82 | 410 | 0.12 |
| 50 | 15.40 | 33.30 | 5.84 | 0.55 | 0 | 8.09 | 2.25 | 24.60 | 50 | 15.40 | 33.30 | 5.84 | 0.55 | 24.60 | 337 | 0.20 |
| 75 | 14.16 | 33.24 | 5.80 | 0.74 | 0 | 8.07 | 2.23 | 24.82 | 75 | 14.16 | 33.24 | 5.80 | 0.74 | 24.82 | 316 | 0.28 |
| 100 | 12.02 | 33.28 | 5.17 | 0.87 | 0 | 7.99 | 2.24 | 25.27 | 100 | 12.02 | 33.28 | 5.17 | 0.87 | 25.27 | 273 | 0.36 |
| 125 | 9.75 | 33.39 | 4.57 | 1.28 | 4 | 7.88 | 2.25 | 25.76 | 150 | 9.06 | 33.53 | 4.45 | 1.44 | 25.98 | 206 | 0.48 |
| 149 | 9.06 | 33.53 | 4.45 | 1.43 | 8 | 7.85 | 2.26 | 25.98 | 200 | 8.16 | 33.91 | 3.31 | 1.96 | 26.42 | 166 | 0.57 |
| 174 | 8.72 | 33.68 | 4.09 | 1.70 | 14 | 7.80 | 2.28 | 26.15 | 250 | 7.45 | 34.01 | 2.48 | 2.16 | 26.60 | 149 | 0.65 |
| | | | | | | | | | 300 | 6.86 | 34.03 | 1.96 | 2.28 | 26.70 | 140 | 0.72 |
| 186b) | 8.32 | 33.86 | 3.61 | 1.85 | 18 | 7.70 | 2.29 | 26.35 | 400 | 6.31 | 34.10 | 1.17 | 2.67 | 26.82 | 129 | 0.85 |
| 243 | 7.58 | 34.01 | 2.56 | 2.17 | 26 | 7.62 | 2.28 | 26.58 | 500 | 5.55 | 34.21 | 0.58 | 2.78 | 27.01 | 112 | 0.98 |
| 281 | 6.94 | 34.02 | 2.13 | 2.17 | 38 | 7.60 | 2.32 | 26.68 | 600 | 5.03 | 34.30 | 0.35 | 2.95 | 27.14 | 100 | 1.08 |
| | | | | | | | | | 700 | 4.66 | 34.37 | 0.30 | 2.88 | 27.24 | 92 | 1.18 |
| 398a) | 6.33 | 34.10 | 1.19 | 2.67 | 51 | 7.51 | 2.34 | 26.82 | 800 | 4.33 | 34.42 | 0.35 | 2.93 | 27.31 | 85 | 1.26 |
| | | | | | | | | | 1000 | 3.77 | 34.49 | 0.51 | 2.93 | 27.43 | 75 | 1.42 |
| 485b) | 5.63 | 34.22 | 0.58 | 2.71 | 66 | 7.50 | 2.38 | 27.00 | 1200 | 3.30 | 34.53 | 0.81 | 3.03 | 27.50 | 68 | 1.57 |
| | | | | | | | | | 1500 | 2.70 | 34.58 | 1.10 | 2.84 | 27.60 | 59 | 1.76 |
| 498a) | 5.56 | 34.17 | 0.63 | 2.78 | 67 | 7.54 | 2.39 | 26.97 | 2000 | 2.00 | 34.64 | 1.72 | 2.79 | 27.71 | 49 | 2.03 |
| | | | | | | | | | 2500 | 1.71 | 34.66 | 2.23 | 3.37 | 27.74 | 45 | 2.26 |
| 582b) | 5.10 | 34.28 | 0.38 | 2.99 | 76 | 7.46 | 2.39 | 27.11 | 3000 | 1.56 | 34.69 | 2.57 | 2.70 | 27.78 | 43 | 2.48 |
| 678 | 4.74 | 34.36 | 0.29 | 2.86 | 97 | 7.52 | 2.42 | 27.22 | 4000 | 1.48 | 34.70 | 3.28 | 2.60 | 27.79 | 44 | 2.92 |
| 775 | 4.41 | 34.41 | 0.34 | 2.93 | 100 | 7.46 | 2.41 | 27.30 | | | | | | | | |
| 968 | 3.84 | 34.48 | 0.45 | 2.93 | 110 | 7.52 | 2.42 | 27.41 | | | | | | | | |
| 1164 | 3.40 | 34.52 | - | 2.99 | 119 | 7.49 | 2.45 | 27.49 | | | | | | | | |
| 1289c) | 3.08 | 34.55 | 0.91 | 3.07 | 126 | 7.50 | 2.44 | 27.54 | | | | | | | | |
| 1463b) | 2.77 | 34.57 | 1.05 | 2.85 | 131 | 7.55 | 2.43 | 27.58 | | | | | | | | |
| 1578c) | 2.56 | 34.59 | 1.21 | 2.83 | 139 | 7.56 | 2.45 | 27.62 | | | | | | | | |
| 2055 | 1.95 | 34.64 | 1.78 | 2.82 | 153 | 7.42 | 2.46 | 27.71 | | | | | | | | |
| 2530 | 1.70 | 34.66 | 2.26 | 3.37 | 159 | 7.53 | 2.46 | 27.74 | | | | | | | | |
| 3015 | 1.56 | 34.69 | 2.58 | 2.69 | 160 | 7.60 | 2.46 | 27.78 | | | | | | | | |
| 3496 | 1.49 | 34.69 | 2.99 | 2.86 | 155 | 7.60 | 2.46 | 27.78 | | | | | | | | |
| 3996 | 1.48 | 34.70 | 3.28 | 2.60 | 150 | 7.60 | 2.46 | 27.79 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 4450d) | 1.51 | 34.70 | 3.32 | 2.48 | 143 | 7.63 | 2.47 | 27.79 | | | | | | | | |
| 4550 | 1.52 | 34.70 | 3.34 | 2.54 | 144 | 7.64 | 2.46 | 27.79 | | | | | | | | |

a) Fourth cast; wire angle, 02°.
b) First cast; wire angle, 17°.
c) Second cast; wire angle, 12°.
d) Third cast; wire angle, 08°.

BROWN BEAR; August 4, 1958; 2200 GCT; 32°55'N, 127°39'W; sounding, 4554 m; wind, 360°, force 4; weather, partly cloudy; sea, moderate.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 19.40 | 33.35 | 5.05 | 0.79 | 23.68 | 0 | 19.40 | 33.35 | 5.05 | 0.79 | 23.68 | 422 | 0.00 |
| 10 | 19.34 | 33.34 | 5.12 | 0.88 | 23.69 | 10 | 19.34 | 33.34 | 5.12 | 0.88 | 23.69 | 422 | 0.04 |
| | | | | | | 20 | 19.32 | 33.34 | 5.26 | 0.88 | 23.69 | 422 | 0.08 |
| 20b) | 19.32 | 33.34 | 5.26 | 0.88 | 23.69 | 30 | 18.93 | 33.76 | 5.40 | 0.56 | 24.11 | 382 | 0.12 |
| 30 | 18.93 | 33.76 | 5.40 | 0.56 | 24.11 | 50 | 16.26 | 33.71 | 5.60 | 0.53 | 24.72 | 325 | 0.20 |
| | | | | | | 75 | 15.14 | 33.67 | 5.80 | 0.34 | 24.94 | 305 | 0.27 |
| 48c) | 16.38 | 33.71 | 5.57 | 0.57 | 24.69 | 100 | 14.63 | 33.62 | 5.68 | 0.64 | 25.01 | 299 | 0.35 |
| | | | | | | 150 | 11.50 | 33.67 | 5.13 | 1.12 | 25.67 | 236 | 0.48 |
| 74b) | 15.15 | 33.68 | 5.80 | 0.32 | 24.94 | 200 | 9.21 | 33.73 | 4.63 | 1.95 | 26.11 | 195 | 0.59 |
| 99 | 14.64 | 33.62 | - | 0.66 | 25.01 | 250 | 8.23 | 33.94 | 3.93 | 2.54 | 26.43 | 165 | 0.68 |
| 123 | 13.78 | 33.69 | 5.47 | 0.50 | 25.24 | 300 | 7.40 | 33.98 | 3.12 | 2.21 | 26.58 | 151 | 0.76 |
| 148 | 11.69 | 33.68 | 5.13 | 1.14 | 25.64 | 400 | 6.06 | 34.05 | 1.64 | 2.62 | 26.82 | 129 | 0.90 |
| 173 | 9.90 | 33.63 | 5.03 | 1.17 | 25.92 | 500 | 5.47 | 34.15 | 0.86 | 2.89 | 26.97 | 116 | 1.02 |
| 197 | 9.30 | 33.71 | 4.65 | 1.63 | 26.08 | 600 | 4.94 | 34.24 | 0.51 | 3.14 | 27.10 | 104 | 1.13 |
| | | | | | | 700 | 4.52 | 34.32 | 0.38 | 3.34 | 27.21 | 94 | 1.23 |
| 199c) | 9.21 | 33.75 | 4.66 | 2.13 | 26.13 | 800 | 4.21 | 34.38 | 0.39 | 3.57 | 27.29 | 86 | 1.32 |
| | | | | | | 1000 | 3.68 | 34.47 | 0.55 | 3.60 | 27.42 | 75 | 1.48 |
| 238d) | 8.42 | 33.92 | 4.11 | 2.71 | 26.38 | 1200 | 3.16 | 34.52 | 0.73 | 2.92 | 27.51 | 67 | 1.62 |
| 285 | 7.63 | 33.98 | 3.32 | 2.09 | 26.55 | | | | | | | | |
| | | | | | | | | | | | | | |
| 296b) | 7.58 | 33.97 | 3.30 | 2.25 | 26.55 | | | | | | | | |
| | | | | | | | | | | | | | |
| 380d) | 6.18 | 34.03 | 1.87 | 2.51 | 26.79 | | | | | | | | |
| 474 | 5.63 | 34.13 | 0.99 | 2.92 | 26.93 | | | | | | | | |
| 569 | 5.06 | 34.22 | 0.58 | 3.23 | 27.07 | | | | | | | | |
| | | | | | | | | | | | | | |
| 592b) | 5.02 | 34.23 | 0.54 | 2.77 | 27.08 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

(continued from preceding page)

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 664d) | 4.66 | 34.29 | 0.40 | 3.42 | | | | 27.17 | | | | | | | | |
| 759 | 4.31 | 34.36 | 0.36 | 3.30 | | | | 27.27 | | | | | | | | |
| 952 | 3.82 | 34.45 | - | 3.95 | | | | 27.39 | | | | | | | | |
| 1145 | 3.29 | 34.51 | 0.68 | 2.98 | | | | 27.49 | | | | | | | | |
| 1440 | 2.74 | 34.56 | 0.97 | 3.77 | | | | 27.58 | | | | | | | | |

a) Third cast; wire angle, missing.
b) Fourth cast; wire angle, missing.
c) First cast; wire angle, 14°.
d) Second cast; wire angle, 21°.

BROWN BEAR; August 5, 1958; 1900 GCT; 32°05'N, 128°54'W; sounding, 4243 m; wind, 020°, force 5; weather, partly cloudy; sea, moderate.

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 20.09 | 33.58 | 4.98 | 0.51 | 0 | 8.13 | 2.25 | 23.68 | 0 | 20.09 | 33.58 | 4.98 | 0.51 | 23.68 | 423 | 0.00 |
| 10 | 20.09 | 33.58 | 5.14 | 0.93 | 0 | 8.13 | 2.24 | 23.68 | 10 | 20.09 | 33.58 | 5.14 | 0.93 | 23.68 | 423 | 0.04 |
| 20 | 19.66 | 33.92 | 5.32 | 0.64 | 0 | 8.15 | 2.25 | 24.05 | 20 | 19.66 | 33.92 | 5.32 | 0.64 | 24.05 | 388 | 0.08 |
| 29 | 18.08 | 33.94 | 5.54 | 0.43 | 0 | 8.18 | 2.25 | 24.46 | 30 | 18.08 | 33.94 | 5.40 | 0.46 | 24.46 | 349 | 0.12 |
| | | | | | | | | | 50 | 17.44 | 33.93 | 5.72 | 0.37 | 24.61 | 336 | 0.19 |
| 30b) | - | 33.93 | 5.26 | 0.49 | 0 | 8.19 | 2.32 | | 75 | 15.73 | 33.78 | 5.58 | 0.57 | 24.89 | 309 | 0.27 |
| 49 | 17.54 | 33.94 | 5.77 | - | 0 | 8.17 | 2.29 | 24.59 | 100 | 15.72 | 33.94 | 5.53 | 0.71 | 25.02 | 298 | 0.34 |
| | | | | | | | | | 150 | 12.48 | 33.79 | 5.17 | 0.77 | 25.58 | 245 | 0.48 |
| 50c) | 17.35 | 33.92 | 5.68 | 0.37 | 0 | 8.17 | 2.29 | 24.62 | 200 | 9.32 | 33.70 | 4.35 | 1.57 | 26.07 | 199 | 0.59 |
| 74 | 15.72 | 33.77 | 5.58 | 0.55 | 0 | 8.17 | 2.25 | 24.89 | 250 | 8.38 | 33.89 | 3.31 | 2.03 | 26.37 | 171 | 0.68 |
| 99 | 15.72 | 33.94 | 5.53 | 0.73 | 0 | 8.17 | 2.26 | 25.02 | 300 | 7.65 | 33.99 | 2.67 | 2.41 | 26.55 | 154 | 0.76 |
| | | | | | | | | | 400 | 6.67 | 34.10 | 1.45 | 2.83 | 26.78 | 134 | 0.91 |
| 123b) | 14.98 | 33.93 | 5.50 | 0.52 | 0 | 8.13 | 2.26 | 25.17 | 500 | 5.78 | 34.16 | 0.79 | 3.19 | 26.94 | 119 | 1.04 |
| | | | | | | | | | 600 | 5.16 | 34.24 | 0.49 | 3.37 | 27.08 | 106 | 1.15 |
| 124c) | 14.90 | 33.90 | 5.51 | 0.46 | 0 | 8.14 | 2.22 | 25.17 | 700 | 4.63 | 34.32 | 0.36 | 3.13 | 27.20 | 95 | 1.25 |
| | | | | | | | | | 800 | 4.24 | 34.39 | 0.36 | 3.27 | 27.30 | 86 | 1.34 |
| 147b) | 13.14 | 33.84 | 5.20 | 0.64 | 0 | 8.05 | 2.21 | 25.49 | 1000 | 3.72 | 34.48 | 0.58 | 3.30 | 27.42 | 75 | 1.50 |
| | | | | | | | | | 1200 | 3.28 | 34.53 | 0.81 | 2.59 | 27.51 | 68 | 1.64 |
| 148c) | 12.56 | 33.78 | 5.25 | 0.78 | 0 | 8.06 | 2.22 | 25.55 | 1500 | 2.75 | 34.58 | 1.15 | 2.50 | 27.59 | 60 | 1.83 |
| | | | | | | | | | 2000 | 2.08 | 34.63 | 1.81 | 2.89 | 27.69 | 50 | 2.11 |
| 171a) | 9.78 | 33.64 | 4.77 | 1.27 | 8 | 7.93 | 2.19 | 25.95 | 2500 | 1.75 | 34.67 | 2.27 | 3.01 | 27.75 | 45 | 2.35 |
| 194 | 9.30 | 33.70 | 4.42 | 1.59 | 7 | 7.90 | 2.20 | 26.07 | 3000 | 1.57 | 34.68 | 2.64 | 3.13 | 27.77 | 44 | 2.57 |
| | | | | | | | | | 4000 | 1.51 | 34.70 | 3.19 | 2.42 | 27.79 | 44 | 3.01 |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 196b) | 9.54 | 33.65 | 4.56 | 1.44 | 10 | 7.88 | 2.20 | 26.00 | | | | | | | | |
| 242a) | 8.52 | 33.87 | 3.40 | 1.95 | 26 | 7.75 | 2.22 | 26.33 | | | | | | | | |
| 291 | 7.74 | 33.98 | 2.81 | 2.36 | 31 | 7.70 | 2.24 | 26.53 | | | | | | | | |
| 387 | 6.82 | 34.09 | 1.57 | 2.80 | 49 | 7.59 | 2.28 | 26.75 | | | | | | | | |
| 484 | 5.88 | 34.15 | 0.86 | 3.07 | 66 | 7.53 | 2.34 | 26.92 | | | | | | | | |
| 581 | 5.28 | 34.23 | 0.52 | 3.47 | 75 | 7.48 | 2.33 | 27.05 | | | | | | | | |
| 678 | 4.77 | 34.29 | 0.40 | 3.14 | 89 | 7.50 | 2.36 | 27.16 | | | | | | | | |
| 683b) | 4.66 | 34.31 | 0.36 | 3.10 | 94 | 7.52 | 2.38 | 27.19 | | | | | | | | |
| 780 | 4.30 | 34.38 | 0.34 | 3.20 | 107 | 7.70 | 2.41 | 27.28 | | | | | | | | |
| 974 | 3.78 | 34.47 | 0.55 | 3.44 | 119 | 7.51 | 2.41 | 27.41 | | | | | | | | |
| 1167 | 3.34 | 34.52 | 0.78 | 2.62 | 130 | 7.58 | 2.45 | 27.49 | | | | | | | | |
| 1459 | 2.82 | 34.57 | 1.09 | 2.45 | 139 | 7.60 | 2.45 | 27.58 | | | | | | | | |
| 1954 | 2.12 | 34.63 | 1.74 | 2.66 | 153 | 7.59 | 2.45 | 27.69 | | | | | | | | |
| 1988c) | 2.08 | 34.63 | 1.81 | 3.09 | 158 | 7.61 | 2.46 | 27.69 | | | | | | | | |
| 2485 | 1.76 | 34.67 | 2.26 | 3.00 | 160 | 7.66 | 2.46 | 27.75 | | | | | | | | |
| 2975 | 1.58 | 34.68 | 2.62 | 3.16 | 165 | 7.67 | 2.46 | 27.77 | | | | | | | | |
| 3468 | 1.50 | 34.69 | 2.96 | 2.69 | 157 | 7.73 | 2.47 | 27.78 | | | | | | | | |
| 3968 | 1.51 | 34.70 | 3.20 | 2.44 | 155 | 7.76 | 2.46 | 27.79 | | | | | | | | |
| 4068 | 1.50 | 34.70 | 3.17 | 2.39 | 154 | 7.72 | 2.46 | 27.79 | | | | | | | | |

a) Third cast; wire angle, 10°.
b) First cast; wire angle, 10°.
c) Second cast; wire angle, 10°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 6, 1958; 2400 GCT; 34°13'N, 129°51'W; sounding, 4846 m; wind, 340°, force 6; weather, cloudy; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 19.76 | 33.86 | 5.05 | 0.44 | | | | 23.98 | 0 | 19.76 | 33.86 | 5.05 | 0.44 | 23.98 | 394 | 0.00 |
| 10 | 19.74 | 33.85 | 5.21 | 0.63 | | | | 23.97 | 10 | 19.74 | 33.85 | 5.21 | 0.63 | 23.97 | 395 | 0.04 |
| 19 | 19.70 | 33.85 | 5.26 | 0.99 | | | | 23.98 | 20 | 19.72 | 33.85 | 5.25 | 0.92 | 23.98 | 395 | 0.08 |
| 29 | 19.60 | 33.85 | 5.23 | 0.45 | | | | 24.01 | 30 | 19.44 | 33.85 | 5.26 | 0.46 | 24.05 | 388 | 0.12 |
| | | | | | | | | | 50 | 17.06 | 33.89 | 5.63 | 0.56 | 24.67 | 330 | 0.19 |
| 50b) | 17.06 | 33.89 | 5.63 | 0.56 | | | | 24.67 | 75 | 15.97 | 33.90 | 5.67 | 0.54 | 24.93 | 306 | 0.27 |
| 74 | 16.00 | 33.91 | 5.67 | 0.53 | | | | 24.93 | 100 | 15.06 | 33.83 | 5.59 | 0.70 | 25.08 | 292 | 0.34 |
| 99 | 15.10 | 33.83 | 5.60 | 0.71 | | | | 25.07 | 150 | 11.85 | 33.78 | 5.20 | 1.22 | 25.69 | 234 | 0.48 |
| 123 | 13.84 | 33.85 | 5.33 | 0.70 | | | | 25.35 | 200 | 9.84 | 33.78 | 4.96 | 1.39 | 26.05 | 201 | 0.58 |
| | | | | | | | | | 250 | 8.79 | 33.93 | 4.46 | 1.74 | 26.33 | 174 | 0.68 |
| 144a) | 12.77 | 33.85 | 5.26 | 1.10 | | | | 25.57 | 300 | 7.88 | 33.97 | 3.91 | 1.87 | 26.50 | 159 | 0.76 |
| | | | | | | | | | 400 | 6.30 | 33.98 | 2.53 | 2.25 | 26.73 | 138 | 0.91 |
| 148b) | 11.51 | 33.74 | 5.15 | 1.19 | | | | 25.72 | 500 | 5.27 | 34.06 | 1.37 | 2.93 | 26.92 | 120 | 1.04 |
| | | | | | | | | | 600 | 4.76 | 34.18 | 0.67 | 3.08 | 27.07 | 106 | 1.15 |
| 167a) | 10.84 | 33.72 | 5.16 | 1.39 | | | | 25.83 | 700 | 4.42 | 34.27 | 0.32 | 3.05 | 27.18 | 96 | 1.25 |
| 192 | 10.03 | 33.75 | 5.04 | 1.31 | | | | 25.99 | 800 | 4.15 | 34.37 | 0.34 | 2.95 | 27.29 | 86 | 1.34 |
| 239 | 9.00 | 33.91 | 4.56 | 1.69 | | | | 26.29 | 1000 | 3.54 | 34.46 | 0.47 | 3.33 | 27.43 | 74 | 1.50 |
| 287 | 8.12 | 33.97 | 4.09 | 1.89 | | | | 26.47 | 1200 | 3.12 | 34.52 | 0.79 | 2.69 | 27.51 | 66 | 1.64 |
| 382 | 6.56 | 33.97 | 2.80 | 2.04 | | | | 26.69 | | | | | | | | |
| 478 | 5.41 | 34.03 | 1.56 | 2.88 | | | | 26.88 | | | | | | | | |
| 573 | 4.90 | 34.14 | 0.83 | 2.97 | | | | 27.03 | | | | | | | | |
| 590b) | 4.76 | 34.18 | 0.72 | 3.16 | | | | 27.07 | | | | | | | | |
| 688 | 4.45 | 34.26 | 0.32 | 3.09 | | | | 27.17 | | | | | | | | |
| 786 | 4.20 | 34.36 | 0.34 | 2.87 | | | | 27.28 | | | | | | | | |
| 982 | 3.58 | 34.45 | 0.44 | 3.43 | | | | 27.41 | | | | | | | | |
| 1179 | 3.16 | 34.51 | 0.76 | 2.72 | | | | 27.50 | | | | | | | | |
| 1473 | 2.70 | 34.57 | 1.14 | 3.19 | | | | 27.59 | | | | | | | | |

a) Second cast; wire angle, 17°.
b) First cast; wire angle, 07°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 8, 1958; 0000 GCT; 36°25'N, 130°40'W; sounding, 4810 m; wind, 340°, force 4; weather, partly cloudy; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 19.36 | 33.33 | 4.92 | 0.44 | 0 | 8.11 | 2.25 | 23.68 | 0 | 19.36 | 33.33 | 4.92 | 0.44 | 23.68 | 423 | 0.00 |
| 10b) | 19.15 | 33.34 | 5.21 | 0.63 | 0 | 8.10 | 2.23 | 23.74 | 10 | 19.15 | 33.34 | 5.21 | 0.63 | 23.74 | 417 | 0.04 |
| 20 | 19.02 | 33.33 | 5.24 | 0.99 | 0 | 8.08 | 2.20 | 23.76 | 20 | 19.02 | 33.33 | 5.24 | 0.99 | 23.76 | 415 | 0.08 |
| 30 | 18.85 | 33.32 | 5.26 | 0.45 | 0 | 8.09 | 2.21 | 23.80 | 30 | 18.85 | 33.32 | 5.26 | 0.45 | 23.80 | 412 | 0.12 |
| 50c) | 15.98 | 33.34 | 5.99 | 0.56 | 0 | 8.02 | 2.20 | 24.50 | 50 | 15.98 | 33.34 | 5.99 | 0.56 | 24.50 | 346 | 0.20 |
| 75 | 13.40 | 33.39 | 5.94 | 0.53 | 0 | 8.03 | 2.19 | 25.09 | 75 | 13.40 | 33.39 | 5.94 | 0.53 | 25.09 | 290 | 0.28 |
| 99 | 12.96 | 33.41 | 6.45 | 0.71 | 0 | 8.04 | 2.22 | 25.19 | 100 | 12.98 | 33.42 | 6.40 | 0.70 | 25.19 | 281 | 0.35 |
| 124 | 12.50 | 33.55 | 5.45 | 0.70 | 0 | 8.00 | 2.22 | 25.39 | 150 | 9.77 | 33.60 | 5.10 | 1.16 | 25.92 | 212 | 0.48 |
| 148 | 9.86 | 33.58 | 5.11 | 1.19 | 0 | 7.91 | 2.20 | 25.89 | 200 | 8.98 | 33.88 | 4.70 | 1.31 | 26.27 | 180 | 0.57 |
| 150b) | 9.74 | 33.61 | 5.14 | 1.10 | 4 | 7.89 | 2.20 | 25.93 | 250 | 8.40 | 33.96 | 4.22 | 1.69 | 26.42 | 166 | 0.66 |
| 175 | 9.14 | 33.73 | 4.80 | 1.39 | 4 | 7.90 | 2.22 | 26.12 | 300 | 7.46 | 33.98 | 3.49 | 1.89 | 26.57 | 152 | 0.74 |
| 200 | 8.98 | 33.88 | 4.70 | 1.31 | 9 | 7.87 | 2.23 | 26.27 | 400 | 5.97 | 33.98 | 2.41 | 2.04 | 26.77 | 133 | 0.88 |
| 250 | 8.40 | 33.96 | 4.22 | 1.69 | 17 | 7.78 | 2.25 | 26.42 | 500 | 5.12 | 34.06 | 1.28 | 2.88 | 26.94 | 118 | 1.01 |
| 300 | 7.46 | 33.98 | 3.49 | 1.89 | 26 | 7.72 | 2.25 | 26.57 | 600 | 4.73 | 34.17 | 0.62 | 2.97 | 27.07 | 106 | 1.12 |
| 400 | 5.97 | 33.98 | 2.41 | 2.04 | 46 | 7.60 | 2.30 | 26.77 | 700 | 4.23 | 34.24 | 0.37 | 3.06 | 27.18 | 96 | 1.22 |
| 500 | 5.12 | 34.06 | 1.28 | 2.88 | 67 | 7.44 | 2.30 | 26.94 | 800 | 3.89 | 34.31 | 0.35 | 2.93 | 27.27 | 88 | 1.31 |
| 593c) | 4.78 | 34.17 | 0.64 | 3.16 | 83 | 7.41 | 2.34 | 27.06 | 1000 | 3.32 | 34.41 | 0.35 | 3.36 | 27.41 | 76 | 1.48 |
| 599b) | 4.72 | 34.17 | 0.65 | 2.77 | 79 | 7.46 | 2.35 | 27.07 | 1200 | 2.99 | 34.49 | 0.58 | 2.70 | 27.50 | 67 | 1.62 |
| 692c) | 4.26 | 34.23 | 0.37 | 3.09 | 98 | 7.40 | 2.37 | 27.17 | | | | | | | | |
| 790 | 3.93 | 34.30 | 0.36 | 2.87 | 106 | 7.39 | 2.38 | 27.26 | | | | | | | | |
| 988 | 3.34 | 34.41 | 0.34 | 3.43 | 126 | 7.33 | 2.40 | 27.40 | | | | | | | | |
| 1183d) | 3.02 | 34.48 | 0.56 | 2.72 | 134 | 7.40 | 2.43 | 27.49 | | | | | | | | |
| 1481 | 2.60 | 34.56 | 1.04 | 3.19 | 143 | 7.45 | 2.43 | 27.59 | | | | | | | | |

a) Third cast; wire angle, 05°.
b) Fourth cast; wire angle, 03°.
c) First cast; wire angle, 03°.
d) Second cast; wire angle, 12°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 9, 1958; 0000 GCT; 38°32'N, 131°27'W; sounding, 4810 m; wind, calm; weather, cloudy; sea, smooth. | | | | | | | | | | | | | | | | |
| 0a) | 20.41 | 33.18 | 5.26 | 0.54 | | | | 23.29 | 0 | 20.41 | 33.18 | 5.26 | 0.54 | 23.29 | 460 | 0.00 |
| 10 | 19.44 | 33.17 | 5.34 | 0.64 | | | | 23.53 | 10 | 19.44 | 33.17 | 5.34 | 0.64 | 23.53 | 437 | 0.04 |
| 20 | 18.78 | 33.14 | 5.47 | 0.68 | | | | 23.68 | 20 | 18.78 | 33.14 | 5.47 | 0.68 | 23.68 | 423 | 0.09 |
| 30 | 17.50 | 33.14 | 5.58 | 0.46 | | | | 23.99 | 30 | 17.50 | 33.14 | 5.58 | 0.46 | 23.99 | 394 | 0.13 |
| 50 | 13.16 | 33.02 | 6.32 | 0.44 | | | | 24.85 | 50 | 13.16 | 33.02 | 6.32 | 0.44 | 24.85 | 312 | 0.20 |
| 75 | 11.36 | 33.02 | 6.20 | 0.69 | | | | 25.19 | 75 | 11.36 | 33.02 | 6.20 | 0.69 | 25.19 | 280 | 0.27 |
| 100 | 10.82 | 33.03 | 5.91 | 0.69 | | | | 25.30 | 100 | 10.82 | 33.03 | 5.91 | 0.69 | 25.30 | 271 | 0.34 |
| 125 | 9.42 | 33.42 | 5.30 | 1.26 | | | | 25.84 | 150 | 8.64 | 33.58 | 5.26 | 1.41 | 26.08 | 196 | 0.46 |
| 150 | 8.64 | 33.58 | 5.26 | 1.41 | | | | 26.08 | 200 | 8.49 | 33.94 | 4.83 | 1.65 | 26.39 | 168 | 0.55 |
| 175 | 8.46 | 33.71 | 5.17 | 1.53 | | | | 26.21 | 250 | 7.83 | 33.99 | 4.68 | 1.89 | 26.53 | 156 | 0.63 |
| | | | | | | | | | 300 | 7.14 | 33.97 | 3.80 | 2.09 | 26.61 | 148 | 0.71 |
| 175b) | 8.64 | 33.78 | 5.02 | 1.60 | | | | 26.24 | 400 | 5.69 | 33.98 | 2.33 | 2.72 | 26.81 | 130 | 0.85 |
| 200 | 8.49 | 33.94 | 4.83 | 1.65 | | | | 26.39 | 500 | 4.96 | 34.04 | 1.38 | 2.87 | 26.94 | 118 | 0.97 |
| 250 | 7.83 | 33.99 | 4.68 | 1.89 | | | | 26.53 | 600 | 4.56 | 34.15 | 0.68 | 3.15 | 27.07 | 106 | 1.08 |
| 300 | 7.14 | 33.97 | 3.80 | 2.09 | | | | 26.61 | 700 | 4.16 | 34.23 | | | 27.18 | 96 | 1.18 |
| 400 | 5.69 | 33.98 | 2.33 | 2.72 | | | | 26.81 | 800 | 3.86 | 34.29 | 0.35 | 2.98 | 27.26 | 89 | 1.28 |
| 500 | 4.96 | 34.04 | 1.38 | 2.87 | | | | 26.94 | 1000 | 3.39 | 34.39 | 0.39 | 3.33 | 27.38 | 78 | 1.44 |
| 600 | 4.56 | 34.15 | 0.68 | 3.15 | | | | 27.07 | 1200 | 3.02 | 34.47 | 0.52 | 3.50 | 27.48 | 69 | 1.59 |
| 700 | 4.16 | 34.23 | - | - | | | | 27.18 | | | | | | | | |
| 800 | 3.86 | 34.29 | 0.35 | 2.98 | | | | 27.26 | | | | | | | | |
| 1198a) | 3.02 | 34.47 | 0.52 | 3.50 | | | | 27.48 | | | | | | | | |
| 1498 | 2.64 | 34.57 | 0.91 | 3.42 | | | | 27.60 | | | | | | | | |

a) Second cast; wire angle, 00°.
b) First cast; wire angle, 02°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 10, 1958; 0000 GCT; 40°35'N, 132°31'W; sounding, 3804 m; wind, 130°, force 5; weather, overcast; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 19.58 | 32.76 | 5.11 | 0.94 | 0 | 8.07 | 2.14 | 23.19 | 0 | 19.58 | 32.76 | 5.11 | 0.94 | 23.19 | 470 | 0.00 |
| 10 | 19.52 | 32.74 | 5.15 | 0.73 | 0 | 8.09 | 2.15 | 23.19 | 10 | 19.52 | 32.74 | 5.15 | 0.73 | 23.19 | 470 | 0.04 |
| 19 | 18.68 | 32.70 | 5.32 | 0.75 | 0 | 8.07 | 2.14 | 23.37 | 20 | 18.66 | 32.71 | 5.30 | 0.71 | 23.38 | 452 | 0.09 |
| 29 | 17.79 | 32.76 | 5.33 | 0.44 | 0 | 8.07 | 2.13 | 23.63 | 30 | 17.35 | 32.76 | 5.44 | 0.45 | 23.74 | 418 | 0.14 |
| 48 | 11.70 | 32.75 | 6.61 | 0.61 | 0 | 8.07 | 2.13 | 24.92 | 50 | 11.64 | 32.76 | 6.55 | 0.62 | 24.94 | 304 | 0.21 |
| 73 | 10.71 | 32.91 | 5.94 | 0.84 | 0 | 8.02 | 2.15 | 25.22 | 75 | 10.57 | 32.92 | 5.88 | 0.89 | 25.25 | 274 | 0.28 |
| 97 | 9.24 | 33.11 | 5.35 | 1.26 | 5 | 7.93 | 2.17 | 25.62 | 100 | 9.07 | 33.17 | 5.31 | 1.26 | 25.70 | 232 | 0.34 |
| 121 | 8.26 | 33.49 | 5.08 | 1.32 | 9 | 7.90 | 2.20 | 26.07 | 150 | 8.09 | 33.69 | 4.96 | 1.47 | 26.25 | 180 | 0.45 |
| 145 | 8.10 | 33.65 | 4.99 | 1.57 | 12 | 7.88 | 2.21 | 26.22 | 200 | 7.81 | 33.89 | 4.45 | 1.80 | 26.45 | 162 | 0.53 |
| 169 | 8.01 | 33.80 | 4.77 | 1.27 | 18 | 7.87 | 2.24 | 26.35 | 250 | 7.17 | 33.95 | 3.93 | 2.31 | 26.59 | 149 | 0.61 |
| | | | | | | | | | 300 | 6.42 | 33.95 | 3.20 | 2.37 | 26.69 | 140 | 0.68 |
| 169b) | 8.04 | 33.81 | 4.84 | 1.35 | 19 | 7.86 | 2.23 | 26.36 | 400 | 5.34 | 33.98 | 2.04 | 2.74 | 26.85 | 126 | 0.82 |
| 193 | 7.88 | 33.87 | 4.49 | 1.41 | 21 | 7.76 | 2.24 | 26.43 | 500 | 4.66 | 34.07 | 1.21 | 3.05 | 27.00 | 112 | 0.93 |
| | | | | | | | | | 600 | 4.27 | 34.15 | 0.71 | 3.10 | 27.10 | 102 | 1.04 |
| 194a) | 7.86 | 33.88 | 4.49 | 1.95 | - | 7.82 | 2.24 | 26.44 | 700 | 4.05 | 34.23 | 0.42 | 3.17 | 27.19 | 95 | 1.14 |
| | | | | | | | | | 800 | 3.81 | 34.31 | 0.31 | 3.30 | 27.28 | 87 | 1.23 |
| 241b) | 7.32 | 33.95 | 4.08 | 2.32 | 27 | 7.73 | 2.25 | 26.57 | 1000 | 3.37 | 34.41 | 0.34 | 3.10 | 27.40 | 76 | 1.39 |
| 288 | 6.58 | 33.95 | 3.36 | 2.33 | 39 | 7.64 | 2.25 | 26.67 | 1200 | 2.95 | 34.48 | 0.52 | 3.09 | 27.50 | 68 | 1.54 |
| 384 | 5.47 | 33.97 | 2.21 | 2.67 | 59 | 7.54 | 2.26 | 26.83 | 1500 | 2.50 | 34.55 | 0.87 | 2.86 | 27.59 | 59 | 1.73 |
| 480 | 4.78 | 34.05 | 1.34 | 3.01 | 73 | 7.48 | 2.33 | 26.97 | 2000 | 1.94 | 34.61 | 1.54 | 3.12 | 27.69 | 50 | 2.00 |
| 578 | 4.31 | 34.13 | 0.80 | 3.14 | 88 | 7.41 | 2.35 | 27.08 | 2500 | 1.73 | 34.65 | 2.05 | 2.51 | 27.73 | 46 | 2.24 |
| | | | | | | | | | 3000 | 1.60 | 34.66 | 2.45 | 2.43 | 27.75 | 46 | 2.47 |
| 676a) | 4.15 | 34.21 | 0.47 | 3.08 | 100 | 7.35 | 2.37 | 27.16 | | | | | | | | |
| 676b) | 4.10 | - | 0.47 | - | - | 7.36 | 2.36 | | | | | | | | | |
| 774 | 3.86 | 34.29 | 0.32 | 3.36 | 106 | 7.39 | 2.39 | 27.26 | | | | | | | | |
| 972 | 3.44 | 34.40 | 0.32 | 3.08 | 103 | 7.38 | 2.41 | 27.39 | | | | | | | | |
| 1171 | 3.00 | 34.47 | 0.49 | 3.14 | 105 | 7.38 | 2.41 | 27.48 | | | | | | | | |
| 1464c) | 2.54 | 34.54 | 0.82 | 2.88 | - | 7.39 | 2.45 | 27.58 | | | | | | | | |
| 1470b) | 2.56 | 34.54 | 0.81 | 2.72 | 135 | 7.41 | 2.44 | 27.58 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| (continued from preceding page) | | | | | | | | | | | | | | | | |
| 1964c) | 1.96 | 34.61 | 1.50 | 3.19 | 163 | 7.46 | 2.44 | 27.68 | | | | | | | | |
| 2465 | 1.74 | 34.65 | 2.01 | 2.50 | 167 | 7.58 | 2.45 | 27.73 | | | | | | | | |
| 2966 | 1.60 | 34.66 | 2.44 | 2.50 | 159 | 7.60 | 2.45 | 27.75 | | | | | | | | |
| 3468 | 1.58 | 34.68 | 2.62 | 2.14 | 159 | 7.59 | 2.46 | 27.77 | | | | | | | | |
| 3668 | 1.58 | 34.69 | 2.69 | 2.39 | 163 | 7.58 | 2.45 | 27.78 | | | | | | | | |
| 3768 | 1.56 | 34.68 | 2.73 | 2.98 | 164 | 7.62 | 2.47 | 27.77 | | | | | | | | |

a) Fourth cast; wire angle, 15°.
b) Second cast; wire angle, missing.
c) First cast; wire angle, 09°.

BROWN BEAR; August 11, 1958; 0500 GCT; 42°27'N, 134°58'W; sounding, 4279 m; wind, 250°, force 4; weather, cloudy; sea, slight.

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 19.50 | 32.81 | 5.06 | - | 23.24 | 0 | 19.50 | 32.81 | 5.06 | | 23.24 | 464 | 0.00 |
| 10 | 19.48 | 32.80 | 5.12 | 1.44 | 23.24 | 10 | 19.48 | 32.80 | 5.12 | 1.44 | 23.24 | 465 | 0.05 |
| 20 | 18.88 | 32.85 | 5.24 | 0.69 | 23.43 | 20 | 18.88 | 32.85 | 5.24 | 0.69 | 23.43 | 447 | 0.09 |
| 30 | 17.24 | 32.80 | 5.56 | 0.79 | 23.79 | 30 | 17.24 | 32.80 | 5.56 | 0.79 | 23.79 | 413 | 0.14 |
| 50 | 12.21 | 32.74 | 6.48 | 0.74 | 24.82 | 50 | 12.21 | 32.74 | 6.48 | 0.74 | 24.82 | 315 | 0.21 |
| 75 | 10.28 | 32.75 | 5.95 | 1.23 | 25.17 | 75 | 10.28 | 32.75 | 5.95 | 1.23 | 25.17 | 282 | 0.28 |
| 100 | 9.39 | 32.99 | 5.45 | 1.25 | 25.51 | 100 | 9.39 | 32.99 | 5.45 | 1.25 | 25.51 | 250 | 0.35 |
| 125 | 8.22 | 33.33 | 5.17 | 1.47 | 25.95 | 150 | 7.87 | 33.52 | 5.11 | 1.64 | 26.15 | 190 | 0.46 |
| 150 | 7.87 | 33.52 | 5.11 | 1.64 | 26.15 | 200 | 7.58 | 33.86 | 4.77 | 1.73 | 26.46 | 161 | 0.55 |
| | | | | | | 250 | 7.03 | 33.92 | 4.29 | 2.02 | 26.59 | 150 | 0.63 |
| 174b) | 7.82 | 33.77 | 4.93 | 1.78 | 26.36 | 300 | 6.38 | 33.93 | 3.74 | 2.17 | 26.68 | 141 | 0.70 |
| | | | | | | 400 | 5.32 | 33.97 | 2.11 | 2.28 | 26.84 | 126 | 0.83 |
| 175a) | 7.86 | 33.74 | 4.96 | 1.67 | 26.33 | 500 | 4.69 | 34.04 | 1.35 | 2.96 | 26.97 | 114 | 0.95 |
| | | | | | | 600 | 4.26 | 34.14 | 0.68 | 3.15 | 27.10 | 103 | 1.06 |
| 199c) | 7.58 | 33.86 | 4.80 | 1.69 | 26.46 | 700 | 4.07 | 34.26 | 0.36 | 3.30 | 27.21 | 93 | 1.16 |
| | | | | | | 800 | 3.79 | 34.30 | 0.32 | 3.26 | 27.27 | 88 | 1.25 |
| 200a) | 7.58 | 33.86 | 4.74 | 1.77 | 26.46 | 1000 | 3.27 | 34.39 | 0.40 | 2.93 | 27.40 | 76 | 1.41 |
| | | | | | | 1200 | 2.91 | 34.46 | 0.44 | 3.41 | 27.48 | 68 | 1.56 |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 249c) | 7.04 | 33.92 | 4.30 | 2.02 | | | | 26.58 | | | | | | | | |
| 299 | 6.39 | 33.93 | 3.76 | 2.17 | | | | 26.68 | | | | | | | | |
| 398 | 5.33 | 33.97 | 2.13 | 2.26 | | | | 26.84 | | | | | | | | |
| 498 | 4.70 | 34.04 | 1.37 | 2.96 | | | | 26.97 | | | | | | | | |
| 598 | 4.26 | 34.14 | 0.69 | 3.14 | | | | 27.10 | | | | | | | | |
| 698 | 4.08 | 34.26 | 0.36 | 3.30 | | | | 27.21 | | | | | | | | |
| 797 | 3.80 | 34.30 | 0.32 | 3.27 | | | | 27.27 | | | | | | | | |
| 997 | 3.28 | 34.39 | 0.40 | 2.92 | | | | 27.39 | | | | | | | | |
| 1196 | 2.92 | 34.46 | 0.44 | 3.41 | | | | 27.48 | | | | | | | | |
| 1497 | 2.41 | 34.54 | 0.72 | 3.23 | | | | 27.59 | | | | | | | | |

a) Fourth cast; wire angle, 02°.
b) First cast; wire angle, 07°.
c) Third cast; wire angle, 05°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 12, 1958; 1100 GCT; 44°15'N, 137°37'W; sounding, 4115 m; wind, 230°, force 5; weather, intermittent heavy rain; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 18.68 | 32.81 | 4.80 | 0.67 | 0 | 8.16 | 2.20 | 23.45 | 0 | 18.68 | 32.81 | 4.80 | 0.67 | 23.45 | 444 | 0.00 |
| 10 | 18.66 | 32.80 | 5.05 | 0.73 | 0 | 8.12 | 2.20 | 23.45 | 10 | 18.66 | 32.80 | 5.05 | 0.73 | 23.45 | 445 | 0.04 |
| 20 | 18.64 | 32.85 | 5.15 | 0.58 | 0 | 8.12 | 2.19 | 23.49 | 20 | 18.64 | 32.85 | 5.15 | 0.58 | 23.49 | 441 | 0.09 |
| 30 | 14.50 | 32.80 | 6.05 | 0.54 | 0 | 8.13 | 2.18 | 24.41 | 30 | 14.50 | 32.80 | 6.05 | 0.54 | 24.41 | 354 | 0.13 |
| 50 | 10.80 | 32.74 | 6.40 | 0.63 | 0 | 8.10 | 2.16 | 25.07 | 50 | 10.80 | 32.74 | 6.40 | 0.63 | 25.07 | 291 | 0.19 |
| 75 | 9.55 | 32.75 | 6.15 | 0.87 | 0 | 8.05 | 2.18 | 25.29 | 75 | 9.55 | 32.75 | 6.15 | 0.87 | 25.29 | 270 | 0.26 |
| 100 | 8.95 | 32.99 | 6.05 | 0.98 | 0 | 8.01 | 2.18 | 25.58 | 100 | 8.95 | 32.99 | 6.05 | 0.98 | 25.58 | 244 | 0.33 |
| 125 | 7.77 | 33.33 | 5.24 | 1.23 | 10 | 7.93 | 2.24 | 26.02 | 150 | 7.72 | 33.52 | 5.12 | 1.38 | 26.17 | 187 | 0.43 |
| 150 | 7.72 | 33.52 | 5.12 | 1.38 | 10 | 7.93 | 2.24 | 26.17 | 200 | 7.43 | 33.86 | 4.86 | 1.60 | 26.48 | 159 | 0.52 |
| 175 | 7.72 | 33.74 | 4.98 | - | 17 | 7.92 | 2.28 | 26.35 | 250 | 6.79 | 33.92 | 4.34 | 1.68 | 26.62 | 146 | 0.60 |
| | | | | | | | | | 300 | 5.95 | 33.93 | 3.50 | 1.66 | 26.74 | 136 | 0.67 |
| 175b) | 7.56 | 33.77 | 5.03 | 1.60 | 20 | 7.83 | 2.25 | 26.39 | 400 | 4.88 | 33.97 | 2.09 | 2.32 | 26.89 | 121 | 0.80 |
| | | | | | | | | | 500 | 4.26 | 34.04 | 1.30 | 2.44 | 27.02 | 110 | 0.91 |
| 200a) | 7.57 | 33.86 | 4.95 | 1.61 | 18 | 7.88 | 2.25 | 26.46 | 600 | 3.87 | 34.16 | 0.72 | 2.51 | 27.15 | 97 | 1.01 |
| | | | | | | | | | 700 | 3.57 | 34.27 | 0.48 | 2.61 | 27.27 | 86 | 1.11 |
| 200b) | 7.29 | 33.86 | 4.77 | 1.60 | 24 | 7.83 | 2.26 | 26.50 | 800 | 3.44 | 34.31 | 0.43 | 2.70 | 27.32 | 83 | 1.19 |
| | | | | | | | | | 1000 | 3.08 | 34.40 | 0.39 | 2.60 | 27.42 | 74 | 1.35 |
| 250a) | 6.92 | 33.92 | 4.40 | 1.70 | 28 | 7.85 | 2.26 | 26.60 | 1200 | 2.73 | 34.47 | 0.43 | 2.95 | 27.51 | 66 | 1.49 |
| | | | | | | | | | 1500 | 2.37 | 34.53 | 0.62 | 2.95 | 27.59 | 59 | 1.67 |
| 250b) | 6.66 | 33.92 | 4.28 | 1.66 | - | 7.75 | 2.28 | 26.64 | 2000 | 1.93 | 34.61 | 1.36 | 3.46 | 27.69 | 50 | 1.94 |
| 299 | 5.96 | 33.93 | 3.52 | 1.65 | 41 | 7.70 | 2.28 | 26.73 | 2500 | 1.71 | 34.64 | 1.96 | 3.43 | 27.73 | 47 | 2.19 |
| 398 | 4.90 | 33.97 | 2.11 | 2.32 | 59 | 7.55 | 2.31 | 26.89 | 3000 | 1.55 | 34.66 | 2.52 | 3.50 | 27.76 | 45 | 2.42 |
| 495 | 4.28 | 34.04 | 1.34 | 2.44 | 74 | 7.55 | 2.37 | 27.02 | | | | | | | | |
| 588 | 3.93 | 34.14 | 0.77 | 2.51 | 83 | 7.48 | 2.38 | 27.13 | | | | | | | | |
| 686 | 3.58 | 34.26 | 0.49 | 2.58 | 97 | 7.43 | 2.39 | 27.26 | | | | | | | | |
| 782 | 3.47 | 34.30 | 0.44 | 2.74 | 106 | 7.40 | 2.39 | 27.30 | | | | | | | | |
| 978 | 3.12 | 34.39 | 0.39 | 2.54 | 125 | 7.42 | 2.43 | 27.41 | | | | | | | | |
| 1178 | 2.76 | 34.46 | 0.43 | 2.96 | 128 | 7.40 | 2.43 | 27.50 | | | | | | | | |
| 1476 | 2.38 | 34.54 | 0.58 | 2.68 | 146 | 7.50 | 2.45 | 27.59 | | | | | | | | |
| 1484c) | 2.40 | 34.52 | 0.60 | 3.17 | 145 | 7.40 | 2.44 | 27.58 | | | | | | | | |
| 1978 | 1.94 | 34.61 | 1.33 | 3.47 | 154 | 7.45 | 2.46 | 27.69 | | | | | | | | |
| 2473 | 1.72 | 34.64 | 1.92 | 3.39 | 155 | 7.48 | 2.46 | 27.73 | | | | | | | | |
| 2969 | 1.56 | 34.66 | 2.50 | 3.59 | 146 | 7.57 | 2.46 | 27.75 | | | | | | | | |
| 3465 | 1.50 | 34.68 | 2.80 | 2.64 | 150 | 7.60 | 2.46 | 27.77 | | | | | | | | |
| 3664 | 1.51 | 34.68 | 2.87 | 2.60 | 153 | 7.63 | 2.47 | 27.77 | | | | | | | | |
| 3862 | 1.51 | 34.69 | 2.90 | 2.78 | 165 | 7.63 | 2.46 | 27.78 | | | | | | | | |
| 3961 | 1.52 | 34.69 | 2.90 | 1.10 | 161 | 7.67 | 2.47 | 27.78 | | | | | | | | |

a) Third cast; wire angle, 08°.
b) Second cast; wire angle, 10°.
c) First cast; wire angle, 10°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 13, 1958; 0300 GCT; 45°32'N, 139°17'W; sounding, 4270 m; wind, 240°, force 5; weather, moderate to heavy rain showers; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 17.58 | 32.86 | 5.20 | 0.65 | | | | 23.76 | 0 | 17.58 | 32.86 | 5.20 | 0.65 | 23.76 | 415 | 0.00 |
| 10 | 17.56 | 32.86 | 5.30 | 0.59 | | | | 23.76 | 10 | 17.56 | 32.86 | 5.30 | 0.59 | 23.76 | 415 | 0.04 |
| 20 | 17.52 | 32.86 | 4.20 | 0.65 | | | | 23.77 | 20 | 17.52 | 32.86 | 4.20 | 0.65 | 23.77 | 414 | 0.08 |
| 29 | 13.80 | 32.83 | 6.54 | 0.65 | | | | 24.57 | 30 | 13.53 | 32.83 | 6.56 | 0.66 | 24.63 | 333 | 0.12 |
| 48 | 9.88 | 32.88 | 6.69 | 0.85 | | | | 25.34 | 50 | 9.77 | 32.89 | 6.62 | 0.87 | 25.37 | 263 | 0.18 |
| 72 | 8.74 | 32.95 | 6.09 | 1.03 | | | | 25.58 | 75 | 8.63 | 32.92 | 6.12 | 1.00 | 25.57 | 244 | 0.24 |
| 96 | 8.04 | 32.97 | 5.99 | 0.98 | | | | 25.70 | 100 | 7.98 | 33.10 | 5.79 | 1.09 | 25.81 | 221 | 0.30 |
| 120 | 7.72 | 33.58 | 5.13 | 1.42 | | | | 26.22 | 150 | 7.49 | 33.79 | 5.11 | 1.39 | 26.42 | 164 | 0.40 |
| 144 | 7.53 | 33.77 | 5.11 | 1.40 | | | | 26.40 | 200 | 6.86 | 33.87 | 4.79 | 1.70 | 26.57 | 150 | 0.48 |
| 169 | 7.21 | 33.83 | 5.02 | 1.40 | | | | 26.49 | 250 | 6.29 | 33.90 | 4.31 | 1.94 | 26.67 | 142 | 0.55 |
| | | | | | | | | | 300 | 5.79 | 33.91 | 3.71 | 2.30 | 26.74 | 135 | 0.62 |
| 173b) | 7.34 | 33.83 | 5.04 | 1.50 | | | | 26.47 | 400 | 4.85 | 33.97 | 2.33 | 2.74 | 26.90 | 120 | 0.74 |
| | | | | | | | | | 500 | 4.28 | 34.05 | 1.38 | 2.58 | 27.02 | 109 | 0.86 |
| 191a) | 6.90 | 33.87 | 4.79 | 1.64 | | | | 26.56 | 600 | 3.89 | 34.14 | 0.84 | 2.70 | 27.14 | 99 | 0.96 |
| | | | | | | | | | 700 | 3.66 | 34.22 | 0.60 | 2.53 | 27.22 | 91 | 1.06 |
| 197b) | 6.98 | 33.86 | 4.89 | 1.74 | | | | 26.55 | 800 | 3.45 | 34.28 | 0.40 | 2.65 | 27.29 | 85 | 1.15 |
| | | | | | | | | | 1000 | 3.05 | 34.37 | 0.33 | 2.42 | 27.40 | 75 | 1.31 |
| 238a) | 6.28 | 33.90 | 4.39 | 1.77 | | | | 26.67 | 1200 | 2.77 | 34.43 | 0.40 | 3.37 | 27.47 | 69 | 1.45 |
| | | | | | | | | | | | | | | | | |
| 247b) | 6.46 | 33.90 | 4.40 | 1.97 | | | | 26.65 | | | | | | | | |
| 296 | 5.84 | 33.91 | 3.77 | 2.27 | | | | 26.73 | | | | | | | | |
| 395 | 4.88 | 33.97 | 2.39 | 2.76 | | | | 26.89 | | | | | | | | |
| 493 | 4.32 | 34.04 | 1.43 | 2.55 | | | | 27.01 | | | | | | | | |
| 582 | 3.94 | 34.13 | 0.88 | 2.78 | | | | 27.12 | | | | | | | | |
| 691 | 3.68 | 34.21 | 0.62 | 2.50 | | | | 27.21 | | | | | | | | |
| 789 | 3.48 | 34.27 | 0.41 | 2.71 | | | | 27.28 | | | | | | | | |
| 986 | 3.07 | 34.37 | 0.32 | 2.32 | | | | 27.40 | | | | | | | | |
| 1184 | 2.79 | 34.43 | 0.39 | 3.33 | | | | 27.47 | | | | | | | | |
| 1483 | 2.40 | 34.53 | 0.48 | 3.22 | | | | 27.58 | | | | | | | | |

a) Second cast; wire angle, 17°.
b) First cast; wire angle, 09°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 14, 1958; 0200 GCT; 46°52'N, 141°01'W; sounding, 4252 m; wind, 240°, force 5; weather, moderate to heavy rain showers; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 16.23 | 32.87 | 5.35 | 1.33 | 0 | 8.11 | 2.16 | 24.08 | 0 | 16.23 | 32.87 | 5.35 | 1.33 | 24.08 | 384 | 0.00 |
| 10 | 16.22 | 32.87 | 5.40 | 0.93 | 0 | 8.12 | 2.17 | 24.08 | 10 | 16.22 | 32.87 | 5.40 | 0.93 | 24.08 | 384 | 0.04 |
| 20 | 16.16 | 32.88 | 5.42 | 0.99 | 0 | 8.12 | 2.18 | 24.10 | 20 | 16.16 | 32.88 | 5.42 | 0.99 | 24.10 | 383 | 0.08 |
| 30 | 12.81 | 32.78 | 6.54 | 1.07 | 0 | 8.10 | 2.17 | 24.73 | 30 | 12.81 | 32.78 | 6.54 | 1.07 | 24.73 | 323 | 0.11 |
| 50 | 9.07 | 32.79 | 6.61 | 1.38 | 0 | 8.02 | 2.16 | 25.40 | 50 | 9.07 | 32.79 | 6.61 | 1.38 | 25.40 | 260 | 0.17 |
| 75 | 8.42 | 32.98 | 6.45 | 1.46 | 0 | 8.01 | 2.18 | 25.65 | 75 | 8.42 | 32.98 | 6.45 | 1.46 | 25.65 | 236 | 0.23 |
| 99 | 7.73 | 33.02 | 6.10 | 1.38 | 6 | 7.99 | 2.18 | 25.78 | 100 | 7.73 | 33.05 | 6.05 | 1.36 | 25.80 | 222 | 0.29 |
| 124 | 7.66 | 33.61 | 5.24 | 1.28 | 15 | 7.90 | 2.24 | 26.25 | 150 | 7.39 | 33.83 | 5.08 | 1.94 | 26.46 | 160 | 0.38 |
| 149 | 7.40 | 33.83 | 5.08 | 1.94 | 20 | 7.90 | 2.26 | 26.46 | 200 | 6.92 | 33.88 | 4.85 | 1.97 | 26.57 | 150 | 0.46 |
| | | | | | | | | | 250 | 6.13 | 33.89 | 4.42 | 2.11 | 26.68 | 140 | 0.53 |
| 169b) | 7.36 | 33.82 | 5.14 | 1.83 | 21 | 7.86 | 2.25 | 26.46 | 300 | 5.59 | 33.90 | 3.80 | 2.33 | 26.76 | 133 | 0.60 |
| | | | | | | | | | 400 | 4.73 | 33.98 | 2.23 | 2.88 | 26.92 | 118 | 0.73 |
| 174a) | 7.08 | 33.87 | 4.83 | 1.97 | 25 | 7.90 | 2.26 | 26.54 | 500 | 4.24 | 34.06 | 1.44 | 3.12 | 27.04 | 108 | 0.84 |
| | | | | | | | | | 600 | 3.91 | 34.14 | 0.96 | 2.90 | 27.13 | 99 | 0.94 |
| 193b) | 7.10 | 33.87 | 4.98 | 1.88 | 26 | 7.83 | 2.26 | 26.54 | 700 | 3.63 | 34.22 | 0.65 | 2.73 | 27.23 | 91 | 1.04 |
| | | | | | | | | | 800 | 3.39 | 34.28 | 0.50 | 2.81 | 27.30 | 84 | 1.13 |
| 198a) | 6.90 | 33.89 | 4.77 | 2.05 | 27 | 7.86 | 2.25 | 26.58 | 1000 | 3.00 | 34.38 | 0.36 | 2.73 | 27.41 | 74 | 1.29 |
| | | | | | | | | | 1200 | 2.73 | 34.44 | 0.37 | 2.97 | 27.48 | 68 | 1.43 |
| 241b) | 6.40 | 33.90 | 4.55 | 1.99 | 35 | 7.80 | 2.25 | 26.65 | | | | | | | | |
| 247a) | 6.01 | 33.88 | 4.37 | 2.21 | 38 | 7.80 | 2.26 | 26.69 | | | | | | | | |
| 288b) | 5.72 | 33.89 | 4.05 | 2.22 | 44 | 7.75 | 2.28 | 26.73 | | | | | | | | |
| 382 | 4.85 | 33.96 | 2.43 | 2.85 | 64 | 7.60 | 2.30 | 26.89 | | | | | | | | |
| 477 | 4.32 | 34.04 | 1.56 | 3.02 | 82 | 7.54 | 2.35 | 27.01 | | | | | | | | |
| 572 | 4.01 | 34.11 | 1.10 | 3.16 | 92 | 7.47 | 2.36 | 27.10 | | | | | | | | |
| 668 | 3.70 | 34.20 | 0.71 | 2.59 | 106 | 7.43 | 2.38 | 27.20 | | | | | | | | |
| 764 | 3.48 | 34.26 | 0.54 | 2.90 | 116 | 7.47 | 2.42 | 27.27 | | | | | | | | |
| 959 | 3.06 | 34.36 | 0.37 | 2.64 | 130 | 7.46 | 2.43 | 27.39 | | | | | | | | |
| 1151 | 2.79 | 34.43 | 0.36 | 2.95 | 135 | 7.41 | 2.43 | 27.47 | | | | | | | | |
| 1449 | 2.42 | 34.50 | 0.45 | 2.76 | 150 | 7.47 | - | 27.56 | | | | | | | | |

a) Second cast; wire angle, 10°.
b) First cast; wire angle, 17°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 15, 1958; 0500 GCT; 48°16'N, 142°42'W; sounding, 4206 m; wind, 230°, force 4; weather, cloudy; sea, moderate. | | | | | | | | | | | | | | | | |
| 0a) | 14.34 | 32.82 | 5.72 | 0.92 | 0 | 8.09 | 2.20 | 24.45 | 0 | 14.34 | 32.82 | 5.72 | 0.92 | 24.45 | 349 | 0.00 |
| 10 | 14.36 | 32.82 | 5.90 | 1.04 | 0 | 8.07 | 2.18 | 24.45 | 10 | 14.36 | 32.82 | 5.90 | 1.04 | 24.45 | 349 | 0.04 |
| 20 | 14.31 | 32.83 | 5.82 | 0.80 | 0 | 8.09 | 2.18 | 24.47 | 20 | 14.31 | 32.83 | 5.82 | 0.80 | 24.47 | 348 | 0.07 |
| 30 | 13.79 | 32.82 | 5.94 | 0.78 | 0 | 8.09 | 2.18 | 24.57 | 30 | 13.79 | 32.82 | 5.94 | 0.78 | 24.57 | 338 | 0.10 |
| 50 | 8.36 | 32.80 | 6.79 | 1.09 | 5 | 8.01 | 2.18 | 25.52 | 50 | 8.36 | 32.80 | 6.79 | 1.09 | 25.52 | 248 | 0.16 |
| 74 | 7.90 | 32.88 | 6.62 | 1.27 | 6 | 8.00 | 2.20 | 25.65 | 75 | 7.87 | 32.88 | 6.62 | 1.27 | 25.65 | 236 | 0.22 |
| 98 | 7.25 | 32.89 | 6.48 | 1.33 | 10 | 7.98 | 2.19 | 25.75 | 100 | 7.22 | 32.88 | 6.48 | 1.32 | 25.74 | 227 | 0.28 |
| 123 | 6.92 | 32.99 | 6.23 | 1.35 | 14 | 7.96 | 2.21 | 25.87 | 150 | 6.56 | 33.51 | 5.47 | 1.74 | 26.33 | 173 | 0.38 |
| 148 | 6.57 | 33.49 | 5.50 | 1.75 | 25 | 7.88 | 2.25 | 26.31 | 200 | 5.80 | 33.75 | 5.05 | 1.76 | 26.61 | 146 | 0.46 |
| 168b) | 6.42 | 33.68 | 5.26 | 1.63 | 26 | 7.83 | 2.27 | 26.48 | 250 | 5.07 | 33.80 | 4.43 | 2.11 | 26.74 | 134 | 0.53 |
| 172a) | 6.30 | 33.70 | 5.22 | 1.70 | 29 | 7.85 | 2.28 | 26.51 | 300 | 4.52 | 33.83 | 3.51 | 2.45 | 26.82 | 126 | 0.60 |
| 193b) | 5.84 | 33.71 | 5.08 | 1.62 | 29 | 7.82 | 2.28 | 26.58 | 400 | 4.30 | 33.99 | 1.99 | 2.82 | 26.97 | 113 | 0.72 |
| 196a) | 5.94 | 33.77 | 5.11 | 1.81 | 31 | 7.80 | 2.26 | 26.61 | 500 | 4.06 | 34.08 | 1.24 | 3.06 | 27.07 | 104 | 0.83 |
| 241b) | 5.10 | 33.79 | 4.60 | 2.15 | 39 | 7.73 | 2.28 | 26.73 | 600 | 3.79 | 34.17 | 0.75 | 3.12 | 27.17 | 96 | 0.93 |
| 246a) | 5.24 | 33.80 | 4.48 | 1.96 | 42 | 7.79 | 2.29 | 26.72 | 700 | 3.56 | 34.24 | 0.62 | 3.19 | 27.25 | 89 | 1.02 |
| 289b) | 4.55 | 33.81 | 3.74 | 2.40 | 48 | 7.65 | 2.29 | 26.80 | 800 | 3.36 | 34.28 | 0.60 | 3.11 | 27.30 | 84 | 1.10 |
| 384 | 4.33 | 33.97 | 2.14 | 2.76 | 66 | 7.53 | 2.32 | 26.96 | 1000 | 2.99 | 34.37 | 0.42 | 3.00 | 27.41 | 75 | 1.26 |
| 479 | 4.12 | 34.07 | 1.37 | 3.03 | 78 | 7.52 | 2.38 | 27.06 | 1200 | 2.68 | 34.45 | 0.46 | 3.41 | 27.50 | 67 | 1.40 |
| 573 | 3.86 | 34.14 | 0.87 | 3.12 | 100 | 7.47 | 2.38 | 27.14 | 1500 | 2.33 | 34.52 | 0.64 | 3.37 | 27.58 | 59 | 1.59 |
| 670 | 3.62 | 34.22 | 0.57 | 3.14 | 108 | 7.42 | 2.40 | 27.23 | 2000 | 1.96 | 34.59 | 1.25 | 3.24 | 27.67 | 52 | 1.87 |
| 764 | 3.44 | 34.27 | 0.67 | 3.24 | 116 | 7.47 | 2.44 | 27.28 | 2500 | 1.72 | 34.64 | 1.97 | 3.09 | 27.73 | 47 | 2.12 |
| 958 | 3.06 | 34.35 | 0.41 | 2.87 | 129 | 7.44 | 2.42 | 27.38 | 3000 | 1.57 | 34.67 | 2.51 | 2.94 | 27.76 | 44 | 2.34 |
| 1152 | 2.76 | 34.43 | 0.46 | 3.35 | 137 | 7.42 | 2.43 | 27.47 | 4000 | 1.50 | 34.70 | 3.13 | 2.75 | 27.79 | 44 | 2.79 |
| 1448 | 2.36 | 34.51 | 0.58 | 3.45 | 150 | 7.43 | 2.45 | 27.57 | | | | | | | | |

(continued on next page)

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

(continued from preceding page)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1596c) | 2.26 | 34.53 | 0.75 | 3.25 | 151 | 7.40 | 2.46 | 27.60 |
| 2094 | 1.90 | 34.60 | 1.37 | 3.22 | 159 | 7.49 | 2.46 | 27.68 |
| 2593 | 1.69 | 34.65 | 2.09 | 3.06 | 173 | 7.52 | 2.46 | 27.74 |
| 3094 | 1.55 | 34.67 | 2.60 | 2.93 | 160 | 7.62 | 2.46 | 27.76 |
| 3592 | 1.50 | 34.69 | 2.98 | 2.96 | 157 | 7.64 | 2.46 | 27.78 |
| 3891 | 1.50 | 34.70 | 3.05 | 2.28 | 163 | 7.67 | 2.47 | 27.79 |
| 4090 | 1.51 | 34.70 | 3.14 | 2.71 | 160 | 7.67 | 2.46 | 27.79 |
| 4193 | 1.52 | 34.70 | 3.08 | 2.19 | 161 | 7.66 | 2.47 | 27.79 |

a) Fifth cast; wire angle, 10°.
b) Fourth cast; wire angle, 15°.
c) Third cast; wire angle, missing.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 15, 1958; 2200 GCT; 48°04'N, 140°29'W; sounding, 4151 m; wind, 220°, force 3; weather, cloudy; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 15.23 | 32.77 | 5.82 | 0.92 | | | | 24.23 | 0 | 15.23 | 32.77 | 5.82 | 0.92 | 24.23 | 370 | 0.00 |
| 10 | 15.14 | 32.77 | 5.87 | 0.85 | | | | 24.25 | 10 | 15.14 | 32.77 | 5.87 | 0.85 | 24.25 | 369 | 0.04 |
| 20 | 15.08 | 32.77 | 5.84 | 1.10 | | | | 24.26 | 20 | 15.08 | 32.77 | 5.84 | 1.10 | 24.26 | 368 | 0.07 |
| 30 | 15.10 | 32.77 | 5.82 | 1.07 | | | | 24.25 | 30 | 15.10 | 32.77 | 5.82 | 1.07 | 24.25 | 368 | 0.11 |
| 50 | 8.66 | 32.82 | 7.12 | 1.12 | | | | 25.49 | 50 | 8.66 | 32.82 | 7.12 | 1.12 | 25.49 | 251 | 0.17 |
| 75 | 7.86 | 32.83 | 6.65 | 1.39 | | | | 25.61 | 75 | 7.86 | 32.83 | 6.65 | 1.39 | 25.61 | 240 | 0.23 |
| 100 | 7.32 | 32.87 | 6.44 | 1.35 | | | | 25.72 | 100 | 7.32 | 32.87 | 6.44 | 1.35 | 25.72 | 230 | 0.29 |
| 125 | 6.82 | 33.27 | 5.82 | 1.83 | | | | 26.10 | 150 | 6.34 | 33.59 | 5.53 | 2.18 | 26.42 | 164 | 0.39 |
| 150 | 6.34 | 33.59 | 5.53 | 2.18 | | | | 26.42 | 200 | 5.78 | 33.79 | 4.95 | 2.17 | 26.65 | 143 | 0.47 |
| | | | | | | | | | 250 | 5.27 | 33.86 | 4.07 | 2.51 | 26.76 | 132 | 0.54 |
| 170b) | 6.02 | 33.70 | 5.32 | 2.12 | | | | 26.55 | 300 | 4.86 | 33.90 | 3.16 | 2.93 | 26.84 | 125 | 0.60 |
| | | | | | | | | | 400 | 4.37 | 33.99 | 1.95 | 3.12 | 26.97 | 114 | 0.72 |
| 175a) | 5.96 | 33.71 | 5.30 | 1.90 | | | | 26.56 | 500 | 4.04 | 34.08 | 1.17 | 3.28 | 27.07 | 104 | 0.83 |
| | | | | | | | | | 600 | 3.75 | 34.16 | 0.80 | 3.28 | 27.17 | 96 | 0.93 |
| 194b) | 5.80 | 33.78 | 5.04 | 2.16 | | | | 26.64 | 700 | 3.54 | 34.24 | 0.62 | 3.30 | 27.25 | 88 | 1.02 |
| | | | | | | | | | 800 | 3.36 | 34.30 | 0.51 | 3.24 | 27.32 | 83 | 1.11 |
| 200a) | 5.82 | 33.79 | 4.96 | 2.15 | | | | 26.64 | 1000 | 2.97 | 34.39 | 0.45 | 3.13 | 27.42 | 73 | 1.26 |
| | | | | | | | | | 1200 | 2.69 | 34.45 | 0.47 | 3.68 | 27.50 | 67 | 1.40 |
| 243b) | 5.34 | 33.86 | 4.18 | 2.57 | | | | 26.75 | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 250a) | 5.28 | 33.86 | 4.12 | 2.35 | | | | 26.76 | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 291b) | 4.91 | 33.89 | 3.29 | 2.91 | | | | 26.83 | | | | | | | | |
| 387 | 4.41 | 33.98 | 2.09 | 3.10 | | | | 26.95 | | | | | | | | |
| 482 | 4.10 | 34.06 | 1.27 | 3.24 | | | | 27.05 | | | | | | | | |
| 576 | 3.82 | 34.14 | 0.85 | 3.35 | | | | 27.14 | | | | | | | | |
| 671 | 3.58 | 34.22 | 0.67 | 3.20 | | | | 27.23 | | | | | | | | |
| 766 | 3.44 | 34.28 | 0.53 | 3.43 | | | | 27.29 | | | | | | | | |
| 959 | 3.03 | 34.37 | 0.45 | 2.89 | | | | 27.40 | | | | | | | | |
| 1152 | 2.75 | 34.44 | 0.46 | 3.64 | | | | 27.48 | | | | | | | | |
| 1446 | 2.40 | 34.50 | 0.57 | 3.02 | | | | 27.56 | | | | | | | | |

a) Second cast; wire angle, missing.
b) First cast; wire angle, 12°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 16, 1958; 1500 GCT; 48°14'N, 138°11'W; sounding, 4005 m; wind, 270°, force 3; weather, partly cloudy; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 15.74 | 32.58 | 5.58 | 0.59 | 0 | 8.10 | 2.25 | 23.97 | 0 | 15.74 | 32.58 | 5.58 | 0.59 | 23.97 | 395 | 0.00 |
| 10 | 15.72 | 32.62 | 5.61 | 0.69 | 0 | 8.08 | 2.25 | 24.00 | 10 | 15.72 | 32.62 | 5.61 | 0.69 | 24.00 | 392 | 0.04 |
| 20 | 15.68 | 32.58 | 5.69 | 0.76 | 0 | 8.08 | 2.24 | 23.98 | 20 | 15.68 | 32.58 | 5.69 | 0.76 | 23.98 | 394 | 0.08 |
| 30 | 14.68 | 32.63 | 5.95 | 0.62 | 0 | 8.08 | 2.24 | 24.24 | 30 | 14.68 | 32.63 | 5.95 | 0.62 | 24.24 | 370 | 0.12 |
| 50 | 9.08 | 32.53 | 7.14 | 0.83 | 0 | 8.02 | 2.23 | 25.20 | 50 | 9.08 | 32.53 | 7.14 | 0.83 | 25.20 | 279 | 0.18 |
| 75 | 7.67 | 32.61 | 6.40 | 1.24 | 6 | 7.98 | 2.25 | 25.47 | 75 | 7.67 | 32.61 | 6.40 | 1.24 | 25.47 | 253 | 0.25 |
| 100 | 6.79 | 32.87 | 5.87 | 1.49 | 15 | 7.90 | 2.25 | 25.79 | 100 | 6.79 | 32.87 | 5.87 | 1.49 | 25.79 | 223 | 0.31 |
| 125 | 6.53 | 33.65 | 2.88 | 2.39 | 41 | 7.56 | 2.31 | 26.44 | 150 | 6.62 | 33.88 | 1.72 | 2.86 | 26.61 | 146 | 0.40 |
| 150 | 6.62 | 33.88 | 1.72 | 2.86 | 51 | 7.58 | 2.34 | 26.61 | 200 | 6.45 | 33.95 | 1.42 | 2.91 | 26.69 | 139 | 0.47 |
| | | | | | | | | | 250 | 6.19 | 33.98 | 1.38 | 2.85 | 26.74 | 134 | 0.54 |
| 171b) | 6.60 | 33.91 | 1.47 | 2.66 | 52 | 7.57 | 2.35 | 26.64 | 300 | 5.97 | 33.98 | 1.32 | 2.80 | 26.77 | 132 | 0.60 |
| | | | | | | | | | 400 | 5.45 | 34.03 | 1.19 | 2.90 | 26.88 | 123 | 0.73 |
| 175a) | 6.54 | 33.92 | 1.50 | 2.56 | 50 | 7.50 | 2.34 | 26.65 | 500 | 4.89 | 34.08 | 0.94 | 2.78 | 26.98 | 114 | 0.85 |
| | | | | | | | | | 600 | 4.35 | 34.14 | 0.59 | 2.57 | 27.09 | 104 | 0.96 |
| 195b) | 6.50 | 33.95 | 1.44 | 2.78 | 54 | 7.53 | 2.35 | 26.68 | 700 | 4.01 | 34.21 | 0.47 | 2.59 | 27.18 | 96 | 1.06 |
| | | | | | | | | | 800 | 3.72 | 34.27 | 0.47 | 2.75 | 27.26 | 89 | 1.15 |
| 200a) | 6.43 | 33.95 | 1.41 | 3.04 | 53 | 7.49 | 2.32 | 26.69 | 1000 | 3.26 | 34.36 | 0.30 | 2.60 | 27.37 | 78 | 1.32 |
| | | | | | | | | | 1200 | 2.88 | 34.45 | 0.43 | 3.37 | 27.48 | 69 | 1.47 |
| 244b) | 6.26 | 33.97 | 1.39 | 2.86 | 56 | 7.44 | 2.31 | 26.73 | | | | | | | | |
| 250a) | 6.14 | 33.98 | 1.36 | 2.85 | 54 | 7.50 | 2.34 | 26.75 | | | | | | | | |
| 293b) | 6.01 | 33.98 | 1.33 | 2.78 | 58 | 7.49 | 2.33 | 26.77 | | | | | | | | |
| 389 | 5.50 | 34.02 | 1.21 | 2.91 | 67 | 7.49 | 2.35 | 26.86 | | | | | | | | |
| 485 | 5.00 | 34.07 | 1.00 | 2.80 | 78 | 7.53 | 2.40 | 26.96 | | | | | | | | |
| 582 | 4.42 | 34.13 | 0.65 | 2.65 | 90 | 7.48 | 2.40 | 27.07 | | | | | | | | |
| 679 | 4.08 | 34.19 | 0.44 | 2.46 | 102 | 7.38 | 2.41 | 27.16 | | | | | | | | |
| 776 | 3.78 | 34.26 | 0.52 | 2.89 | 113 | 7.43 | 2.41 | 27.24 | | | | | | | | |
| 971 | 3.32 | 34.35 | 0.28 | 2.40 | 126 | 7.44 | 2.44 | 27.36 | | | | | | | | |
| 1167 | 2.94 | 34.44 | 0.41 | 3.32 | 141 | 7.40 | 2.45 | 27.47 | | | | | | | | |
| 1466 | 2.44 | 34.53 | 0.63 | 2.69 | 156 | 7.52 | 2.45 | 27.58 | | | | | | | | |

a) Second cast; wire angle, 05°.
b) First cast; wire angle, 08°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 17, 1958; 0800 GCT; 48°17'N, 135°18'W; sounding, 3914 m; wind, calm; weather, clear; sea, calm. | | | | | | | | | | | | | | | | |
| 0a) | 17.06 | 32.60 | 5.53 | 0.56 | | | | 23.68 | 0 | 17.06 | 32.60 | 5.53 | 0.56 | 23.68 | 422 | 0.00 |
| 10 | 16.84 | 32.59 | 5.63 | 0.56 | | | | 23.73 | 10 | 16.84 | 32.59 | 5.63 | 0.56 | 23.73 | 418 | 0.04 |
| 20 | 14.16 | 32.58 | 6.81 | 0.37 | | | | 24.31 | 20 | 14.16 | 32.58 | 6.81 | 0.37 | 24.31 | 363 | 0.08 |
| 30 | 10.33 | 32.59 | 7.43 | 0.71 | | | | 25.04 | 30 | 10.33 | 32.59 | 7.43 | 0.71 | 25.04 | 294 | 0.11 |
| 50 | 8.30 | 32.63 | 6.73 | 0.95 | | | | 25.39 | 50 | 8.30 | 32.63 | 6.73 | 0.95 | 25.39 | 260 | 0.17 |
| 75 | 7.80 | 32.69 | 7.50 | 1.11 | | | | 25.51 | 75 | 7.80 | 32.69 | 7.50 | 1.11 | 25.51 | 249 | 0.23 |
| 100 | 7.22 | 32.73 | 6.37 | 1.15 | | | | 25.63 | 100 | 7.22 | 32.73 | 6.37 | 1.15 | 25.63 | 239 | 0.29 |
| 125 | 6.68 | 32.94 | 5.97 | 1.43 | | | | 25.86 | 150 | 6.23 | 33.28 | 5.42 | 1.67 | 26.19 | 186 | 0.40 |
| 150 | 6.23 | 33.28 | 5.42 | 1.67 | | | | 26.19 | 200 | 5.43 | 33.72 | 4.29 | 2.23 | 26.63 | 144 | 0.48 |
| | | | | | | | | | 250 | 5.30 | 33.88 | 3.24 | 2.66 | 26.78 | 131 | 0.55 |
| 173b) | 5.52 | 33.63 | 4.64 | 2.01 | | | | 26.55 | 300 | 4.90 | 33.92 | 2.29 | 2.81 | 26.85 | 124 | 0.62 |
| | | | | | | | | | 400 | 4.40 | 34.03 | 1.27 | 3.03 | 27.00 | 111 | 0.73 |
| 175a) | 5.66 | 33.50 | 4.97 | 1.92 | | | | 26.43 | 500 | 4.10 | 34.12 | 0.80 | 3.12 | 27.10 | 102 | 0.84 |
| | | | | | | | | | 600 | 3.90 | 34.19 | 0.53 | 3.26 | 27.17 | 95 | 0.94 |
| 198b) | 5.44 | 33.74 | 4.19 | 2.29 | | | | 26.65 | 700 | 3.59 | 34.25 | 0.53 | 3.44 | 27.25 | 88 | 1.03 |
| | | | | | | | | | 800 | 3.39 | 34.31 | 0.43 | 3.37 | 27.32 | 82 | 1.11 |
| 200a) | 5.42 | 33.69 | 4.63 | 2.14 | | | | 26.61 | 1000 | 3.06 | 34.40 | 0.38 | 2.94 | 27.42 | 73 | 1.27 |
| | | | | | | | | | 1200 | 2.77 | 34.47 | 0.47 | 3.39 | 27.50 | 66 | 1.41 |
| 246b) | 5.28 | 33.87 | 3.48 | 2.73 | | | | 26.77 | | | | | | | | |
| 250a) | 5.37 | 33.88 | 3.08 | 2.57 | | | | 26.77 | | | | | | | | |
| 296b) | 4.92 | 33.92 | 2.34 | 2.80 | | | | 26.85 | | | | | | | | |
| 394 | 4.42 | 34.02 | 1.30 | 3.02 | | | | 26.99 | | | | | | | | |
| 493 | 4.11 | 34.11 | 0.83 | 3.12 | | | | 27.09 | | | | | | | | |
| 591 | 3.94 | 34.19 | 0.52 | 3.23 | | | | 27.17 | | | | | | | | |
| 690 | 3.61 | 34.24 | 0.54 | 3.43 | | | | 27.24 | | | | | | | | |
| 788 | 3.41 | 34.30 | 0.44 | 3.43 | | | | 27.31 | | | | | | | | |
| 985 | 3.08 | 34.39 | 0.38 | 2.88 | | | | 27.41 | | | | | | | | |
| 1183 | 2.80 | 34.46 | 0.46 | 3.37 | | | | 27.49 | | | | | | | | |
| 1478 | 2.34 | 34.53 | 0.71 | 3.10 | | | | 27.59 | | | | | | | | |

a) Second cast; wire angle, 03°.
b) First cast; wire angle, 02°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 18, 1958; 0200 GCT; 48°21'N, 132°42'W; sounding, 4279 m; wind, calm; weather, partly cloudy; sea, calm. | | | | | | | | | | | | | | | | |
| 0a) | 18.48 | 32.42 | 5.31 | 0.39 | 0 | 8.19 | 2.18 | 23.20 | 0 | 18.48 | 32.42 | 5.31 | 0.39 | 23.20 | 468 | 0.00 |
| 10 | 17.82 | 32.42 | 5.40 | 0.37 | 0 | 8.19 | 2.18 | 23.36 | 10 | 17.82 | 32.42 | 5.40 | 0.37 | 23.36 | 453 | 0.05 |
| 20 | 17.70 | 32.42 | 5.40 | 0.40 | 0 | 8.19 | 2.20 | 23.39 | 20 | 17.70 | 32.42 | 5.40 | 0.40 | 23.39 | 450 | 0.09 |
| 30 | - | 32.44 | 5.52 | 0.45 | 0 | 8.20 | 2.20 | | 30 | 16.90 | 32.44 | 5.52 | 0.45 | 23.60 | 431 | 0.14 |
| 50 | 9.16 | 32.53 | 6.54 | 0.96 | 0 | 8.08 | 2.20 | 25.18 | 50 | 9.16 | 32.53 | 6.54 | 0.96 | 25.18 | 280 | 0.21 |
| 75 | 8.00 | 32.56 | 6.29 | 1.32 | 0 | 8.06 | 2.22 | 25.38 | 75 | 8.00 | 32.56 | 6.29 | 1.32 | 25.38 | 262 | 0.27 |
| 100 | 7.23 | 32.78 | 5.84 | 1.42 | 10 | 8.00 | 2.23 | 25.66 | 100 | 7.23 | 32.78 | 5.84 | 1.42 | 25.66 | 235 | 0.34 |
| | | | | | | | | | 150 | 6.24 | 33.49 | 5.11 | 1.98 | 26.35 | 170 | 0.44 |
| 125b) | 6.78 | 32.98 | 5.60 | 1.60 | 17 | 7.92 | 2.25 | 25.88 | 200 | 6.35 | 33.81 | 4.40 | 2.10 | 26.59 | 148 | 0.52 |
| | | | | | | | | | 250 | 5.96 | 33.90 | 3.38 | 2.13 | 26.71 | 137 | 0.59 |
| 125a) | 6.44 | 33.18 | 5.43 | 1.80 | 20 | 7.93 | 2.26 | 26.08 | 300 | 5.39 | 33.92 | 2.96 | 2.55 | 26.80 | 130 | 0.66 |
| 150 | 6.24 | 33.49 | 5.11 | 1.98 | 23 | 7.92 | 2.28 | 26.35 | 400 | 4.66 | 33.98 | 1.88 | 3.05 | 26.93 | 118 | 0.78 |
| 175 | 6.39 | 33.72 | 4.59 | 1.86 | 30 | 7.89 | 2.29 | 26.51 | 500 | 4.23 | 34.07 | 0.99 | 3.15 | 27.05 | 107 | 0.89 |
| | | | | | | | | | 600 | 4.05 | 34.16 | 0.62 | 2.98 | 27.14 | 99 | 0.99 |
| 200b) | 6.36 | 33.80 | 4.50 | 2.15 | 27 | 7.83 | 2.31 | 26.58 | 700 | 3.81 | 34.24 | 0.45 | 2.75 | 27.22 | 91 | 1.09 |
| | | | | | | | | | 800 | 3.60 | 34.31 | 0.34 | 2.74 | 27.30 | 85 | 1.18 |
| 200a) | 6.34 | 33.82 | 4.30 | 2.06 | - | 7.87 | 2.30 | 26.60 | 1000 | 3.23 | 34.40 | 0.34 | 2.79 | 27.41 | 75 | 1.34 |
| | | | | | | | | | 1200 | 2.93 | 34.46 | 0.40 | 3.34 | 27.48 | 69 | 1.48 |
| 250b) | 6.02 | 33.90 | 3.47 | 2.32 | 38 | 7.73 | 2.33 | 26.70 | | | | | | | | |
| 251a) | 5.90 | 33.91 | 3.29 | 1.94 | 45 | 7.76 | 2.32 | 26.73 | | | | | | | | |
| 295c) | 5.43 | 33.92 | 3.02 | 2.51 | 48 | 7.70 | 2.33 | 26.79 | | | | | | | | |
| 396 | 4.68 | 33.98 | 1.93 | 3.04 | 70 | 7.60 | 2.35 | 26.93 | | | | | | | | |
| 495 | 4.24 | 34.07 | 1.02 | 3.16 | 88 | 7.51 | 2.37 | 27.04 | | | | | | | | |
| 593 | 4.07 | 34.15 | 0.63 | 3.01 | 93 | 7.50 | 2.39 | 27.13 | | | | | | | | |
| 693 | 3.83 | 34.23 | 0.46 | 2.75 | 105 | 7.47 | 2.40 | 27.21 | | | | | | | | |
| 792 | 3.62 | 34.31 | 0.34 | 2.75 | 115 | 7.48 | 2.43 | 27.30 | | | | | | | | |
| 991 | 3.24 | 34.40 | 0.34 | 2.75 | 125 | 7.53 | 2.44 | 27.41 | | | | | | | | |
| 1190 | 2.95 | 34.46 | 0.39 | 3.33 | 138 | 7.51 | 2.44 | 27.48 | | | | | | | | |
| 1490 | 2.42 | 34.52 | 0.65 | 2.80 | 154 | 7.58 | 2.46 | 27.57 | | | | | | | | |

a) Third cast; wire angle, 00°.
b) First cast; wire angle, 00°.
c) Second cast; wire angle, 00°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 18, 1958; 2000 GCT; 48°25'N, 130°09'W; sounding, 2012 m; wind, 240°, force 3; weather, cloudy; sea, smooth. | | | | | | | | | | | | | | | | |
| 0a) | 17.92 | 32.34 | 5.29 | 0.53 | | | | 23.28 | 0 | 17.92 | 32.34 | 5.29 | 0.53 | 23.28 | 461 | 0.00 |
| 10 | 17.80 | 32.33 | 5.35 | 0.66 | | | | 23.30 | 10 | 17.80 | 32.33 | 5.35 | 0.66 | 23.30 | 459 | 0.05 |
| 20 | 17.78 | 32.34 | 5.41 | 0.69 | | | | 23.31 | 20 | 17.78 | 32.34 | 5.41 | 0.69 | 23.31 | 458 | 0.09 |
| 30 | 16.98 | 32.37 | 5.57 | 0.87 | | | | 23.53 | 30 | 16.98 | 32.37 | 5.57 | 0.87 | 23.53 | 438 | 0.14 |
| 50 | 14.78 | 32.41 | 6.00 | 0.57 | | | | 24.05 | 50 | 14.78 | 32.41 | 6.00 | 0.57 | 24.05 | 389 | 0.22 |
| 75 | 9.33 | 32.47 | 6.18 | 0.86 | | | | 25.11 | 75 | 9.33 | 32.47 | 6.18 | 0.86 | 25.11 | 288 | 0.30 |
| 100 | 8.14 | 32.66 | 5.71 | 1.24 | | | | 25.44 | 100 | 8.14 | 32.66 | 5.71 | 1.24 | 25.44 | 256 | 0.37 |
| 125 | 7.26 | 33.04 | 5.14 | 1.65 | | | | 25.86 | 150 | 7.10 | 33.31 | 4.60 | 1.85 | 26.10 | 194 | 0.49 |
| 150 | 7.10 | 33.31 | 4.60 | 1.85 | | | | 26.10 | 200 | 6.95 | 33.87 | 2.70 | 2.46 | 26.56 | 152 | 0.57 |
| | | | | | | | | | 250 | 6.56 | 33.96 | 1.99 | 2.71 | 26.68 | 140 | 0.65 |
| 172b) | 7.06 | 33.78 | 3.26 | 2.28 | | | | 26.47 | 300 | 5.94 | 34.00 | 1.65 | 2.92 | 26.79 | 130 | 0.71 |
| | | | | | | | | | 400 | 5.38 | 34.04 | 1.17 | 3.25 | 26.89 | 122 | 0.84 |
| 175a) | 7.06 | 33.68 | 3.47 | 2.16 | | | | 26.39 | 500 | 4.74 | 34.08 | 0.95 | 3.33 | 27.00 | 112 | 0.96 |
| | | | | | | | | | 600 | 4.37 | 34.14 | 0.63 | 3.33 | 27.09 | 104 | 1.06 |
| 196b) | 6.92 | 33.88 | 2.56 | 2.58 | | | | 26.57 | 700 | 4.20 | 34.22 | 0.41 | 3.42 | 27.17 | 97 | 1.17 |
| | | | | | | | | | 800 | 3.99 | 34.29 | 0.34 | 3.44 | 27.24 | 90 | 1.26 |
| 200a) | 7.00 | 33.83 | 2.93 | 2.32 | | | | 26.52 | 1000 | 3.45 | 34.39 | 0.35 | 3.21 | 27.38 | 78 | 1.43 |
| | | | | | | | | | 1200 | 2.99 | 34.46 | 0.45 | 3.42 | 27.48 | 69 | 1.58 |
| 245b) | 6.52 | 33.96 | 2.05 | 2.82 | | | | 26.69 | | | | | | | | |
| 250a) | 6.66 | 33.96 | 1.96 | 2.59 | | | | 26.67 | | | | | | | | |
| 292b) | 5.98 | 34.00 | 1.71 | 2.88 | | | | 26.79 | | | | | | | | |
| 389 | 5.46 | 34.04 | 1.18 | 3.23 | | | | 26.88 | | | | | | | | |
| 486 | 4.82 | 34.07 | 1.00 | 3.33 | | | | 26.98 | | | | | | | | |
| 584 | 4.40 | 34.13 | 0.69 | 3.33 | | | | 27.07 | | | | | | | | |
| 681 | 4.23 | 34.21 | 0.43 | 3.38 | | | | 27.16 | | | | | | | | |
| 778 | 4.06 | 34.28 | 0.35 | 3.51 | | | | 27.23 | | | | | | | | |
| 973 | 3.52 | 34.38 | 0.34 | 3.16 | | | | 27.36 | | | | | | | | |
| 1168 | 3.06 | 34.45 | 0.43 | 3.41 | | | | 27.46 | | | | | | | | |
| 1464 | 2.52 | 34.53 | 0.69 | 3.14 | | | | 27.57 | | | | | | | | |

a) Second cast; wire angle, 09°.
b) First cast; wire angle, 12°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 19, 1958; 1200 GCT; 48°28'N, 127°33'W; sounding, 2566 m; wind, 280°, force 3; weather, cloudy; sea, slight. | | | | | | | | | | | | | | | | |
| 0a) | 15.43 | 32.07 | 5.73 | 0.45 | 0 | 8.20 | 2.18 | 23.65 | 0 | 15.43 | 32.07 | 5.73 | 0.45 | 23.65 | 426 | 0.00 |
| 10 | 15.36 | 32.08 | 5.82 | 0.59 | 0 | 8.20 | 2.18 | 23.67 | 10 | 15.36 | 32.08 | 5.82 | 0.59 | 23.67 | 424 | 0.04 |
| 19 | 15.16 | 32.11 | 5.72 | 0.48 | 0 | 8.20 | 2.18 | 23.73 | 20 | 14.67 | 32.14 | 5.76 | 0.52 | 23.86 | 406 | 0.08 |
| 29 | 11.12 | 32.37 | 6.00 | 0.88 | 0 | 8.11 | 2.20 | 24.73 | 30 | 10.97 | 32.37 | 5.97 | 0.93 | 24.76 | 320 | 0.12 |
| 49 | 8.80 | 32.51 | 5.49 | 1.55 | 5 | 8.03 | 2.17 | 25.22 | 50 | 8.76 | 32.52 | 5.48 | 1.54 | 25.24 | 275 | 0.18 |
| 73 | 7.94 | 32.81 | 5.17 | 1.48 | 12 | 7.99 | 2.20 | 25.59 | 75 | 7.92 | 32.85 | 5.13 | 1.48 | 25.62 | 239 | 0.24 |
| 98 | 7.53 | 33.25 | 4.59 | 1.57 | 21 | 7.93 | 2.25 | 25.99 | 100 | 7.46 | 33.27 | 4.52 | 1.60 | 26.02 | 202 | 0.30 |
| 122 | 6.89 | 33.49 | 3.98 | 1.80 | 28 | 7.85 | 2.28 | 26.27 | 150 | 6.68 | 33.69 | 3.97 | 1.98 | 26.45 | 161 | 0.39 |
| 146 | 6.72 | 33.66 | 4.00 | 1.82 | 34 | 7.88 | 2.29 | 26.42 | 200 | 6.27 | 33.92 | 2.91 | 2.56 | 26.69 | 139 | 0.46 |
| 170 | 6.50 | 33.79 | 3.76 | 1.87 | 37 | 7.82 | 2.29 | 26.55 | 250 | 5.87 | 33.96 | 2.31 | 2.77 | 26.77 | 132 | 0.53 |
| | | | | | | | | | 300 | 5.45 | 33.97 | 1.90 | 2.79 | 26.83 | 126 | 0.60 |
| 172b) | 6.48 | 33.85 | 3.56 | 2.30 | 41 | 7.80 | 2.30 | 26.60 | 400 | 5.06 | 34.07 | 1.12 | 3.07 | 26.95 | 116 | 0.72 |
| 196 | 6.30 | 33.91 | 2.97 | 2.53 | 46 | 7.74 | 2.31 | 26.68 | 500 | 4.69 | 34.15 | 0.65 | 3.19 | 27.06 | 106 | 0.83 |
| 244 | 5.94 | 33.96 | 2.36 | 2.78 | 56 | 7.66 | 2.32 | 26.76 | 600 | 4.41 | 34.20 | 0.49 | 3.30 | 27.13 | 100 | 0.93 |
| 293 | 5.48 | 33.96 | 1.97 | 2.77 | 63 | 7.64 | 2.32 | 26.82 | 700 | 4.13 | 34.25 | 0.38 | 3.28 | 27.20 | 94 | 1.03 |
| 390 | 5.10 | 34.06 | 1.19 | 3.05 | 76 | 7.60 | 2.35 | 26.94 | 800 | 3.87 | 34.32 | 0.31 | 2.95 | 27.28 | 87 | 1.12 |
| 488 | 4.72 | 34.14 | 0.68 | 3.19 | 89 | 7.54 | 2.37 | 27.05 | 1000 | 3.41 | 34.41 | 0.41 | 3.02 | 27.40 | 76 | 1.28 |
| 585 | 4.45 | 34.19 | 0.50 | 3.25 | 95 | 7.54 | 2.38 | 27.12 | 1200 | 2.99 | 34.47 | 0.40 | 3.45 | 27.49 | 69 | 1.43 |
| 682 | 4.18 | 34.24 | 0.41 | 3.37 | 104 | 7.51 | 2.40 | 27.19 | | | | | | | | |
| 780 | 3.92 | 34.31 | 0.29 | 2.98 | 113 | 7.51 | 2.42 | 27.27 | | | | | | | | |
| 975 | 3.46 | 34.40 | 0.43 | 2.92 | 126 | 7.57 | 2.43 | 27.39 | | | | | | | | |
| 1168c) | 3.06 | 34.46 | 0.39 | 3.42 | 135 | 7.57 | 2.44 | 27.47 | | | | | | | | |
| 1465 | 2.46 | 34.52 | 0.72 | 3.10 | 151 | 7.63 | 2.46 | 27.57 | | | | | | | | |

a) Second cast; wire angle, 12°.
b) First cast; wire angle, 13°.
c) Third cast; wire angle, 15°.

| OBSERVED | | | | | | | | COMP | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $SiO_3$-Si | pH | Alk. | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | µg at/L | | meq/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| BROWN BEAR; August 20, 1958; 0400 GCT; 48°26'N, 124°35'W; sounding, 243 m; wind, 270°, force 4; weather, partly cloudy; sea, smooth; wire angle, 00°. | | | | | | | | | | | | | | | | |
| 0 | 11.09 | 31.80 | 5.20 | | | | | 24.29 | 0 | 11.09 | 31.80 | 5.20 | | 24.29 | 364 | 0.00 |
| 10 | 10.62 | 31.87 | 4.50 | | | | | 24.43 | 10 | 10.62 | 31.87 | 4.50 | | 24.43 | 351 | 0.04 |
| 20 | 9.67 | 32.19 | 4.04 | | | | | 24.84 | 20 | 9.67 | 32.19 | 4.04 | | 24.84 | 313 | 0.07 |
| 30 | 8.71 | 32.67 | 3.47 | | | | | 25.36 | 30 | 8.71 | 32.67 | 3.47 | | 25.36 | 263 | 0.10 |
| 50 | 7.83 | 33.20 | 3.26 | | | | | 25.91 | 50 | 7.83 | 33.20 | 3.26 | | 25.91 | 211 | 0.14 |
| 75 | 7.34 | 33.61 | 2.98 | | | | | 26.30 | 75 | 7.34 | 33.61 | 2.98 | | 26.30 | 174 | 0.19 |
| 100 | 7.13 | 33.75 | 2.52 | | | | | 26.44 | 100 | 7.13 | 33.75 | 2.52 | | 26.44 | 162 | 0.24 |
| 125 | 7.06 | 33.78 | 2.42 | | | | | 26.47 | 150 | 6.98 | 33.81 | 2.35 | | 26.51 | 156 | 0.31 |
| 150 | 6.98 | 33.81 | 2.35 | | | | | 26.51 | 200 | 6.88 | 33.86 | 2.16 | | 26.56 | 151 | 0.39 |
| 175 | 6.94 | 33.82 | 2.30 | | | | | 26.52 | | | | | | | | |
| 200 | 6.88 | 33.86 | 2.16 | | | | | 26.56 | | | | | | | | |
| 220 | 6.87 | 33.87 | 2.16 | | | | | 26.57 | | | | | | | | |
| BROWN BEAR; August 20, 1958; 0800 GCT; 48°18'N, 124°02'W; sounding, 187 m; wind, 270°, force 1; weather, partly cloudy; sea smooth; wire angle, 04°. | | | | | | | | | | | | | | | | |
| 0 | 10.72 | 32.20 | 4.92 | | | | | 24.67 | 0 | 10.72 | 32.20 | 4.92 | | 24.67 | 328 | 0.00 |
| 10 | 10.30 | 32.22 | 4.69 | | | | | 24.76 | 10 | 10.30 | 32.22 | 4.69 | | 24.76 | 320 | 0.03 |
| 20 | 9.86 | 32.32 | 4.58 | | | | | 24.91 | 20 | 9.86 | 32.32 | 4.58 | | 24.91 | 306 | 0.06 |
| 30 | 9.61 | 32.43 | 4.39 | | | | | 25.03 | 30 | 9.61 | 32.43 | 4.39 | | 25.03 | 294 | 0.09 |
| 50 | 8.27 | 32.97 | 3.20 | | | | | 25.66 | 50 | 8.27 | 32.97 | 3.20 | | 25.66 | 234 | 0.15 |
| 75 | 7.30 | 33.48 | 2.36 | | | | | 26.20 | 75 | 7.30 | 33.48 | 2.36 | | 26.20 | 184 | 0.20 |
| 100 | 6.92 | 33.81 | 2.16 | | | | | 26.51 | 100 | 6.92 | 33.81 | 2.16 | | 26.51 | 154 | 0.24 |
| 125 | 6.88 | 33.83 | 2.22 | | | | | 26.54 | 150 | 6.84 | 33.85 | 2.16 | | 26.56 | 151 | 0.32 |
| 150 | 6.84 | 33.85 | 2.16 | | | | | 26.56 | | | | | | | | |
| 175 | 6.80 | 33.85 | 2.06 | | | | | 26.56 | | | | | | | | |
| 180 | 6.82 | 33.85 | 2.11 | | | | | 26.56 | | | | | | | | |
| BROWN BEAR; August 20, 1958; 2000 GCT; 47°45'N, 122°25'W; sounding, 285 m; wind, 020°, force 2; weather, dry haze; sea, calm; wire angle, 00°. | | | | | | | | | | | | | | | | |
| 0 | 14.28 | 29.79 | 5.32 | | | | | 22.14 | 0 | 14.28 | 29.79 | 5.32 | | 22.14 | 570 | 0.00 |
| 10 | 13.52 | 29.85 | 4.85 | | | | | 22.34 | 10 | 13.52 | 29.85 | 4.85 | | 22.34 | 551 | 0.06 |
| 20 | 13.24 | 29.89 | 4.60 | | | | | 22.42 | 20 | 13.24 | 29.89 | 4.60 | | 22.42 | 543 | 0.11 |
| 30 | 12.93 | 30.01 | 4.46 | | | | | 22.57 | 30 | 12.93 | 30.01 | 4.46 | | 22.57 | 529 | 0.16 |
| 50 | 12.76 | 30.13 | 4.37 | | | | | 22.70 | 50 | 12.76 | 30.13 | 4.37 | | 22.70 | 517 | 0.27 |
| 75 | 12.72 | 30.28 | 4.52 | | | | | 22.82 | 75 | 12.72 | 30.28 | 4.52 | | 22.82 | 506 | 0.40 |
| 100 | 12.54 | 30.32 | 4.41 | | | | | 22.89 | 100 | 12.54 | 30.32 | 4.41 | | 22.89 | 500 | 0.52 |
| 125 | 12.54 | 30.38 | 4.51 | | | | | 22.93 | 150 | 12.60 | 30.40 | 4.52 | | 22.94 | 497 | 0.77 |
| 150 | 12.60 | 30.40 | 4.52 | | | | | 22.94 | 200 | 12.44 | 30.43 | 4.37 | | 22.99 | 492 | 1.02 |
| 180 | 12.48 | 30.42 | 4.39 | | | | | 22.97 | 250 | | 30.47 | 4.43 | | | | |
| 220 | 12.43 | 30.43 | 4.39 | | | | | 22.99 | | | | | | | | |
| 260 | - | 30.49 | 4.45 | | | | | | | | | | | | | |

BROWN BEAR; September 21, 1958; 1233, 1249 GCT; 48°16'N, 123°43'W; sounding, 179 m; wind, 270°, force 7; weather, overcast; sea, moderate; wire angle, 02°, 12°. 202-001

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 0a) | 9.82 | 31.847 | 4.04 | 3.05 | 24.55 | 0 | 9.82 | 31.85 | 4.04 | 3.05 | 24.55 | 340 | 0.00 |
| 5 | 9.82 | 31.848 | 4.03 | 2.96 | 24.55 | 10 | 9.72 | 31.91 | 3.86 | 3.04 | 24.61 | 334 | 0.03 |
| 10 | 9.72 | 31.905 | 3.86 | 3.04 | 24.61 | 20 | 9.43 | 32.10 | 3.71 | 2.42 | 24.81 | 316 | 0.07 |
| 20 | 9.43 | 32.097 | 3.71 | 2.42 | 24.81 | 30 | 9.37 | 32.16 | 3.60 | 3.10 | 24.86 | 310 | 0.10 |
| 30 | 9.37 | 32.158 | 3.60 | 3.10 | 24.86 | 50 | 9.25 | 32.29 | 3.52 | 3.05 | 24.98 | 299 | 0.16 |
| 50 | 9.25 | 32.285 | 3.52 | 3.05 | 24.98 | 75 | 9.23 | 32.35 | 3.57 | 2.95 | 25.03 | 295 | 0.23 |
| | | | | | | 100 | 8.66 | 32.90 | 3.37 | 2.92 | 25.55 | 246 | 0.30 |
| 73b) | 9.26 | 32.300 | 3.57 | 2.96 | 24.99 | 150 | 7.23 | 33.71 | 2.36 | 3.34 | 26.39 | 166 | 0.40 |
| 98 | 8.76 | 32.851 | 3.43 | 2.90 | 25.50 | | | | | | | | |
| 137 | 7.41 | 33.595 | 2.53 | 3.23 | 26.28 | | | | | | | | |
| 176 | 7.29 | 33.706 | 2.22 | 3.57 | 26.38 | | | | | | | | |

BROWN BEAR; September 21, 1958; 1523 GCT; 48°18'N, 124°04'W; sounding, 186 m; wind, 210°, force 4; weather, cloudy; sea, moderate; wire angle, 11°. 202-002

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 9.90 | 31.952 | 4.35 | 2.83 | 24.61 | 0 | 9.90 | 31.95 | 4.35 | 2.83 | 24.61 | 334 | 0.00 |
| 5 | 9.85 | 31.958 | 4.32 | 2.85 | 24.63 | 10 | 9.86 | 31.97 | 4.20 | 2.96 | 24.63 | 332 | 0.03 |
| 10 | 9.86 | 31.973 | 4.20 | 2.96 | 24.63 | 20 | 9.74 | 32.01 | 4.02 | 3.09 | 24.69 | 327 | 0.07 |
| 20 | 9.74 | 32.007 | 4.02 | 3.09 | 24.69 | 30 | 9.65 | 32.11 | 3.79 | 3.25 | 24.78 | 318 | 0.10 |
| 29 | 9.67 | 32.080 | 3.81 | 3.25 | 24.75 | 50 | 9.20 | 32.58 | 3.37 | 3.24 | 25.22 | 277 | 0.16 |
| 49 | 9.21 | 32.565 | 3.38 | 3.27 | 25.21 | 75 | 8.55 | 33.03 | 2.96 | 3.13 | 25.67 | 234 | 0.22 |
| 74 | 8.61 | 33.004 | 2.99 | 3.09 | 25.64 | 100 | 7.43 | 33.60 | 2.43 | 3.86 | 26.28 | 177 | 0.27 |
| 98 | 7.45 | 33.588 | 2.46 | 3.86 | 26.27 | 150 | 7.17 | 33.78 | 2.04 | 3.89 | 26.46 | 160 | 0.36 |
| 137 | 7.20 | 33.764 | 2.08 | 3.86 | 26.44 | | | | | | | | |
| 177 | 7.20 | 33.772 | 2.09 | 3.98 | 26.44 | | | | | | | | |

BROWN BEAR; September 21, 1958; 1900 GCT; 48°27'N, 124°32'W; sounding, 232 m; wind, 220°, force 4; weather, cloudy; sea, moderate; wire angle, 00°. 202-003

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 10.76 | 31.175 | 5.06 | 2.57 | 23.87 | 0 | 10.76 | 31.18 | 5.06 | 2.57 | 23.87 | 404 | 0.00 |
| 5 | 10.64 | 31.290 | 4.89 | 2.57 | 23.98 | 10 | 10.30 | 31.65 | 4.39 | 2.70 | 24.31 | 362 | 0.04 |
| 10 | 10.30 | 31.645 | 4.39 | 2.70 | 24.31 | 20 | 10.02 | 31.86 | 4.23 | 2.80 | 24.52 | 342 | 0.07 |
| 20 | 10.02 | 31.861 | 4.23 | 2.80 | 24.52 | 30 | 10.01 | 31.91 | 4.22 | 2.80 | 24.56 | 339 | 0.11 |
| 30 | 10.01 | 31.907 | 4.22 | 2.80 | 24.56 | 50 | 9.97 | 31.97 | 4.01 | 2.68 | 24.62 | 334 | 0.17 |
| 50 | 9.97 | 31.974 | 4.01 | 2.68 | 24.62 | 75 | 8.78 | 32.82 | 2.99 | 2.90 | 25.47 | 253 | 0.25 |
| 75 | 8.78 | 32.822 | 2.99 | 2.90 | 25.47 | 100 | 7.75 | 33.46 | 2.13 | 3.51 | 26.12 | 192 | 0.30 |
| 100 | 7.75 | 33.457 | 2.13 | 3.51 | 26.12 | 150 | 7.44 | 33.74 | 1.49 | 3.86 | 26.39 | 167 | 0.39 |
| 125 | 7.52 | 33.652 | 1.55 | 3.57 | 26.31 | 200 | 7.37 | 33.83 | 1.50 | 3.62 | 26.47 | 160 | 0.48 |
| 150 | 7.44 | 33.737 | 1.49 | 3.86 | 26.39 | | | | | | | | |
| 175 | 7.42 | 33.760 | 1.53 | 3.66 | 26.41 | | | | | | | | |
| 200 | 7.37 | 33.826 | 1.50 | 3.62 | 26.47 | | | | | | | | |
| 225 | 7.22 | 33.831 | 1.55 | 3.76 | 26.49 | | | | | | | | |

a) First cast.
b) Second cast.

UW

BB-202

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

202-004 BROWN BEAR; September 22, 1958; 1646, 1819 GCT; 49°26'N, 128°10'W; sounding, 2350 m; wind, calm; weather, partly cloudy; sea, calm; wire angle, 07°, 05°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 14.58 | 32.008 | 5.88 | 0.74 | 23.78 | 0 | 14.58 | 32.01 | 5.88 | 0.74 | 23.78 | 413 | 0.00 |
| 10 | 14.54 | 32.009 | 5.86 | 0.72 | 23.79 | 10 | 14.54 | 32.01 | 5.86 | 0.72 | 23.79 | 412 | 0.04 |
| 20 | 14.44 | 32.009 | 5.84 | 0.55 | 23.81 | 20 | 14.44 | 32.01 | 5.84 | 0.55 | 23.81 | 410 | 0.08 |
| 30 | 14.38 | 32.050 | 5.76 | 0.69 | 23.85 | 30 | 14.38 | 32.05 | 5.76 | 0.69 | 23.85 | 407 | 0.12 |
| 50 | 9.76 | 32.454 | 5.72 | 1.26 | 25.02 | 50 | 9.76 | 32.45 | 5.72 | 1.26 | 25.02 | 295 | 0.19 |
| 75 | 7.98 | 32.750 | 5.19 | 1.60 | 25.53 | 75 | 7.98 | 32.75 | 5.19 | 1.60 | 25.53 | 247 | 0.26 |
| 100 | 7.35 | 33.191 | 4.59 | 2.00 | 25.97 | 100 | 7.35 | 33.19 | 4.59 | 2.00 | 25.97 | 206 | 0.32 |
| 125 | 6.72 | 33.581 | 4.29 | 2.20 | 26.36 | 150 | 6.90 | 33.82 | 3.30 | 2.44 | 26.53 | 154 | 0.41 |
| 149 | 6.90 | 33.818 | 3.38 | 2.43 | 26.53 | 200 | 6.39 | 33.88 | 3.19 | 2.58 | 26.64 | 144 | 0.48 |
| 174 | 6.79 | 33.875 | 2.35 | 2.54 | 26.59 | 250 | 5.91 | 33.94 | 2.58 | 2.99 | 26.75 | 134 | 0.55 |
| | | | | | | 300 | 5.59 | 33.96 | 1.87 | 3.22 | 26.80 | 129 | 0.62 |
| 197b) | 6.30 | 33.862 | 3.51 | 2.60 | 26.64 | 400 | 5.09 | 34.04 | 1.18 | 3.81 | 26.93 | 118 | 0.74 |
| | | | | | | 500 | 4.72 | 34.12 | 0.74 | 3.63 | 27.03 | 109 | 0.85 |
| 199a) | 6.52 | 33.913 | 2.91 | 2.51 | 26.65 | 600 | 4.29 | 34.20 | 0.46 | 3.70 | 27.14 | 99 | 0.96 |
| | | | | | | 700 | 4.06 | 34.26 | 0.33 | 3.89 | 27.21 | 93 | 1.05 |
| 247b) | 5.81 | 33.910 | 3.06 | 3.05 | 26.74 | 800 | 3.84 | 34.32 | 0.30 | 3.77 | 27.28 | 86 | 1.14 |
| | | | | | | 1000 | 3.33 | 34.40 | 0.33 | 3.83 | 27.40 | 76 | 1.31 |
| 248a) | 6.02 | 33.959 | 2.18 | 2.90 | 26.75 | 1200 | 2.86 | 34.46 | 0.51 | 3.52 | 27.49 | 68 | 1.45 |
| | | | | | | 1500 | 2.35 | 34.53 | 0.83 | 3.45 | 27.59 | 59 | 1.64 |
| 296b) | 5.61 | 33.962 | 1.90 | 3.18 | 26.80 | | | | | | | | |
| 395 | 5.10 | 34.039 | 1.21 | 3.82 | 26.93 | | | | | | | | |
| 493 | 4.76 | 34.113 | 0.76 | 3.64 | 27.02 | | | | | | | | |
| 592 | 4.31 | 34.191 | 0.48 | 3.66 | 27.13 | | | | | | | | |
| 691 | 4.08 | 34.260 | 0.34 | 3.91 | 27.21 | | | | | | | | |
| 789 | 3.87 | 34.312 | 0.30 | 3.76 | 27.27 | | | | | | | | |
| 987 | 3.36 | 34.400 | 0.32 | 3.86 | 27.39 | | | | | | | | |
| 1480 | 2.38 | 34.532 | 0.81 | 3.44 | 27.59 | | | | | | | | |
| 1780 | 2.08 | 34.575 | 1.19 | 3.82 | 27.65 | | | | | | | | |

202-005 BROWN BEAR; September 23, 1958; 2047, 2222 GCT; 50°02'N, 132°22'W; sounding, 3191 m; wind, 200°, force 5; weather, cloudy; sea, slight; wire angle, 04°, 00°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 15.21 | 32.545 | 5.90 | 0.63 | 24.06 | 0 | 15.21 | 32.55 | 5.90 | 0.63 | 24.06 | 386 | 0.00 |
| 10 | 15.17 | 32.544 | 5.85 | 0.60 | 24.06 | 10 | 15.17 | 32.54 | 5.85 | 0.60 | 24.06 | 386 | 0.04 |
| 20 | 15.10 | 32.541 | 5.87 | 0.94 | 24.08 | 20 | 15.10 | 32.54 | 5.87 | 0.94 | 24.08 | 385 | 0.08 |
| 30 | 15.10 | 32.547 | 5.88 | 0.69 | 24.09 | 30 | 15.10 | 32.55 | 5.88 | 0.69 | 24.09 | 385 | 0.12 |
| 50 | 9.60 | 32.501 | 6.91 | 1.15 | 25.09 | 50 | 9.60 | 32.50 | 6.91 | 1.15 | 25.09 | 289 | 0.18 |
| 75 | 8.38 | 32.537 | 6.44 | 1.40 | 25.31 | 75 | 8.38 | 32.54 | 6.44 | 1.40 | 25.31 | 268 | 0.25 |
| 100 | 7.17 | 32.772 | 6.01 | 1.71 | 25.66 | 100 | 7.17 | 32.77 | 6.01 | 1.71 | 25.66 | 235 | 0.32 |
| 125 | 6.44 | 33.190 | 5.50 | 1.91 | 26.09 | 150 | 6.07 | 33.45 | 5.15 | 2.20 | 26.34 | 171 | 0.42 |
| 150 | 6.07 | 33.454 | 5.15 | 2.20 | 26.34 | 200 | 5.63 | 33.84 | 3.76 | 2.95 | 26.70 | 137 | 0.49 |
| 175 | 6.04 | 33.696 | 4.61 | 2.26 | 26.54 | 250 | 5.35 | 33.88 | 3.26 | 2.82 | 26.77 | 131 | 0.56 |
| | | | | | | 300 | 4.96 | 33.91 | 2.62 | 3.02 | 26.84 | 125 | 0.62 |
| 196b) | 5.94 | 33.786 | 4.30 | 3.91 | 26.63 | 400 | 4.41 | 34.00 | 1.53 | 3.81 | 26.97 | 113 | 0.74 |
| | | | | | | 500 | 4.08 | 34.09 | 0.97 | 3.98 | 27.08 | 104 | 0.85 |
| 200a) | 5.34 | 33.890 | 3.25 | 2.96 | 26.78 | 600 | 3.85 | 34.18 | 0.64 | 4.03 | 27.17 | 95 | 0.95 |
| | | | | | | 700 | 3.69 | 34.25 | 0.47 | 4.31 | 27.24 | 89 | 1.04 |
| 245b) | 5.44 | 33.881 | 3.38 | 2.82 | 26.76 | 800 | 3.50 | 34.30 | 0.44 | 4.38 | 27.30 | 84 | 1.13 |
| | | | | | | 1000 | 3.05 | 34.38 | 0.37 | 4.04 | 27.41 | 75 | 1.29 |
| 250a) | 5.30 | 33.889 | 3.20 | 2.82 | 26.78 | 1200 | 2.73 | 34.45 | 0.46 | 4.03 | 27.49 | 67 | 1.43 |
| | | | | | | 1500 | 2.34 | 34.51 | 0.68 | 4.03 | 27.57 | 60 | 1.62 |
| 294b) | 5.00 | 33.909 | 2.70 | 2.95 | 26.83 | | | | | | | | |
| 392 | 4.44 | 33.990 | 1.59 | 3.79 | 26.96 | | | | | | | | |
| 491 | 4.11 | 34.080 | 1.01 | 3.99 | 27.07 | | | | | | | | |
| 590 | 3.86 | 34.166 | 0.67 | 3.99 | 27.16 | | | | | | | | |
| 688 | 3.71 | 34.235 | 0.47 | 4.28 | 27.23 | | | | | | | | |
| 787 | 3.53 | 34.290 | 0.45 | 4.42 | 27.29 | | | | | | | | |
| 983 | 3.08 | 34.374 | 0.37 | 4.04 | 27.40 | | | | | | | | |
| 1180 | 2.76 | 34.447 | 0.45 | 4.02 | 27.49 | | | | | | | | |
| 1479 | 2.36 | 34.514 | 0.66 | 4.04 | 27.57 | | | | | | | | |
| 1778 | 2.11 | 34.565 | 1.08 | 3.80 | 27.64 | | | | | | | | |



a) Second cast.
b) First cast.

BROWN BEAR; September 25, 1958; 1633, 1821 GCT; 49°56'N, 135°58'W; sounding, 3658 m; wind, 140°, force 5; weather, rain; sea, slight; wire angle, 16°, 10°. 202-006

| OBSERVED | | | | | | INTERPOLATED | | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 0a) | 14.00 | 32.311 | 5.97 | 0.59 | 24.13 | 0 | 14.00 | 32.31 | 5.97 | 0.59 | 24.13 | 379 | 0.00 |
| 10 | 14.02 | 32.314 | 5.95 | 1.03 | 24.13 | 10 | 14.02 | 32.31 | 5.95 | 1.03 | 24.13 | 380 | 0.04 |
| 19 | 13.90 | 32.317 | 5.96 | 0.58 | 24.16 | 20 | 13.98 | 32.32 | 5.94 | 0.57 | 24.14 | 379 | 0.08 |
| 28 | 14.00 | 32.319 | 5.95 | 0.59 | 24.14 | 30 | 13.38 | 32.35 | 6.12 | 0.66 | 24.29 | 365 | 0.11 |
| 47 | 9.44 | 32.547 | 6.98 | 1.12 | 25.15 | 50 | 9.20 | 32.56 | 6.91 | 1.15 | 25.20 | 278 | 0.18 |
| 71 | 7.91 | 32.614 | 6.56 | 1.33 | 25.43 | 75 | 7.81 | 32.62 | 6.60 | 1.35 | 25.46 | 254 | 0.24 |
| 95 | 7.24 | 32.713 | 6.50 | 1.52 | 25.61 | 100 | 7.05 | 32.74 | 6.32 | 1.61 | 25.66 | 236 | 0.30 |
| 119 | 6.40 | 32.957 | 5.76 | 1.92 | 25.91 | 150 | 5.61 | 33.48 | 5.37 | 2.18 | 26.42 | 163 | 0.40 |
| 143 | 5.70 | 33.430 | 5.39 | 2.18 | 26.37 | 200 | 5.24 | 33.75 | 4.36 | 2.56 | 26.68 | 139 | 0.48 |
| 167 | 5.43 | 33.599 | 5.13 | 2.26 | 26.54 | 250 | 4.95 | 33.85 | 3.52 | 2.85 | 26.79 | 129 | 0.55 |
| | | | | | | 300 | 4.78 | 33.92 | 2.46 | 3.29 | 26.87 | 122 | 0.61 |
| 187b) | 5.36 | 33.736 | 4.30 | 2.62 | 26.66 | 400 | 4.46 | 34.02 | 1.32 | 3.76 | 26.98 | 112 | 0.73 |
| | | | | | | 500 | 4.13 | 34.10 | 0.87 | 4.06 | 27.08 | 104 | 0.84 |
| 191a) | 5.29 | 33.697 | 4.57 | 2.46 | 26.63 | 600 | 3.87 | 34.17 | 0.56 | 4.28 | 27.16 | 96 | 0.94 |
| | | | | | | 700 | 3.64 | 34.25 | 0.45 | 4.29 | 27.25 | 89 | 1.03 |
| 233b) | 5.02 | 33.839 | 3.83 | 2.82 | 26.78 | 800 | 3.43 | 34.31 | 0.38 | 4.39 | 27.32 | 83 | 1.12 |
| | | | | | | 1000 | 3.06 | 34.40 | 0.34 | 4.22 | 27.42 | 73 | 1.27 |
| 239a) | 5.02 | 33.815 | 3.93 | 2.62 | 26.76 | 1200 | 2.72 | 34.46 | 0.42 | 4.01 | 27.50 | 66 | 1.41 |
| | | | | | | 1500 | 2.31 | 34.52 | 0.63 | 4.03 | 27.58 | 59 | 1.60 |
| 280b) | 4.83 | 33.886 | 2.83 | 3.10 | 26.84 | | | | | | | | |
| 373 | 4.57 | 33.998 | 1.47 | 3.76 | 26.95 | | | | | | | | |
| 466 | 4.22 | 34.072 | 1.00 | 3.86 | 27.05 | | | | | | | | |
| 560 | 3.97 | 34.138 | 0.67 | 4.28 | 27.13 | | | | | | | | |
| 653 | 3.74 | 34.214 | 0.47 | 4.29 | 27.21 | | | | | | | | |
| 745 | 3.54 | 34.278 | 0.43 | 4.30 | 27.28 | | | | | | | | |
| 932 | 3.18 | 34.370 | 0.32 | 4.42 | 27.39 | | | | | | | | |
| 1121 | 2.86 | 34.435 | 0.39 | 3.98 | 27.47 | | | | | | | | |
| 1408 | 2.42 | 34.497 | 0.55 | 4.04 | 27.56 | | | | | | | | |
| 1703 | 2.14 | 34.554 | 0.88 | 3.94 | 27.62 | | | | | | | | |

BROWN BEAR; September 26-27, 1958; 2221, 0009 GCT; 50°01'N, 139°49'W; sounding, 3786 m; wind, 200°, force 7; weather, sky obscured; sea, moderate; wire angle, 07°, 05°. 202-007

| OBSERVED | | | | | | INTERPOLATED | | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 0a) | 12.78 | 32.619 | 6.13 | 0.80 | 24.62 | 0 | 12.78 | 32.62 | 6.13 | 0.80 | 24.62 | 333 | 0.00 |
| 10 | 12.35 | 32.617 | 6.13 | 0.75 | 24.70 | 10 | 12.35 | 32.62 | 6.13 | 0.75 | 24.70 | 326 | 0.03 |
| 20 | 12.35 | 32.614 | 6.13 | 0.77 | 24.69 | 20 | 12.35 | 32.61 | 6.13 | 0.77 | 24.69 | 327 | 0.07 |
| 30 | 12.32 | 32.612 | 6.13 | 0.74 | 24.70 | 30 | 12.32 | 32.61 | 6.13 | 0.74 | 24.70 | 326 | 0.10 |
| 50 | 10.92 | 32.666 | 6.19 | 0.81 | 25.00 | 50 | 10.92 | 32.67 | 6.19 | 0.81 | 25.00 | 298 | 0.16 |
| 75 | 7.15 | 32.787 | 6.70 | 1.26 | 25.68 | 75 | 7.15 | 32.79 | 6.70 | 1.26 | 25.68 | 233 | 0.23 |
| 100 | 6.66 | 32.821 | 6.57 | 1.37 | 25.77 | 100 | 6.66 | 32.82 | 6.57 | 1.37 | 25.77 | 225 | 0.28 |
| 125 | 6.05 | 33.014 | 5.95 | 1.50 | 26.00 | 150 | 5.60 | 33.39 | 5.33 | 1.80 | 26.35 | 170 | 0.38 |
| 150 | 5.60 | 33.392 | 5.33 | 1.80 | 26.35 | 200 | 4.89 | 33.74 | 4.43 | 2.15 | 26.71 | 136 | 0.46 |
| 175 | 5.18 | 33.626 | 4.80 | 1.90 | 26.59 | 250 | 4.59 | 33.83 | 3.55 | 2.48 | 26.82 | 126 | 0.52 |
| | | | | | | 300 | 4.35 | 33.90 | 2.47 | 2.64 | 26.90 | 119 | 0.59 |
| 192b) | 4.92 | 33.726 | 4.45 | 2.13 | 26.70 | 400 | 4.06 | 34.02 | 1.47 | 2.73 | 27.02 | 108 | 0.70 |
| | | | | | | 500 | 3.82 | 34.13 | 0.92 | 3.21 | 27.13 | 98 | 0.80 |
| 199a) | 4.92 | 33.728 | 4.50 | 2.12 | 26.70 | 600 | 3.60 | 34.20 | 0.57 | 3.42 | 27.21 | 91 | 0.90 |
| | | | | | | 700 | 3.41 | 34.26 | 0.55 | 3.57 | 27.28 | 86 | 0.99 |
| 241b) | 4.63 | 33.826 | 3.54 | 2.49 | 26.81 | 800 | 3.23 | 34.31 | 0.50 | 3.64 | 27.34 | 80 | 1.07 |
| | | | | | | 1000 | 2.89 | 34.39 | 0.41 | 3.17 | 27.43 | 72 | 1.22 |
| 249a) | 4.58 | 33.809 | 3.84 | 2.38 | 26.80 | 1200 | 2.64 | 34.45 | 0.48 | 2.40 | 27.50 | 66 | 1.36 |
| | | | | | | 1500 | 2.33 | 34.52 | 0.74 | 2.40 | 27.58 | 59 | 1.55 |
| 289b) | 4.39 | 33.889 | 2.62 | 2.68 | 26.89 | | | | | | | | |
| 386 | 4.09 | 34.000 | 1.55 | 2.63 | 27.00 | | | | | | | | |
| 482 | 3.86 | 34.107 | 1.04 | 3.16 | 27.12 | | | | | | | | |
| 580 | 3.64 | 34.190 | 0.58 | 3.38 | 27.20 | | | | | | | | |
| 676 | 3.45 | 34.241 | 0.55 | 3.53 | 27.26 | | | | | | | | |
| 773 | 3.28 | 34.297 | 0.53 | 3.63 | 27.32 | | | | | | | | |
| 967 | 2.94 | 34.378 | 0.41 | 3.40 | 27.42 | | | | | | | | |
| 1160 | 2.68 | 34.438 | 0.45 | 2.40 | 27.49 | | | | | | | | |
| 1453 | 2.38 | 34.509 | 0.69 | 2.40 | 27.57 | | | | | | | | |
| 1751 | 2.08 | 34.560 | 1.02 | 2.40 | 27.63 | | | | | | | | |



a) Second cast.
b) First cast.

UW

BB-202

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

202-008 BROWN BEAR; September 27-28, 1958; 2313, 0100 GCT; 47°59'N, 140°02'W; sounding, 4115 m; wind, 220°, force 3; weather, drizzle; sea, moderate; wire angle, 10°, 00°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 14.06 | 32.597 | 5.94 | 0.80 | 24.34 | 0 | 14.06 | 32.60 | 5.94 | 0.80 | 24.34 | 359 | 0.00 |
| 10 | 14.04 | 32.600 | 5.95 | 0.81 | 24.35 | 10 | 14.04 | 32.60 | 5.95 | 0.81 | 24.35 | 359 | 0.04 |
| 20 | 13.97 | 32.608 | 5.95 | 0.79 | 24.37 | 20 | 13.97 | 32.61 | 5.95 | 0.79 | 24.37 | 357 | 0.07 |
| 30 | 13.97 | 33.620 | 5.92 | 0.81 | 24.38 | 30 | 13.97 | 32.62 | 5.92 | 0.81 | 24.38 | 357 | 0.11 |
| 50 | 13.50 | 32.654 | 5.98 | 0.99 | 24.50 | 50 | 13.50 | 32.65 | 5.98 | 0.99 | 24.50 | 346 | 0.18 |
| 75 | 8.06 | 32.694 | 6.62 | 1.12 | 25.47 | 75 | 8.06 | 32.69 | 6.62 | 1.12 | 25.47 | 253 | 0.25 |
| 100 | 7.62 | 32.793 | 6.69 | 1.30 | 25.62 | 100 | 7.62 | 32.79 | 6.69 | 1.30 | 25.62 | 240 | 0.32 |
| 125 | 6.92 | 32.884 | 6.23 | 1.45 | 25.78 | 150 | 6.22 | 33.31 | 5.25 | 1.75 | 26.21 | 183 | 0.42 |
| 150 | 6.22 | 33.313 | 5.25 | 1.75 | 26.21 | 200 | 6.10 | 33.79 | 3.96 | 2.12 | 26.61 | 147 | 0.50 |
| 175 | 6.10 | 33.622 | 4.88 | 1.73 | 26.47 | 250 | 5.73 | 33.89 | 3.07 | 2.08 | 26.73 | 135 | 0.57 |
| | | | | | | 300 | 5.20 | 33.93 | 2.29 | 2.18 | 26.83 | 126 | 0.64 |
| 192b) | 6.14 | 33.778 | 4.03 | 2.02 | 26.59 | 400 | 4.50 | 34.00 | 1.46 | 2.56 | 26.96 | 114 | 0.76 |
| | | | | | | 500 | 4.26 | 34.08 | 0.90 | 2.75 | 27.05 | 106 | 0.87 |
| 200a) | 6.09 | 33.784 | 4.03 | 2.24 | 26.60 | 600 | 3.89 | 34.15 | 0.68 | 2.83 | 27.14 | 98 | 0.97 |
| | | | | | | 700 | 3.72 | 34.23 | 0.46 | 2.90 | 27.22 | 91 | 1.06 |
| 240b) | 5.82 | 33.889 | 3.19 | 2.21 | 26.72 | 800 | 3.52 | 34.30 | 0.37 | 2.89 | 27.30 | 84 | 1.15 |
| | | | | | | 1000 | 3.11 | 34.39 | 0.33 | 3.02 | 27.41 | 75 | 1.31 |
| 250a) | 5.74 | 33.890 | 3.18 | 1.94 | 26.73 | 1200 | 2.76 | 34.45 | 0.41 | 2.65 | 27.49 | 68 | 1.45 |
| | | | | | | 1500 | 2.33 | 34.50 | 0.64 | 2.12 | 27.57 | 61 | 1.65 |
| 288b) | 5.35 | 33.922 | 2.39 | 2.13 | 26.80 | | | | | | | | |
| 384 | 4.50 | 33.978 | 1.61 | 2.48 | 26.94 | | | | | | | | |
| 479 | 4.38 | 34.074 | 0.92 | 2.80 | 27.03 | | | | | | | | |
| 574 | 3.93 | 34.129 | 0.77 | 2.72 | 27.12 | | | | | | | | |
| 670 | 3.77 | 34.213 | 0.49 | 2.97 | 27.20 | | | | | | | | |
| 765 | 3.61 | 34.275 | 0.40 | 2.82 | 27.28 | | | | | | | | |
| 958 | 3.18 | 34.378 | 0.32 | 3.03 | 27.40 | | | | | | | | |
| 1154 | 2.85 | 34.438 | 0.39 | 2.86 | 27.47 | | | | | | | | |
| 1447 | 2.39 | 34.491 | 0.59 | 2.11 | 27.55 | | | | | | | | |
| 1744 | 2.14 | 34.547 | 0.92 | 2.77 | 27.62 | | | | | | | | |

202-009 BROWN BEAR; September 28, 1958; 2104, 2246 GCT; 47°57'N, 136°36'W; sounding, 4188 m; wind, 220°, force 1; weather, light fog; sea, smooth; wire angle, 02°, 00°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 14.52 | 32.627 | 5.95 | 0.56 | 24.27 | 0 | 14.52 | 32.63 | 5.95 | 0.56 | 24.27 | 366 | 0.00 |
| 10 | 14.23 | 32.632 | 5.99 | 0.83 | 24.33 | 10 | 14.23 | 32.63 | 5.99 | 0.83 | 24.33 | 361 | 0.04 |
| 20 | 14.07 | 32.624 | 5.95 | 0.74 | 24.36 | 20 | 14.07 | 32.62 | 5.95 | 0.74 | 24.36 | 358 | 0.07 |
| 30 | 14.11 | 32.635 | 5.97 | 0.73 | 24.36 | 30 | 14.11 | 32.64 | 5.97 | 0.73 | 24.36 | 358 | 0.11 |
| 50 | 8.82 | 32.638 | 7.06 | 1.01 | 25.32 | 50 | 8.82 | 32.64 | 7.06 | 1.01 | 25.32 | 267 | 0.17 |
| 75 | 7.95 | 32.741 | 6.62 | 1.02 | 25.53 | 75 | 7.95 | 32.74 | 6.62 | 1.02 | 25.53 | 247 | 0.23 |
| 100 | 7.28 | 32.793 | 6.07 | 1.32 | 25.66 | 100 | 7.28 | 32.79 | 6.07 | 1.32 | 25.66 | 235 | 0.29 |
| 125 | 6.48 | 33.170 | 5.63 | 1.56 | 26.07 | 150 | 6.08 | 33.52 | 5.40 | 1.60 | 26.40 | 166 | 0.39 |
| 150 | 6.08 | 33.522 | 5.40 | 1.60 | 26.40 | 200 | 5.51 | 33.72 | 5.03 | 1.85 | 26.62 | 145 | 0.47 |
| 175 | 5.81 | 33.634 | 5.34 | 1.66 | 26.52 | 250 | 4.97 | 33.81 | 4.12 | 2.11 | 26.76 | 132 | 0.54 |
| | | | | | | 300 | 4.47 | 33.89 | 2.82 | 2.43 | 26.88 | 121 | 0.60 |
| 197b) | 5.46 | 33.731 | 5.02 | 1.96 | 26.64 | 400 | 4.37 | 34.02 | 1.32 | 2.91 | 26.99 | 111 | 0.72 |
| | | | | | | 500 | 3.95 | 34.09 | 1.00 | 2.79 | 27.09 | 102 | 0.83 |
| 200a) | 5.60 | 33.707 | 5.10 | 1.72 | 26.61 | 600 | 3.79 | 34.17 | 0.64 | 2.95 | 27.17 | 96 | 0.93 |
| | | | | | | 700 | 3.52 | 34.23 | 0.53 | 2.92 | 27.24 | 89 | 1.02 |
| 246b) | 4.92 | 33.813 | 4.14 | 2.16 | 26.76 | 800 | 3.33 | 34.28 | 0.47 | 2.73 | 27.30 | 84 | 1.10 |
| | | | | | | 1000 | 3.00 | 34.38 | 0.38 | 2.72 | 27.41 | 74 | 1.26 |
| 250a) | 5.08 | 33.805 | 4.21 | 2.04 | 26.75 | 1200 | 2.74 | 34.45 | 0.38 | 2.86 | 27.49 | 67 | 1.40 |
| | | | | | | 1500 | 2.36 | 34.52 | 0.62 | 2.79 | 27.58 | 60 | 1.59 |
| 296b) | 4.47 | 33.878 | 2.91 | 2.40 | 26.87 | | | | | | | | |
| 395 | 4.40 | 34.017 | 1.33 | 2.92 | 26.99 | | | | | | | | |
| 494 | 3.96 | 34.085 | 1.03 | 2.78 | 27.09 | | | | | | | | |
| 593 | 3.81 | 34.162 | 0.65 | 2.94 | 27.16 | | | | | | | | |
| 692 | 3.53 | 34.229 | 0.54 | 2.94 | 27.24 | | | | | | | | |
| 791 | 3.35 | 34.280 | 0.48 | 2.73 | 27.30 | | | | | | | | |
| 988 | 3.02 | 34.373 | 0.38 | 2.71 | 27.40 | | | | | | | | |
| 1187 | 2.76 | 34.449 | 0.37 | 2.87 | 27.49 | | | | | | | | |
| 1483 | 2.38 | 34.524 | 0.60 | 2.79 | 27.58 | | | | | | | | |
| 1782 | 2.06 | 34.570 | 1.04 | 2.81 | 27.64 | | | | | | | | |



a) Second cast.
b) First cast.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

202-010

BROWN BEAR; September 29-30, 1958; 2233, 0004 GCT; 47°58'N, 133°08'W; sounding, 3493 m; wind, 340°, force 3; weather, cloudy; sea, smooth; wire angle, 07°, 03°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 16.44 | 32.477 | 5.66 | 0.67 | 23.73 | 0 | 16.44 | 32.48 | 5.66 | 0.67 | 23.73 | 417 | 0.00 |
| 10 | 16.42 | 32.475 | 5.77 | 0.70 | 23.74 | 10 | 16.42 | 32.48 | 5.77 | 0.70 | 23.74 | 417 | 0.04 |
| 20 | 16.08 | 32.477 | 5.69 | 0.64 | 23.82 | 20 | 16.08 | 32.48 | 5.69 | 0.64 | 23.82 | 410 | 0.08 |
| 30 | 16.22 | 32.496 | 5.68 | 0.57 | 23.80 | 30 | 16.22 | 32.50 | 5.68 | 0.57 | 23.80 | 412 | 0.12 |
| 50 | 11.24 | 32.579 | 7.10 | 0.73 | 24.87 | 50 | 11.24 | 32.58 | 7.10 | 0.73 | 24.87 | 310 | 0.20 |
| 75 | 8.87 | 32.592 | 6.50 | 1.19 | 25.28 | 75 | 8.87 | 32.59 | 6.50 | 1.19 | 25.28 | 272 | 0.27 |
| 100 | 7.95 | 32.634 | 6.20 | 1.32 | 25.44 | 100 | 7.95 | 32.63 | 6.20 | 1.32 | 25.44 | 256 | 0.34 |
| 125 | 7.16 | 32.901 | 5.77 | 1.51 | 25.77 | 150 | 6.37 | 33.32 | 5.40 | 1.77 | 26.20 | 184 | 0.44 |
| 150 | 6.37 | 33.316 | 5.40 | 1.77 | 26.20 | 200 | 6.20 | 33.80 | 4.59 | 1.78 | 26.60 | 147 | 0.53 |
| 175 | 6.17 | 33.615 | 4.94 | 1.66 | 26.46 | 250 | 5.71 | 33.89 | 3.82 | 2.09 | 26.73 | 135 | 0.60 |
| | | | | | | 300 | 5.16 | 33.91 | 2.89 | 2.28 | 26.82 | 128 | 0.66 |
| 196b) | 6.25 | 33.804 | 4.64 | 1.82 | 26.60 | 400 | 4.57 | 33.98 | 1.68 | 2.54 | 26.94 | 116 | 0.79 |
| | | | | | | 500 | 4.22 | 34.08 | 0.88 | 2.82 | 27.05 | 106 | 0.90 |
| 200a) | 6.20 | 33.812 | 4.60 | 1.71 | 26.61 | 600 | 3.94 | 34.17 | 0.57 | 2.89 | 27.15 | 97 | 1.00 |
| | | | | | | 700 | 3.71 | 34.25 | 0.47 | 2.97 | 27.24 | 90 | 1.09 |
| 246b) | 5.75 | 33.889 | 3.90 | 2.07 | 26.73 | 800 | 3.53 | 34.30 | 0.39 | 2.92 | 27.30 | 84 | 1.18 |
| | | | | | | 1000 | 3.12 | 34.39 | 0.31 | 3.07 | 27.41 | 75 | 1.34 |
| 250a) | 5.73 | 33.887 | 3.83 | 2.08 | 26.73 | 1200 | 2.81 | 34.45 | 0.43 | 3.06 | 27.49 | 68 | 1.48 |
| | | | | | | 1500 | 2.35 | 34.52 | 0.74 | 2.89 | 27.58 | 59 | 1.67 |
| 295b) | 5.20 | 33.909 | 2.96 | 2.27 | 26.81 | | | | | | | | |
| 393 | 4.60 | 33.974 | 1.75 | 2.51 | 26.93 | | | | | | | | |
| 492 | 4.24 | 34.073 | 0.92 | 2.82 | 27.04 | | | | | | | | |
| 591 | 3.96 | 34.157 | 0.58 | 2.87 | 27.14 | | | | | | | | |
| 689 | 3.73 | 34.235 | 0.48 | 2.98 | 27.23 | | | | | | | | |
| 788 | 3.56 | 34.291 | 0.40 | 2.90 | 27.29 | | | | | | | | |
| 985 | 3.14 | 34.378 | 0.31 | 3.07 | 27.40 | | | | | | | | |
| 1182 | 2.84 | 34.448 | 0.41 | 3.07 | 27.48 | | | | | | | | |
| 1478 | 2.38 | 34.516 | 0.71 | 2.90 | 27.58 | | | | | | | | |
| 1778 | 2.08 | 34.567 | 1.11 | 2.72 | 27.64 | | | | | | | | |

a) Second cast.
b) First cast.

202-011

BROWN BEAR; September 30-October 1, 1958; 2225, 2354, 0015 GCT; 47°59'N, 130°08'W; sounding, 2580 m; wind, 300°, force 3; weather, overcast; sea, slight; wire angle, 06°, 07°, 10°.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |
| 0a) | 16.30 | 32.219 | 5.66 | 0.60 | 23.57 | 0 | 16.30 | 32.22 | 5.66 | 0.60 | 23.57 | 433 | 0.00 |
| 10 | 16.22 | 32.219 | 5.69 | 0.56 | 23.58 | 10 | 16.22 | 32.22 | 5.69 | 0.56 | 23.58 | 432 | 0.04 |
| 20 | 16.17 | 32.208 | 5.69 | 0.55 | 23.59 | 20 | 16.17 | 32.21 | 5.69 | 0.55 | 23.59 | 432 | 0.09 |
| 30 | 16.08 | 32.220 | 5.70 | 0.69 | 23.62 | 30 | 16.08 | 32.22 | 5.70 | 0.69 | 23.62 | 429 | 0.13 |
| 50 | 12.40 | 32.403 | 6.42 | 0.87 | 24.52 | 50 | 12.40 | 32.40 | 6.42 | 0.87 | 24.52 | 344 | 0.21 |
| 75 | 8.84 | 32.485 | 6.29 | 1.28 | 25.20 | 75 | 8.84 | 32.49 | 6.29 | 1.28 | 25.20 | 279 | 0.28 |
| 100 | 7.99 | 32.658 | 5.84 | 1.31 | 25.46 | 100 | 7.99 | 32.66 | 5.84 | 1.31 | 25.46 | 254 | 0.35 |
| 125 | 7.46 | 33.021 | 4.95 | 1.70 | 25.82 | 150 | 7.03 | 33.39 | 4.42 | 1.94 | 26.17 | 188 | 0.46 |
| | | | | | | 200 | 6.62 | 33.81 | 3.75 | 2.14 | 26.55 | 152 | 0.55 |
| 148b) | 7.04 | 33.360 | 4.49 | 1.94 | 26.14 | 250 | 6.13 | 33.91 | 3.29 | 2.13 | 26.70 | 139 | 0.62 |
| 172 | 6.86 | 33.654 | 3.90 | 1.97 | 26.40 | 300 | 5.66 | 33.94 | 2.32 | 2.34 | 26.78 | 131 | 0.69 |
| | | | | | | 400 | 5.02 | 34.01 | 1.37 | 2.75 | 26.91 | 120 | 0.81 |
| 195c) | 6.68 | 33.821 | 3.73 | 2.12 | 26.55 | 500 | 4.54 | 34.11 | 0.78 | 2.83 | 27.04 | 108 | 0.92 |
| | | | | | | 600 | 4.28 | 34.18 | 0.48 | 3.02 | 27.13 | 100 | 1.03 |
| 196b) | 6.64 | 33.788 | 3.77 | 2.18 | 26.54 | 700 | 4.07 | 34.26 | 0.35 | 3.02 | 27.21 | 93 | 1.12 |
| | | | | | | 800 | 3.86 | 34.32 | 0.29 | 2.99 | 27.28 | 87 | 1.22 |
| 244c) | 6.16 | 33.905 | 3.40 | 2.13 | 26.69 | 1000 | 3.42 | 34.40 | 0.28 | 3.04 | 27.39 | 77 | 1.38 |
| | | | | | | 1200 | 3.02 | 34.46 | 0.40 | 2.97 | 27.47 | 70 | 1.53 |
| 245b) | 6.25 | 33.900 | 3.47 | 2.09 | 26.67 | 1500 | 2.40 | 34.53 | 0.78 | 2.97 | 27.58 | 59 | 1.72 |
| 293c) | 5.71 | 33.939 | 2.40 | 2.29 | 26.77 | | | | | | | | |
| 391 | 5.08 | 34.004 | 1.44 | 2.75 | 26.90 | | | | | | | | |
| 489 | 4.58 | 34.095 | 0.83 | 2.80 | 27.03 | | | | | | | | |
| 588 | 4.30 | 34.173 | 0.50 | 3.02 | 27.12 | | | | | | | | |
| 686 | 4.10 | 34.251 | 0.36 | 3.03 | 27.20 | | | | | | | | |
| 784 | 3.90 | 34.308 | 0.29 | 2.98 | 27.27 | | | | | | | | |
| 981 | 3.46 | 34.391 | 0.28 | 3.05 | 27.38 | | | | | | | | |
| 1177 | 3.08 | 34.449 | 0.37 | 2.96 | 27.46 | | | | | | | | |
| 1472 | 2.44 | 34.523 | 0.74 | 2.98 | 27.57 | | | | | | | | |
| 1771 | 2.12 | 34.576 | 1.13 | 2.82 | 27.65 | | | | | | | | |

a) Second cast.
b) Third cast.
c) First cast.

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

BROWN BEAR; October, 1, 1958; 2111, 2252 GCT; 47°55'N, 126°45'W; sounding, 2286 m; wind, 350°, force 5; weather, partly cloudy; sea, moderate; wire angle, 07°, 06°. 202-012

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 15.75 | 32.171 | 5.77 | 0.65 | 23.65 | 0 | 15.75 | 32.17 | 5.77 | 0.65 | 23.65 | 425 | 0.00 |
| 10 | 15.66 | 32.167 | 5.79 | 0.89 | 23.67 | 10 | 15.66 | 32.17 | 5.79 | 0.89 | 23.67 | 424 | 0.04 |
| 20 | 15.60 | 32.166 | 5.79 | 0.69 | 23.68 | 20 | 15.60 | 32.17 | 5.79 | 0.69 | 23.68 | 423 | 0.08 |
| 30 | 15.61 | 32.164 | 5.78 | 0.73 | 23.67 | 30 | 15.61 | 32.16 | 5.78 | 0.73 | 23.67 | 424 | 0.13 |
| 50 | 11.92 | 32.342 | 5.88 | 1.18 | 24.56 | 50 | 11.92 | 32.34 | 5.88 | 1.18 | 24.56 | 340 | 0.20 |
| 75 | 8.46 | 32.577 | 5.57 | 1.47 | 25.33 | 75 | 8.46 | 32.58 | 5.57 | 1.47 | 25.33 | 266 | 0.28 |
| 100 | 7.66 | 32.893 | 5.23 | 1.74 | 25.69 | 100 | 7.66 | 32.89 | 5.23 | 1.74 | 25.69 | 233 | 0.34 |
| 125 | 6.88 | 33.296 | 5.12 | 2.03 | 26.12 | 150 | 6.82 | 33.59 | 4.93 | 1.92 | 26.35 | 170 | 0.44 |
| 150 | 6.82 | 33.586 | 4.93 | 1.92 | 26.35 | 200 | 6.96 | 33.92 | 2.60 | 2.31 | 26.60 | 148 | 0.52 |
| 174 | 7.22 | 33.888 | 2.64 | 2.52 | 26.54 | 250 | 6.56 | 33.96 | 2.21 | 2.31 | 26.68 | 140 | 0.59 |
| | | | | | | 300 | 6.16 | 33.98 | 1.85 | 2.74 | 26.75 | 134 | 0.66 |
| 196b) | 7.05 | 33.926 | 2.60 | 2.29 | 26.59 | 400 | 5.19 | 34.02 | 1.40 | 2.85 | 26.90 | 121 | 0.79 |
| | | | | | | 500 | 4.84 | 34.09 | 0.90 | 2.84 | 26.99 | 112 | 0.91 |
| 199a) | 6.92 | 33.924 | 2.64 | 2.36 | 26.60 | 600 | 4.43 | 34.17 | 0.56 | 3.07 | 27.10 | 103 | 1.02 |
| | | | | | | 700 | 4.12 | 34.23 | 0.43 | 3.15 | 27.18 | 96 | 1.11 |
| 245b) | 6.58 | 33.963 | 2.25 | 2.05 | 26.68 | 800 | 3.93 | 34.31 | 0.33 | 3.36 | 27.27 | 88 | 1.21 |
| | | | | | | 1000 | 3.44 | 34.42 | 0.33 | 3.33 | 27.40 | 76 | 1.37 |
| 248a) | 6.58 | 33.960 | 2.23 | 2.46 | 26.68 | 1200 | 3.08 | 34.47 | 0.47 | 3.18 | 27.48 | 70 | 1.52 |
| | | | | | | 1500 | 2.61 | 34.53 | 0.76 | 3.10 | 27.57 | 62 | 1.71 |
| 294b) | 6.24 | 33.983 | 1.87 | 2.72 | 26.74 | | | | | | | | |
| 392 | 5.22 | 34.010 | 1.44 | 2.87 | 26.89 | | | | | | | | |
| 490 | 4.88 | 34.084 | 0.95 | 2.80 | 26.98 | | | | | | | | |
| 588 | 4.48 | 34.158 | 0.58 | 3.08 | 27.09 | | | | | | | | |
| 686 | 4.14 | 34.221 | 0.45 | 3.11 | 27.17 | | | | | | | | |
| 784 | 3.97 | 34.302 | 0.34 | 3.35 | 27.25 | | | | | | | | |
| 981 | 3.48 | 34.405 | 0.32 | 3.35 | 27.39 | | | | | | | | |
| 1177 | 3.11 | 34.458 | 0.45 | 3.19 | 27.47 | | | | | | | | |
| 1471 | 2.66 | 34.523 | 0.73 | 3.11 | 27.55 | | | | | | | | |
| 1770 | 2.16 | 34.570 | 1.13 | 3.03 | 27.64 | | | | | | | | |

BROWN BEAR; October 2, 1958; 0430, 0546 GCT; 48°10'N, 125°48'W; sounding, 732 m; wind, 330°, force 2; weather, partly cloudy; sea, slight; wire angle, 30°, 25°. 202-013

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 13.64 | 32.070 | 6.25 | 0.71 | 24.02 | 0 | 13.64 | 32.07 | 6.25 | 0.71 | 24.02 | 390 | 0.00 |
| 10 | 13.28 | 32.080 | 6.56 | 0.84 | 24.10 | 10 | 13.28 | 32.08 | 6.56 | 0.84 | 24.10 | 383 | 0.04 |
| 20 | 12.84 | 32.097 | 6.29 | 1.01 | 24.20 | 20 | 12.84 | 32.10 | 6.29 | 1.01 | 24.20 | 373 | 0.08 |
| 30 | 11.22 | 32.299 | 5.53 | 1.25 | 24.66 | 30 | 11.22 | 32.30 | 5.53 | 1.25 | 24.66 | 330 | 0.11 |
| 50 | 8.12 | 32.778 | 5.34 | 1.50 | 25.54 | 50 | 8.12 | 32.78 | 5.34 | 1.50 | 25.54 | 246 | 0.17 |
| 75 | 7.52 | 33.231 | 4.65 | 1.81 | 25.98 | 75 | 7.52 | 33.23 | 4.65 | 1.81 | 25.98 | 205 | 0.23 |
| 100 | 7.50 | 33.535 | 3.62 | 1.97 | 26.22 | 100 | 7.50 | 33.54 | 3.62 | 1.97 | 26.22 | 182 | 0.27 |
| 124 | 7.56 | 33.752 | 2.82 | 2.28 | 26.38 | 150 | 7.33 | 33.85 | 2.19 | 2.44 | 26.49 | 158 | 0.36 |
| 148 | 7.36 | 33.841 | 2.23 | 2.33 | 26.48 | 200 | 6.87 | 33.94 | 1.86 | 2.52 | 26.62 | 145 | 0.44 |
| 168 | 7.16 | 33.901 | 2.00 | 2.80 | 26.55 | 250 | 6.48 | 33.99 | 1.76 | 2.51 | 26.71 | 137 | 0.51 |
| | | | | | | 300 | 6.13 | 34.02 | 1.56 | 2.60 | 26.78 | 131 | 0.57 |
| 180b) | 7.10 | 33.917 | 2.00 | 2.42 | 26.58 | 400 | 5.61 | 34.07 | 1.12 | 2.69 | 26.89 | 122 | 0.70 |
| | | | | | | 500 | 5.06 | 34.12 | 0.75 | 2.81 | 26.99 | 113 | 0.82 |
| 192a) | 6.98 | 33.930 | 1.83 | 2.57 | 26.60 | | | | | | | | |
| 224b) | 6.65 | 33.974 | 1.87 | 2.45 | 26.68 | | | | | | | | |
| 240a) | 6.60 | 33.978 | 1.79 | 2.48 | 26.69 | | | | | | | | |
| 271b) | 6.27 | 34.007 | 1.68 | 2.56 | 26.76 | | | | | | | | |
| 365 | 5.80 | 34.048 | 1.28 | 2.68 | 26.85 | | | | | | | | |
| 461 | 5.28 | 34.102 | 0.88 | 2.75 | 26.95 | | | | | | | | |
| 560 | 4.72 | 34.148 | 0.60 | 2.92 | 27.06 | | | | | | | | |

a) Second cast.
b) First cast.

UW

BB-202

| OBSERVED | | | | | COMPUTED | INTERPOLATED | | | | | COMPUTED | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | Z | T | S | $O_2$ | $PO_4$-P | $\sigma_t$ | $\delta$ | $\Delta D$ |
| m | °C | ‰ | ml/L | µg at/L | g/L | m | °C | ‰ | ml/L | µg at/L | g/L | cl/ton | dyn m |

202-014

BROWN BEAR; October 2, 1958; 1617, 1639 GCT; 48°26'N, 124°33'W; sounding, 243 m; wind, 090°, force 2; weather, partly cloudy; sea, smooth; wire angle, 22°, 30°.

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0a) | 10.57 | 31.679 | 4.60 | 2.06 | 24.29 | 0 | 10.57 | 31.68 | 4.60 | 2.06 | 24.29 | 364 | 0.00 |
| 5 | 10.20 | 31.708 | 4.21 | 2.21 | 24.38 | 10 | 10.00 | 31.77 | 4.03 | 2.16 | 24.46 | 349 | 0.04 |
| 10 | 10.00 | 31.766 | 4.03 | 2.16 | 24.46 | 20 | 9.56 | 32.08 | 3.74 | 2.17 | 24.77 | 319 | 0.07 |
| 20 | 9.56 | 32.075 | 3.74 | 2.17 | 24.77 | 30 | 9.38 | 32.24 | 3.50 | 2.25 | 24.92 | 305 | 0.10 |
| 30 | 9.38 | 32.241 | 3.50 | 2.25 | 24.92 | 50 | 8.41 | 33.04 | 2.73 | 2.23 | 25.70 | 231 | 0.15 |
| 50 | 8.41 | 33.037 | 2.73 | 2.23 | 25.70 | 75 | 7.54 | 33.63 | 2.60 | 2.21 | 26.29 | 176 | 0.20 |
| 74 | 7.54 | 33.633 | 2.60 | 2.21 | 26.29 | 100 | 7.47 | 33.69 | 2.51 | 2.25 | 26.34 | 170 | 0.25 |
| 98 | 7.48 | 33.683 | 2.53 | 2.23 | 26.33 | 150 | 7.20 | 33.85 | 2.08 | 2.29 | 26.51 | 156 | 0.33 |
| 122 | 7.34 | 33.792 | 2.27 | 2.40 | 26.44 | | | | | | | | |
| 146 | 7.22 | 33.840 | 2.09 | 2.29 | 26.50 | | | | | | | | |
| 170 | 7.10 | 33.880 | 2.04 | 2.32 | 26.54 | | | | | | | | |
| 194 | 7.03 | 33.903 | 1.95 | 2.36 | 26.57 | | | | | | | | |
| 195b) | 7.00 | 33.909 | 2.12 | 2.44 | 26.58 | | | | | | | | |

a) First cast.
b) Second cast.

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